

APPENDIX A

IOWA ARMY AMMUNITION PLANT RESTORATION ADVISORY BOARD MEMBERS, U.S. ARMY CORPS OF ENGINEERS CONTACTS, ARMY CONTACTS, REGULATORY CONTACTS, FEDERAL ELECTED OFFICIALS, STATE ELECTED OFFICIALS, AND LOCAL OFFICIALS

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Council Member

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The Honorable Stephanie Gerst
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City of West Burlington

City of West Burlington
122 Broadway St.
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The Honorable Hans Trousil
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Shaun Ryan
Fire Chief
FireChief@WestBurlington.org

APPENDIX B
SURVEY AND SURVEY FINDINGS

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2018

Iowa Army Ammunition Plant

Survey Questions for FUSRAP Community Involvement Plan

The U.S. Army Corps of Engineers (USACE) Formerly Utilized Sites Remedial Action Program (FUSRAP) is investigating and cleaning up Atomic Energy Commission (AEC)-generated environmental contaminants at the Iowa Army Ammunition Plant (IAAAP) under a Federal Facility Agreement for FUSRAP. Contaminants of concern include depleted uranium, explosives, metals, polychlorinated biphenyls, and semi-volatile organic compounds. An important part of this effort is keeping members of the community informed and involved in FUSRAP. The Community Involvement Plan (CIP) for the environmental work at IAAAP guides citizen participation in environmental cleanup efforts.

Under FUSRAP, USACE is creating a stand-alone IAAAP FUSRAP CIP that will be separate from the 2017 IAAAP Defense Environmental Restoration Program CIP. An important part of this process is gathering the opinions of residents about the concerns and information needs related to FUSRAP. Responses to the short survey below will be documented in the IAAAP FUSRAP CIP and will help provide factual, timely, and clear information intended to promote public participation in the decision-making process.

Complete the survey as soon as you can: Your opinion is important. Surveys completed after **Oct. 24, 2018**, may not arrive in time to be documented in the IAAAP FUSRAP CIP.

If you have specific questions about the survey or if you would like to speak personally with a representative, contact Vickie Reddick by email at [reddickv@leidos.com](mailto:reddiv@leidos.com) or by phone at 865-481-4736.

Thank you for your time!

1. What do you know about buildings and soils at multiple IAAAP sites that are contaminated with materials that resulted from past AEC operations at Line 1; West Burn Pads Area South of the Road; Warehouse 3-01; Yards C, G, and L; and the Firing Sites Area?

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

Comments welcome:

2. Do you want to know more about the separate remediation program called FUSRAP that USACE is implementing to clean several sites at IAAAP?

- ☐ No
- ☐ Yes

☐ Not sure

Comments welcome:

3. How would you like to know about FUSRAP?

☐ Public meetings/Restoration Advisory Board meetings

☐ Newspaper

☐ Radio

☐ TV

☐ Email

☐ Facebook

☐ Other (Specify): _____

4. How often would you like to hear about FUSRAP progress?

☐ Weekly

☐ Monthly

☐ Quarterly at RAB meetings

☐ Semi-annually

☐ Other (Specify): _____

If you would like to stay informed about IAAAP FUSRAP cleanup, contact Vickie Reddick by email at reddickv@leidos.com or telephone at 865-481-4736.

Email the completed survey by Oct. 24, 2018 to reddickv@leidos.com or mail to:

Vickie Reddick
Senior Public Information Specialist
Leidos
P.O. Box 2502
301 Laboratory Road
Oak Ridge, TN 37831

((If you have trouble with printing, use email to request a hard-copy survey with an addressed and stamped return envelope. All surveys must be received by Oct. 24, 2018 to be included in the IAAAP FUSRAP CIP.)

Tally of Answers and Comments from Surveys Received

1. What do you know about buildings and soils at multiple IAAAP sites that are contaminated with materials that resulted from past AEC operations at Line 1; West Burn Pads Area South of the Road; Warehouse 3-01; Yards C, G, and L; and the Firing Sites Area?

I don't know anything about it.	5
I know a little about it.	4
I know a lot about it.	5

Comments:

- "I worked at IAAAP for 33 years. I know locations and served as Property Manager over all areas of the plant. Not very familiar with soil characterizations but have been part of oversight of the cleanup efforts."
- "I probably know more than many, but I am not an expert. I learn something new at every RAB meeting. There has been a decade's long effort in successfully cleaning contaminated sites. The money spent is enormous. The general public knows little of the ongoing effort. Let's face it, the subject can be rather dry. The public does respond to open houses and tours of IAAAP. Perhaps efforts towards engaging the public along those lines and educating them along the way might be fruitful."
- "Regarding the survey, I know a little about the buildings and soil contamination on the IAAAP grounds. Exact locations I really don't. Mostly through listening to old time employees who worked the lines, etc."
- "I am a former member (and one time civilian co-chair) of the IAAAP RAB."
- "What I've read in *The Hawkeye* in the past"

2. Do you want to know more about the separate remediation program called FUSRAP that USACE is implementing to clean several sites at IAAAP?

No	2
Yes	12
Not sure	0

Comments:

- "I will be getting more information since I am on the RAB, that will be sufficient."
- "Often, the acronyms overwhelm the uninitiated. A handy glossary should be provided with materials. Actually, recent printed materials have shown an improvement in this regard. Printed area maps and a plant map need to be put into a readable size. They simply cannot be read on a projected screen, nor on a printed copy of a PowerPoint."
- "I guess the only real question I would be interested in is an answer to is the chance of airborne contaminants as a result of the reclamation efforts. More of a concern than a curiosity."

3. How would you like to know about FUSRAP?

Public meetings/RAB meetings	11
Newspaper	4
Radio	2
TV	2
Email	6
Facebook	5
Other:	3

"Our local newspaper is much diminished from just a few years ago. I am not even sure if a reporter is sent to RAB meeting anymore. One used to read about the RAB and meetings in our paper. The local radio station has increased their local news coverage, but I don't ever recall seeing a reporter from the news local news station at a meeting. Both print and radio have increased an on line presence. That is where the future lies it seems."

- "newsletter" email 2

4. How often would you like to hear about FUSRAP progress?

Weekly 0

Monthly 4

Quarterly at RAB meetings 9

Semi-annually 2

Comments:

"newsletter" email semi-annually 3

APPENDIX C

IOWA ARMY AMMUNITION PLANT

EXAMPLES OF OUTREACH

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Summary of FUSRAP Activities at the Iowa Army Ammunition Plant

OPERATIONAL RANGE AND MILITARY MUNITIONS RULE



The U.S. Army Corps of Engineers (USACE), St. Louis District, is conducting an environmental cleanup program at the Iowa Army Ammunition Plant for sites formerly used by the Atomic Energy Commission to process material for national defense activities starting in the 1940s. The program responsible for this work is the Formerly Utilized Sites Remedial Action Program (FUSRAP).

The FY 1998 Energy and Water Appropriations Bill, in which Congress transferred management of FUSRAP to the USACE, was signed into law on October 13, 1997. Prior to the signing of this bill, FUSRAP had been managed by the U.S. Department of Energy.

The USACE encourages private citizens to participate fully in the cleanup program.

To learn more about the IAAAP FUSRAP areas or to inquire about public involvement opportunities, call 314.260.3905

or write

FUSRAP Project Office, St. Louis District, Corps of Engineers Office
8945 Latty Avenue
Berkeley, MO 63134

BACKGROUND

USACE is conducting response actions under the Formerly Utilized Sites Remedial Action Program at the Iowa Army Ammunition Plant (IAAAP) at specific locations previously used by the Atomic Energy Commission (AEC) during the early years of the nation's atomic energy program. One of the areas designated for response under FUSRAP is the Firing Site Area (FSA). The FSA is a fenced site located in the western portion of the IAAAP that encompasses 450 acres (1,821,085 m²) and contains several individual firing sites. The FSA was developed by the AEC to support test firing of munitions for the IAAAP and was used by the AEC between 1948 and 1974. The FSA continues to be used by the U.S. Army.

WHAT IS AN OPERATIONAL RANGE?

An "operational range" is a range that is under the jurisdiction, custody, or control of the Secretary of a military department and 1) is used for range activities, or 2) although not currently being used for range activities, is still considered by the Secretary to be a range and has not been put to a new use that is incompatible with range activities. 10 U.S.C. §101(e).

The FSA is currently an operational testing range being used by the U.S. Army to test military munitions. Historically, munitions containing depleted uranium (DU) were tested at the site. Munitions containing DU, however, are no longer tested at the FSA.

WHAT IS THE MILITARY MUNITIONS RULE?

The Military Munitions Rule (MMR) recognizes that conducting environmental response actions at operational ranges conflicts with the United State's need to maintain its military capabilities through training and testing, until the site has been put to a new use that is incompatible with range activities.

In particular, The MMR identifies when military munitions become solid wastes potentially subject to hazardous waste regulation under the Resource Conservation and Recovery Act (RCRA, Pub. L. 94-580). Under the MMR, a military munition is not solid waste when "used for its intended purposes". In addition, used or fired military munitions found on operational ranges do not become solid waste until they are removed from the site of use and transported for treatment or disposal. 42 C.F.R. §262.202. Because the munitions are not considered solid waste, the munitions found on operational ranges are not hazardous waste and are not subject to RCRA regulation.

WHAT IS THE SCOPE OF FUSRAP RESPONSE AT THE FSA?

FUSRAP response actions at the FSA will address DU contaminated soils. DU present at the FSA is a product of historic AEC operations at IAAAP, which are no longer conducted, and is not considered a munition subject to the MMR. FUSRAP response actions will also fully address any other chemical, metal, or explosive contamination that is commingled with soils containing DU. This scope of FUSRAP response is consistent with the December 2006 Dispute Resolution Agreement executed between the U.S. Environmental Agency and the Department of the Army.

Example of Fact Sheet



U.S. Army Corps of Engineers
St. Louis District

Summary of FUSRAP Activities at the Iowa Army Ammunitions Plant

WHAT IS FUSRAP?



"Gateway to Excellence"

The U.S. Army Corps of Engineers (USACE), St. Louis District, is conducting an environmental cleanup program at the Iowa Army Ammunition Plant sites formerly used by the Atomic Energy Commission to process material for national defense activities starting in the 1940s. The program responsible for this work is the Formerly Utilized Sites Remedial Action Program (FUSRAP).

The FY 1998 Energy and Water Appropriations Bill, in which Congress transferred management of FUSRAP to the USACE, was signed into law on October 13, 1997. Prior to the signing of this bill, FUSRAP had been managed by the U.S. Department of Energy.

The USACE encourages private citizens to participate fully in the cleanup program.

To learn more about the IAAAP FUSRAP areas or to inquire about public involvement opportunities, call

314.260.3905

or write

FUSRAP Project Office, St. Louis District, Corps
of Engineers Office 8945 Latty Avenue
Berkeley, MO 63134

The Formerly Utilized Sites Remedial Action Program (FUSRAP) is an environmental remediation program. It addresses radiological contamination generated by activities of the Manhattan Engineer District and the Atomic Energy Commission (MED/AEC) during development of the atomic weapons in the 1940s and 50s.

BACKGROUND

The IAAAP is an active, government-owned, contractor-operated facility that occupies approximately 19,000 acres in Des Moines County near Middletown, Iowa. Less than one-third of the IAAAP property is occupied by active or formerly active munitions production or storage facilities. The current and expected future land use of the IAAAP property is industrial/military.

From 1947 to 1975, portions of the IAAAP facility were under Atomic Energy Commission (AEC) control for weapon-assembly operations. These portions of the IAAAP are now called FUSRAP areas. In March 2000, after performing historical research regarding AEC activities at the IAAAP, investigators determined that some of the FUSRAP areas may contain contamination resulting from AEC activities and warranted additional investigation.

These areas are the structures at Line 1, the Firing Sites area, Yard C, Yard G, Yard L areas surrounding Warehouses L-37-1, L-37-2 and L-37-3. The USACE began investigation in 2000 and characterized soil, sediment, and building contamination in the FUSRAP areas. A Remedial Investigation Report, which was issued in October 2008, identified the existence of depleted uranium on the structures at Line 1, the Firing Sites Area, Yard C and Yard G.

HOW HAZARDOUS ARE FUSRAP SITES?

Even though FUSRAP sites contain levels of radioactivity above current guidelines, none of the sites pose an immediate health risk to the public or environment given current land uses. The contaminated materials have very low concentrations and people are not exposed to them for long periods of time.

Although these materials do not pose an immediate hazard, they will remain radioactive for thousands of years, and health risks could increase if the use of the land were to change. Under FUSRAP, each site is cleaned to levels of acceptable for the projected future use of the land such as residential development, industrial operations, or recreational use.

Example of Fact Sheet

HOW DOES FUSRAP WORK

FUSRAP sites undergo several steps that lead to cleanup. Information about the site is collected and reviewed. A Remedial Investigation/Feasibility Study (RI/FS) is conducted to develop cleanup alternatives. The Remedial Investigation identifies the type and location of the contamination. The Feasibility Study develops and evaluates cleanup alternatives.

The public is informed about the development of the RI/FS cleanup alternatives through public meetings and media. Public participation is especially encouraged during the selection of the final remediation, or cleanup, method.

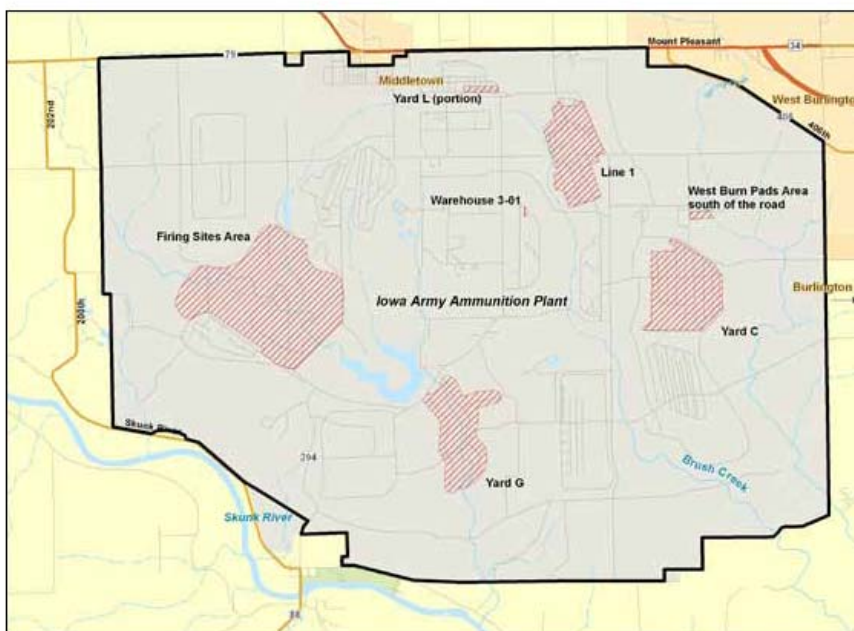
When a cleanup alternative is chosen, a Proposed Plan is written to explain why it was chosen. Members of the public are asked to comment on all the cleanup options, including the selected alternative. After public comments have been considered, a final decision is made and documented in a Record of Decision (ROD). The Remedial Design follows the ROD and includes technical drawings and specifications that show how the cleanup will be conducted.

Cleanup, or Remedial Action, begins after the Remedial Design is complete. This phase involves site preparation and construction activities. When these remediation activities are completed, verification surveys are conducted to ensure that cleanup objectives for the site have been met and are documented in a Post Remedial Action Report.

What Are FUSRAP's Objectives?

The objectives of FUSRAP are to:

- Protect human health and the environment.
- Execute the approved alternative for cleaning up radioactive contamination above health-based cleanup guidelines.
- Minimize adverse effects on areas business operations.



Former AEC work areas are now under FUSRAP. These areas are identified in hatchings on this map.

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Example of Fact Sheet (Continued)



Summary of FUSRAP Activities at the

IOWA ARMY AMMUNITIONS PLANT FEASIBILITY STUDY



The U.S. Army Corps of Engineers (USACE), St. Louis District, is conducting a cleanup program at areas formerly used by the Atomic Energy Commission at the Iowa Army Ammunition Plant (IAAAP). This program is being carried out under the Formerly Utilized Sites Remedial Action Program (FUSRAP) which authorizes USACE to address contamination resulting from the Nation's early atomic weapons program. The IAAAP site contains soils and structures primarily contaminated with depleted uranium as a result of activities performed by the Atomic Energy Commission from 1947 until 1975.

In April 2011, the USACE issued a Feasibility Study identifying and evaluating four cleanup alternatives for soil and three for structures at IAAAP FUSRAP areas.

The USACE encourages private citizens to participate fully in the cleanup program.

To learn more about the IAAAP FUSRAP areas or to inquire about public involvement opportunities, call

314.260.3905

or write

FUSRAP Project Office, St. Louis
District, Corps of Engineers Office
8945 Latty Avenue
Berkeley, MO 63134

BACKGROUND

The Iowa Army Ammunition Plant (IAAAP) is an active, government-owned, contractor-operated facility that occupies approximately 19,000 acres in Des Moines County near Middletown, Iowa. Less than one-third of the IAAAP property is occupied by active or formerly active munitions production or storage facilities. The current and expected future land use of the IAAAP property is industrial/military.

From 1947 to 1975, portions of the IAAAP facility were under Atomic Energy Commission (AEC) control for weapon-assembly operations. These portions of the IAAAP are now called Formerly Utilized Sites Remedial Action Program (FUSRAP) areas. In March 2000, after performing historical research regarding AEC activities at the IAAAP, investigators determined that some of the FUSRAP areas may contain contamination resulting from AEC activities and warranted additional investigation. These areas were the structures at Line 1, the Firing Sites area, Yard C, Yard G, Yard L areas surrounding Warehouses L-37-1, L-37-2, and L-37-3. That year, the USACE began investigation and characterization of soil, sediment, and building contamination in the FUSRAP areas.

A Remedial Investigation Report, which was issued in October 2008, identified the existence of unacceptable risk at the structures at Line 1, the Firing Sites Area, Yard C, and Yard G. These areas were subsequently addressed by the Feasibility Study.

The purpose of the Feasibility Study is to develop and evaluate cleanup alternatives for these FUSRAP areas.

CONTAMINANTS OF CONCERN

Depleted uranium that is present on the FUSRAP areas will be addressed by the USACE. Based on continued industrial/military land use, the only contaminant of concern to be addressed by USACE is depleted uranium.

SUMMARY OF ALTERNATIVES

Soil Alternative 1 – No Action

This alternative involves no action for the FUSRAP areas. It is required by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to act as a baseline alternative for comparison with other alternatives. The total cost is \$0.

Soil Alternative 2 – Land Use Controls

Alternative 2 includes providing additional land use controls to reduce the potential for exposure to contaminated soil. Land use controls would include fencing, warning signs, and other restrictions. The total estimated cost is \$2.3 million.

Example of Fact Sheet

Remedial Alternatives for Soil:

- Alternative 1: No Action for Soil (Cost: \$0)
- Alternative 2: Land Use Controls for Soil (Cost: \$2.3 million)
- Alternative 3: Excavation of DU-Contaminated Soil with Off-Site Disposal (Cost: \$50.4 million)
- **Alternative 4: Excavation of DU-Contaminated Soil with Physical Treatment and Off-Site Disposal (Cost: \$45.2 million)**

Remedial Alternatives for Structures:

- Alternative S1: No Action for Structures (Cost: \$0)
- Alternative S2: Land Use Controls for Structures (Cost: \$286 thousand)
- **Alternative S3: Decontamination/Replacement of Structures (Cost: \$103 thousand)**

Soil Alternative 3 – Excavation of Depleted Uranium Contaminated Soil with Off Site Disposal

This alternative includes excavation of depleted uranium contaminated soil where the remediation goal was exceeded. There is no treatment of soil under this alternative. All excavated soil would be transported to a properly permitted off-site disposal facility. The total estimated cost is \$50.4 million.

Soil Alternative 4 – Excavation of Depleted Uranium Contaminated Soil with Physical Treatment and Off Site Disposal

Alternative 4 consists of the same excavation routine as Soil Alternative 3 with the addition of soil treatment onsite. Soil treatment is designed to reduce the volume of soil requiring off-site disposal and would include soil sorting and scanning for depleted uranium. Soil exceeding remedial goals for depleted uranium would be transported to a properly permitted off-site disposal facility. The total estimated cost is \$45.2 million.

Structure Alternative S1 – No Action

Alternative S1 proposes no cleanup actions at contaminated structures at FUSRAP areas. It is required by CERCLA to act as a baseline alternative for comparison with other alternatives. The total cost is \$0.

Structure Alternative S2 – Land Use Controls

Alternative S2 includes land use controls for structures and is protective as long as the controls are in place. This alternative involves leaving contamination in place. Land use controls would include fencing, warning signs, and other restrictions. The total estimated cost is \$286,000.

Structure Alternative S3 – Decontamination/Replacement of Structures

Alternative S3 includes cleaning with high pressure washing or grit blasting to remove contamination from structural surfaces or replacing the structural components. This alternative includes the decontamination of a steel grate and the replacement of air filters at Line 1. The total estimated cost is \$103,000.

PUBLIC PARTICIPATION

This fact sheet is being issued as part of the public involvement in development of the Record of Decision. The USACE encourages public input to select one cleanup alternative each for soil and structures in the FUSRAP areas. Public input is needed to ensure the remedy selected meets the needs of the local community and is an effective solution to the problem. The final remedy will be documented in a Record of Decision for the FUSRAP areas at the IAAAP. The public is encouraged to review documents contained in the Administrative Record File for the FUSRAP areas of the IAAAP.

Written comments may be submitted to the USACE, at any time during the 30-day period. Oral comments will be recorded during the May 17, 2011, public meeting. The USACE will respond to all significant comments and will consider these comments when working with the EPA to select a final remedy.

The entire Feasibility Study may be read at
Burlington Public Library, 210 Court St, Burlington, IA
or online at www.mvs.usace.army.mil/eng-con/expertise/fusrap-IAAAP.html

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Example of Fact Sheet (Continued)



Summary of FUSRAP Activities at the

IOWA ARMY AMMUNITIONS PLANT PROPOSED PLAN



The U.S. Army Corps of Engineers (USACE), St. Louis District, is conducting a cleanup program at areas formerly used by the Atomic Energy Commission at the Iowa Army Ammunition Plant (IAAAP). This program is being carried out under the Formerly Utilized Sites Remedial Action Program (FUSRAP) which authorizes USACE to address contamination resulting from the Nation's early atomic weapons program. The IAAAP site contains soils and structures primarily contaminated with depleted uranium as a result of activities performed by the Atomic Energy Commission from the 1947 until the 1975.

The USACE issued a Proposed Plan, summarizing cleanup alternatives on April 22, 2011. The Proposed Plan identifies Soil Alternative 4, Excavation of Contaminated Soil with Physical Treatment and Off-Site Disposal, and Structures Alternative 3, Decontamination/ Replacement of Structures, as the USACE's preferred remedy for the FUSRAP areas.

Public comment and regulatory review will help determine the final remedy selected for the areas. The USACE will respond to all significant comments in the IAAAP FUSRAP Record of Decision, which will identify the final remedy for the site based in part upon public comments received during the 30-day review period (which ends May 22, 2011.)

The USACE encourages private citizens to participate fully in the cleanup program.

To learn more about the IAAAP FUSRAP areas or to inquire about public involvement opportunities, call

314.260.3905

or write

FUSRAP Project Office, St. Louis District, Corps of
Engineers Office 8945 Latty Avenue
Berkeley, MO 63134

BACKGROUND

The Iowa Army Ammunition Plant (IAAAP) is an active, government-owned, contractor-operated facility that occupies approximately 19,000 acres in Des Moines County near Middletown, Iowa. Less than one-third of the IAAAP property is occupied by active or formerly active munitions production or storage facilities. The current and expected future land use of the IAAAP property is industrial/military.

From 1947 to 1975, portions of the IAAAP facility were under Atomic Energy Commission (AEC) control for weapon-assembly operations. These portions of the IAAAP are now called Formerly Utilized Sites Remedial Action Program (FUSRAP) areas. In March 2000, after performing historical research at the IAAAP, investigators determined that some of the FUSRAP areas may contain contamination resulting from AEC activities and warranted additional investigation. These areas were the structures at Line 1, the Firing Sites Area, Yard C, Yard G, Yard L areas surrounding Warehouses L-37-1, L-37-2 and L-37-3, and Warehouse 3-01. That year, the USACE began investigation and characterization of soil and building contamination.

A Remedial Investigation Report, which was issued in October 2008, identified the existence of unacceptable risk at the structures at Line 1, the Firing Sites Area, Yard C, and Yard G. These areas were subsequently addressed by the Feasibility Report.

In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, the USACE issued a Proposed Plan describing the preferred remedy for the FUSRAP areas. The Proposed Plan provides background information and summarizes the four alternatives for soil and three alternatives for structures as identified in the Feasibility Study. The Proposed Plan also presents the USACE's rationale for its preferred remedies. The preferred alternatives can change in response to public comment or the development of new information.

Example of Fact Sheet

Cleanup Alternatives for Soil:

- Alternative 1: No Action for Soil (Cost: \$0)
- Alternative 2: Land Use Controls for Soil (Estimated Cost: \$2.3 million)
- Alternative 3: Excavation of DU-Contaminated Soil with Off-Site Disposal (Estimated Cost: \$50.4 million)
- **Alternative 4:** Excavation of DU-Contaminated Soil with Physical Treatment and Off-Site Disposal (Estimated Cost: \$45.2 million)

Cleanup Alternatives for Structures:

- Alternative S1: No Action for Structures (Cost: \$0)
- Alternative S2: Land Use Controls for Structures (Estimated Cost: \$286,000)
- **Alternative S3:** Decontamination/Replacement of Structures (Estimated Cost: \$103,000)

THE PREFERRED ALTERNATIVES

The alternatives are discussed and evaluated in detail in the Feasibility Study for the FUSRAP areas. Based on currently available information, the USACE prefers **Soil Alternative 4, Excavation of Contaminated Soil with Physical Treatment and Off-Site Disposal**, and **Structures Alternative S3, Decontamination/ Replacement of Structures**. These alternatives protect human health and the environment and provide the best balance of effectiveness, cost, and implementability.

The preferred alternative for soil, Alternative 4, includes removal and physical treatment of depleted uranium-contaminated soil to reduce the volume of soil requiring off-site disposal. Physical treatment includes soil sorting and radiological scanning. Soil exceeding the remediation goal will be transported to a properly permitted off-site disposal facility.

The preferred alternative for structures, Alternative S3, includes the decontamination of one structural component (a steel grate) and the replacement of another component (air filters) at Line 1.

PUBLIC PARTICIPATION

The USACE encourages public input to select one cleanup alternative each for soil and structures in the FUSRAP areas. Public input is needed to ensure the remedy selected meets the needs of the local community and is an effective solution to the problem. The final remedy for soil and structures will not be selected until after full consideration of all public and government agency comments. The final remedy will be documented in a Record of Decision for the FUSRAP areas at the IAAAP. The public is encouraged to review documents contained in the Administrative Record File for the FUSRAP areas of the IAAAP.

Written comments may be submitted to the USACE, at any time during the 30-day period. Oral comments will be recorded during the May 17, 2011, public meeting. The USACE will respond to all significant comments and will consider these comments when working with the EPA to select a final remedy.

The entire Proposed Plan may be read at:
Burlington Public Library
 210 Court St, Burlington, IA
 or online at
www.mvs.usace.army.mil/eng-con/expertise/fusrap-IAAAP.html

10 MAY 11

Example of Fact Sheet (Continued)

WHAT IS DEPLETED URANIUM?



Uranium is one of the most common radioactive elements. You can find it in soil anywhere in the United States.

Uranium ore is mined and then processed. Processing separates the highly radioactive isotope (uranium-235) so it can be used for nuclear power and weapons. The remaining uranium is called **depleted uranium** (DU). DU is less radioactive than natural uranium. DU is still thought to be related to health problems and needs to be managed carefully.

At the Iowa Army Ammunition Plant, the Atomic Energy Commission used DU in weapons testing in the 1960s and 1970s. Some fragments of DU can be found in the soil today.

The Proposed Plan describes U.S. Army Corps of Engineers' the preferred remedy for DU contamination at IAAAP.




A scientist used radiological equipment to find depleted uranium.



This fragment of depleted uranium was found at Firing Site 12.

Example of Poster Used in Public Meeting



PUBLIC MEETING

Proposed Plan

Iowa Army Ammunition Plant

Sharon Cotner, U.S. Army Corps of Engineers, St. Louis District

May 17, 2011

Tonight's Agenda

FUSRAP

- What it means to you

What we know about IAAAP FUSRAP sites

- Feasibility Study

What is planned for FUSRAP sites

- Proposed Plan

Question and comment period

2

Formerly Utilizeu sites Remedial Action Program

Example of Presentation Slides from Public Meeting

FUSRAP: What it means

The Formerly Utilized Sites Remedial Action Program or FUSRAP is a national program.

- Was assigned to the Army Corps of Engineers to manage in 1997 by Congress
- Works at weapons production sites with radiological cleanup needs
- Requires investigations to protect public health, welfare, and the environment.

3

Formerly Utilized Sites Remedial Action Program

FUSRAP: What it means for IAAAP

FUSRAP at IAAAP affects

- Portions of the IAAAP used for weapon-assembly operations from 1947 to 1975
- Contamination includes
 - soil
 - groundwater
 - discharges of wastewater containing explosives to surface water

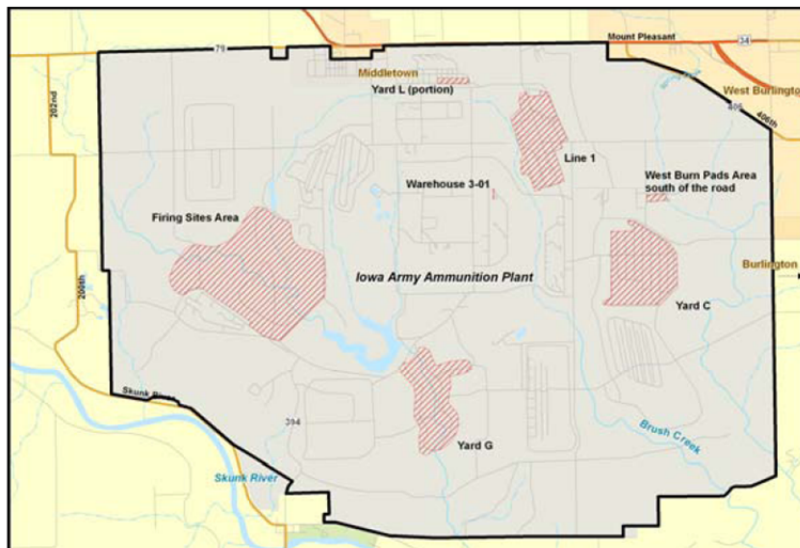
Current plant operations *do not* use the FUSRAP areas.

4

Formerly Utilized Sites Remedial Action Program

Example of Presentation Slides from Public Meeting (Continued)

Map of the FUSRAP areas at IAAAP



5

Formerly Utilized Sites Remedial Action Program

Where we are now

- September 2006 Federal Facility Agreement
30-day public comment period
- 2000 to 2007 Soil, sediment, buildings studied
- 2008 Remedial Investigation Report
- 2008 to present Human health dose and risks calculated
- April 2011 Feasibility Study and Proposed Plan
30-day public comment period ends
May 21, 2011
- Later this year Record of Decision

6

Formerly Utilized Sites Remedial Action Program

Example of Presentation Slides from Public Meeting (Continued)

What this means to you

The USACE encourages public input.

What you can do:

1. Learn more
 - www.iaaap.adminrecord.com
 - www.iowaaaap-irp.com
2. Tell us what you know
 - Written comments may be submitted to the USACE at any time during the 30-day period. Oral comments will be recorded tonight.

7

Formerly Utilized Sites Remedial Action Program

We'd like to hear from you...



**US Army Corps
of Engineers**

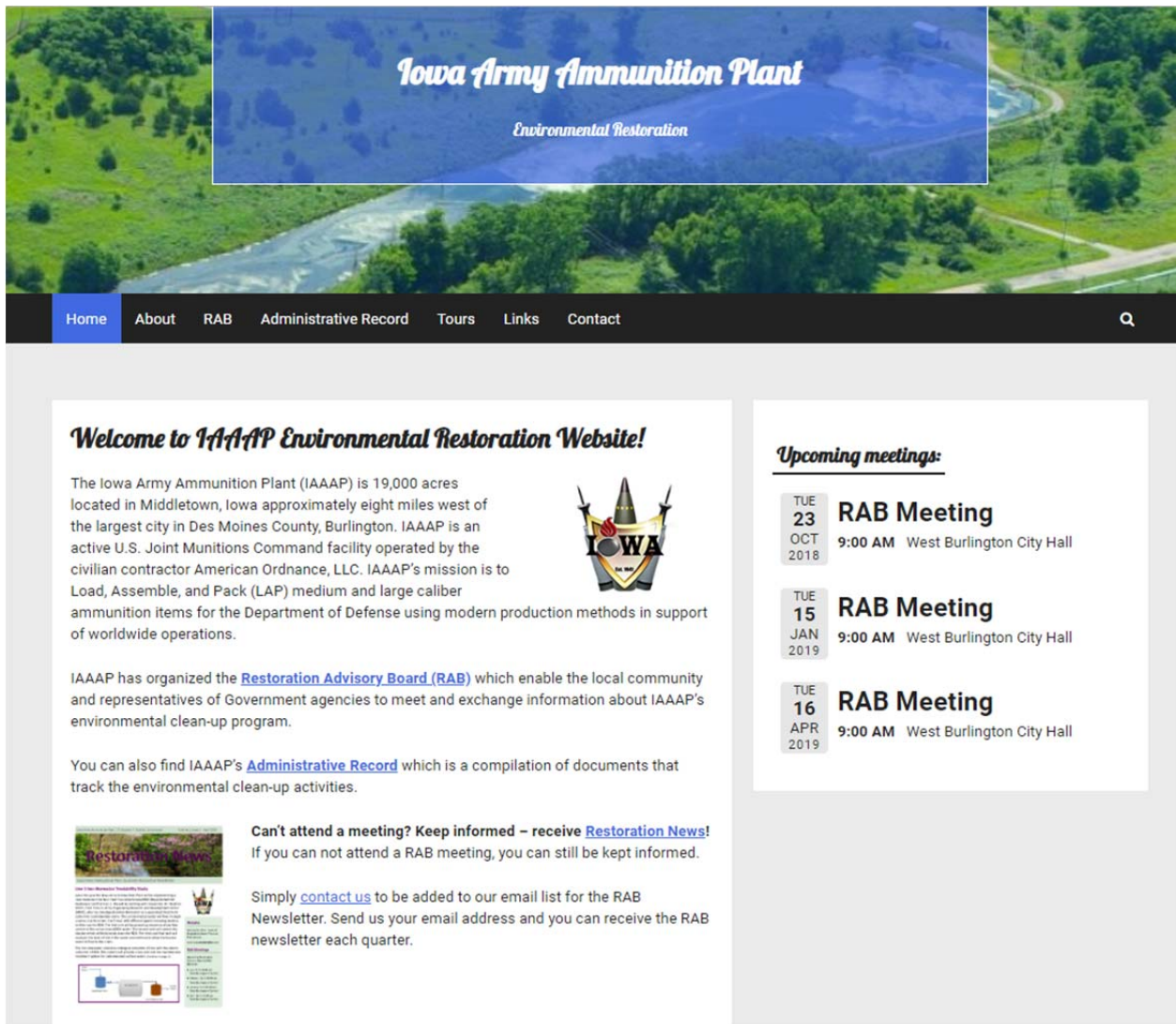
Written comments may be mailed during the
30-day comment period to

U.S. Army Corps of Engineers, St. Louis District
FUSRAP Project Office
8945 Latty Ave/ Berkeley, MO 63134

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Formerly Utilized Sites Remedial Action Program

Example of Presentation Slides from Public Meeting (Continued)



Example of IAAAP Environmental Restoration Webpage Content

Administrative Record

IAAAP Administrative Record, required by the Code of Federal Regulations, is a compilation of documents that track the discovery, investigation and remedy selection for environmental clean-up activities. It also provides a mechanism for public participation. The documents contained in the Administrative Record were used as the basis for the selection of a response action. All hard copies of the Administrative Record reside at the installation. For a complete list of every document, download the [Administrative Record Index – OCT2018](#). You can also download a description of the [CERCLA Phases](#).

^ Operable Unit 1 (OU1) - Soils
^ Operable Unit 3 (OU3) - Offsite Groundwater
^ Operable Unit 4 (OU4) - Inert Disposal Area (IDA)
^ Operable Unit 5 (OU5) - Military Munitions Response Program (MMRP)
^ Operable Unit 6 (OU6) - Onsite Groundwater
^ Operable Unit 7 (OU7) - Installation Wide
^ Operable Unit 8 (OU8) - FUSRAP
^ Operable Unit 9 (OU9) - Construction Debris Sites
^ RAB Meeting Minutes
^ Five-Year Review Reports (5YR)
^ Mathes Lake - Operable Unit Undetermined
^ TNT Cave Complex - Operable Unit Undetermined

Example of IAAAP Environmental Restoration Webpage Content (Continued)

APPENDIX D

IOWA ARMY AMMUNITION PLANT
ENVIRONMENTAL RESTORATION NEWSLETTER

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Iowa Army Ammunition Plant, LTC Stephen T. Koehler, Commander

Volume 2, Issue 4 July 2018



Iowa Army Ammunition Plant Quarterly Restoration Newsletter

Earth Day Public Tour Success

The 2018 Earth Day Public Tour was a huge success! We had over 40 people in attendance, from the public to different government employees. Attendees were briefed on the recent restoration efforts, the current status of the plant's demolition project, and the work being done under the Formerly Utilized Sites Remedial Action Program (FUSRAP). After enjoying donuts, presentations, and a quick Q & A session, everyone boarded the charter bus for a tour of the plant restoration sites.

The public was able to see first hand, some of the sites that were talked about in the presentations, as well as receive a little more background of the different areas. Once the tour was complete we asked the attendees to take a quick survey answering a few questions. We received nothing but positive reviews and people expressing their thanks for updating them on the current status of the plant's clean up efforts.



Website

Looking for other issues of *Restoration News*? You can find them at:

www.iaaprestoration.com

RAB Meetings

Upcoming Restoration Advisory Board (RAB) Meetings:

- October 16, 9-10:30 am
West Burlington City Hall
- January 15, 9-10:30 am
West Burlington City Hall
- April 16, 9-10:30 am
West Burlington City Hall
- July 16, 9-10:30 am
West Burlington City Hall

2018 IAAAP Earth Day
Public Tour



IAAAP Building Demolition Status

Phase 1: Phase is complete
 Phase 2: 95% complete
 Phase 3: Phase is complete
 Phase 4: 80% Complete
 Phase 5: Work has begun
 Phase 6: Awaiting funding
 Phase 7: Awaiting funding

IAAAP Building Demolition Summary

Building Demos to date:	229	SQFT:	310,694
Phase	# of Facilities	Area (SQFT)	
PHASE 1	84	91,380	
PHASE 2	75	88,766	
PHASE 3	23	63,058	
PHASE 4	73	113,345	
PHASE 5	32	163,027	
PHASE 6	80	73,673	
PHASE 7	18	112,312	
TOTAL Scheduled:	410 Facilities	705,561 SQFT	
16.20 Acres			

Demolition Photo Update



Line 1 After Demo



Line 5 After Demo



Recycling Efforts

New Fence and Gate at Line 1 Impoundment

PARS Environmental Inc. installed a new access gate and fence to prevent people from entering the blast radii zone during scheduled munitions testing.



Road Resurfacing at Various Restoration Sites



Inert Disposal Area



Line 800

Commander's Corner

With this year in full swing, many Facility enhancements are being made here at IAAAP! At the Admin building we have successfully removed the old communications tower, replaced the sidewalk on the North side, placed boulders near the walkway on the South side, removed old trees, painted the interior and removed shrubbery.

There are also improvements and renovations programmed for lines, utilities and our acreage; still more in the planning phase. Examples include commercial development plans, more rail upgrades, a sewer rehab, critical repairs on bridges, the Visitor Welcome Center, Gate 3, and converting outmoded spaces into more useful areas for today's workforce. Similar to restoring the land on the Plant that was once used to make munitions, we have to restore our older buildings on the facility that are not on the demolition list. These aren't just projects, rather they are coordinated, appropriate and necessary use of funding that will maintain and recapitalize on resources already in our care.



*LTC Stephen T. Koehler
Commander
Iowa Army Ammunition Plant*

IOWA ARMY AMMUNITION PLANT

Environmental Restoration
17571 DMC Highway 79
Middletown, IA 52638

Restoration News is an unofficial publication sent quarterly to inform the public of on-going and upcoming restoration events at the Iowa Army Ammunition Plant. Contents of Restoration news are unofficial and are not necessarily endorsed by the Joint Munitions and Lethality Life Cycle Management Command, the Department of the Army, the Department of Defense, or any other U.S. Government agency.

This publication is edited by Mrs. Kaitlin Nau, American Ordnance LLC.

Phone: 319-753-7616

Email: Kaitlin.Nau@aolc.biz

Website: iaaprestoration.com

Did You Know?

Mathes Lake is named after George Mathes, who served as the IAAAP Chief Engineer for almost forty years.



APPENDIX E
MEDIA CONTACTS

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MEDIA CONTACTS

Newspapers

The Hawk Eye
800 South Main St.
Burlington, IA 52601
Phone: 319-754-8461
Website: www.thehawkeye.com

The Des Moines County News
204 Broadway St.
West Burlington, IA 52655
Phone: 319-752-8328

The Fort Madison Daily Democrat
1226 Ave. H
Fort Madison, IA 52627
Phone: 319-372-6421
Email: editor@dailydem.com

The Mediapolis News
616 Main St.
Mediapolis, IA 62637
Phone: 319-392-3174
Website: www.mediapolisnews.com
Email: meponews@mepotelco.net

Television Stations

WHBF-TV/KGCW-TV/KJLB-TV Channel 26 and KLJB-TV Virtual Channel 18
231 18th St.
Rock Island, IL 61201
Phone: 309-786-5411
Website: www.ourquadcities.com
Email: Contact through website

KWQC-TV Channel 6
805 Brady St.
Davenport, IA 52803
General Manager: John Mann
Phone: 563-383-7000
Website: www.kwqc.com
Email: Contact through website

WQAD-TV Channel 8
3003 Park 16th St.
Moline, IL 61265
News Director: Alan Baker
Phone: 309-764-8888
Website: www.wqad.com
Email: 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 North Fourth St., Suite 300
Burlington, IA 52601
Studio: 319-754-1490
Phone: 319-752-5402
Website: www.kbur.com
Email: Contact through website

Titan Broadcasting, LLC
KGRS (Burlington, IA) and KBKB (Fort Madison, IA)
610 North Fourth St., Suite 310
Burlington, IA 52601
Phone: 319-752-2701
Website: www.kgrsfm.com
Email: Contact through website

KILJ AM-FM
2411 Radio Drive
Mount Pleasant, IA 52641
Phone: 319-385-8728
Website: www.kilj.com
Email: Contract through website

KCPS 1150 AM (West Burlington, IA)
PO Box 100
West Burlington, IA 52655
Phone: 319-753-5277
Website: <http://kcpsradio.com>
Email: kcps@aol.com

American Family Association
KAYP 89.9 FM (Burlington, IA)
PO Box 2440
Tupelo, MS 38801
Phone: 662-844-8888

APPENDIX F
POTENTIAL PUBLIC MEETING LOCATIONS

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POTENTIAL PUBLIC MEETING LOCATIONS

Burlington Public Library
210 Court St.
Burlington, IA 52601

Burlington /West Burlington Chamber of Commerce
610 North Fourth St., Suite 300
Burlington, IA 52601

Comfort Suites
1780 Stonegate Center Drive
Burlington, IA 52601

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

Danville City Hall
105 West Shephard St.
Danville, IA 52623

Bob Dodds Insurance Agency
108 North Main St.
Danville, IA 52623

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APPENDIX G

EXAMPLE OF COMMUNITY INVOLVEMENT MEDIA NOTICE

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U.S. ARMY CORPS OF ENGINEERS

NEWS RELEASE

BUILDING STRONG®

For Immediate Release:
Feb. 27, 2018

Contact:
Michael Kessler, 314-260-3919
STLFUSRAP@usace.army.mil

CORPS OF ENGINEERS CONDUCTS FUSRAP FIVE-YEAR REVIEW FOR IOWA ARMY AMMUNITION PLANT

ST. LOUIS – The U.S. Army Corps of Engineers (USACE) is conducting the first Five-Year Review of its environmental remedial actions that have been implemented at the Iowa Army Ammunition Plant (located in Middletown, Iowa). The purpose of the Five-Year Review is to determine whether the remedial actions are protective of human health and the environment. In addition, the Five-Year Review report will identify issues, if any, found during the review and make recommendations to address them.

For management purposes, the Iowa Army Ammunition Plant environmental cleanup is divided into eight operable units, or OUs. The USACE Five-Year Review is required for those OUs that fall under the responsibility of USACE as outlined in the FUSRAP Record of Decision for the Iowa Army Ammunition Plant, dated September 2011. OUs included in this review are OU-1 Line 1 (including the Building 1-70 area and the surrounding filter bed) and West Burn Pad Area South of the Road; and OU-8, which includes the Firing Sites Area; Storage Yards C, G and L; and Warehouse 3-01.

The selected remedy consists of

- (1) the excavation and sorting of depleted uranium (DU)-contaminated soil with off-site shipment to a properly permitted disposal facility,
- (2) backfilling with clean sorted soil or supplemental soil and site restoration,
- (3) decontamination of structural surfaces in two buildings at Line 1 and disposal of materials at permitted facilities,
- (4) excavation and shipping for disposal of explosives contaminated soil at Building 1-70, and
- (5) continued industrial land use.

USACE is conducting this Five-Year Review as required by the Comprehensive Environmental Response, Compensation and Liability Act, commonly known as CERCLA or Superfund, and the National Contingency Plan (short for National Oil and Hazardous Substances Pollution Contingency Plan). USACE will conduct the review with oversight and support from the U.S. Environmental Protection Agency and the Iowa Department of Natural Resources.

The final Five-Year Review report will be available in January 2019 at the following locations:

- IAAAP Visitor Reception Area in the IAAAP Administrative Building 100-101, 17571 DMC Highway 79, Middletown, IA 52638-5000;
- Burlington Public Library, 501 North Fourth St., Burlington, IA 52601; and the
- FUSRAP Project Office, 8945 Latty Ave., Berkeley, MO 63134-1024.

For more information regarding FUSRAP environmental activities at the Iowa Army Ammunition Plant, contact Michael Kessler at 314-260-3919.

**U.S. ARMY CORPS OF ENGINEERS – ST. LOUIS DISTRICT
1222 SPRUCE STREET, ST. LOUIS, MO 63103-2825**

<http://www.mvs.usace.army.mil/Missions/Centers-of-Expertise/Formerly-Utilized-Sites-Remedial-Action-Program/>

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