

Former Hardesty Federal Complex  
Community Involvement Plan  
October 2014  
Kansas City, Missouri

# Former Hardesty Federal Complex Community Involvement Plan Table of Contents

Acronym List ...i

## Section 1: Introduction ...1

Overview ...1  
Community Involvement Plan Objectives ...3  
Roles and Responsibilities ...3  
Additional Information ...4  
GSA's Commitment ...4

## Section 2: Site Description and Operational History ...5

Physical Setting ...5  
Facility Layout ...7  
Site Ownership ...7  
Operational History ...8  
Water Systems ...8

## Section 3: Site Environmental History ...9

Primary Environmental Issues ...9  
Other Areas of Potential Concern ...12

## Section 4: Explanation of Environmental Cleanup Process ...13

Preliminary Assessment and Site Inspection ...15  
Remedial Investigation and Feasibility Study ...15  
Proposed Plan and Record of Decision ...16  
Remedial Design and Remedial Action ...16  
Long-term Maintenance, Cleanup Completion and Site Reuse ...17  
Recap of the Remediation Process at Hardesty ...17

## Section 5: Community Description ...19

Neighborhoods ...19  
Demographics ...19  
Languages ...23  
An Environmental Justice Community ...24  
Community Characteristics Impact Environmental Outreach ...25  
Community Improvement Efforts and Support Organizations ...25

## Section 6: Community Involvement History ...28

Historical Communication ...28  
Recent Community Involvement ...28

## Section 7: Community Concerns ...35

Human Health ...35  
Cleanup Timeline and Methodology ...36  
Property Values ...37  
Redevelopment and Future Use ...37  
Potential Presence and Detection in Homes ...37  
Community Concerns Unrelated to the Former Federal Complex ...38  
Community Members Without Environmental Concerns ...38

## Section 8: Community Involvement Goals ...39

## Section 9: Planned Community Involvement Activities ...40

Methods of Communication ...40  
Recap of Community Involvement Opportunities ...42

## Appendices ...43

## Acronym List

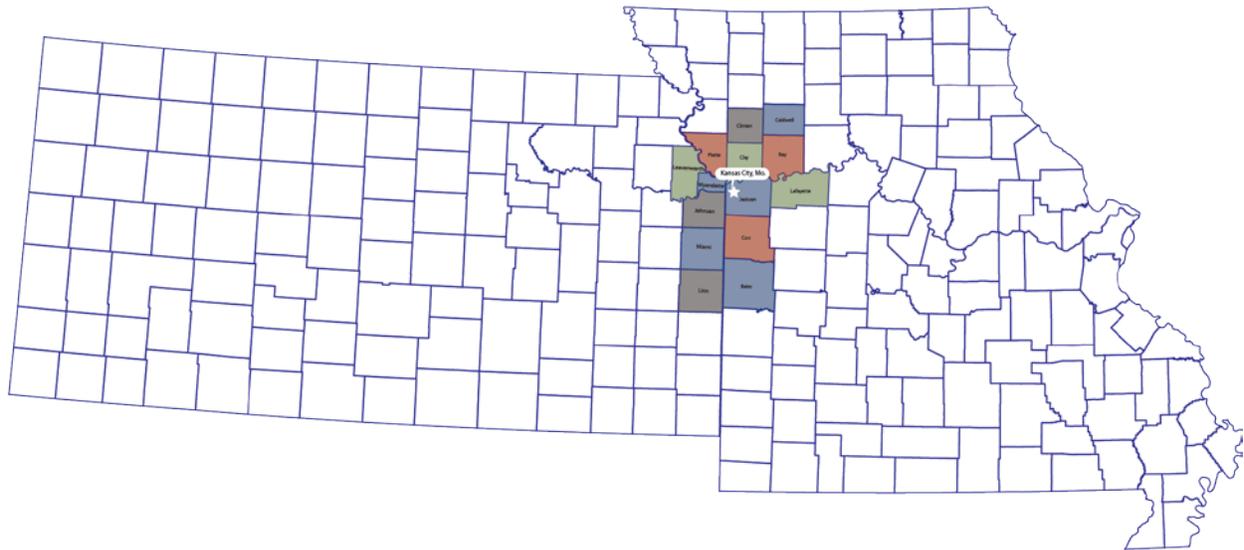
**%ile** -- percentile  
**Avg.** -- average  
**CDR** -- Covenant Deferral Request  
**CERCLA** -- Comprehensive Environmental Response, Compensation, and Liability Act  
**CIP** -- Community Involvement Plan  
**cis-DCE** -- cis-1,2-Dichloroethene  
**EJ** -- environmental justice  
**EPA** -- U.S. Environmental Protection Agency  
**ESA** -- Environmental Site Assessment  
**FS** -- Feasibility Study  
**GSA** -- U.S. General Services Administration  
**HEDC** -- Hispanic Economic Development Corporation  
**HELP** -- Health, Education, Labor & Public Safety  
**HHRA** -- human health risk assessment  
**HHS** -- U.S. Department of Health and Human Services  
**KCHD** -- Kansas City Health Department  
**LEP** -- Limited English Proficiency  
**LISC** -- Local Initiative Support Corporation  
**MARC** -- Mid-America Regional Council  
**MDHSS** -- Missouri Department of Health and Senior Services  
**MDNR** -- Missouri Department of Natural Resources  
**NEAT** -- Northeast Alliance Together  
**NEJAC** -- National Environmental Justice Advisory Council  
**NPL** -- National Priorities List  
**PA** -- Preliminary Assessment  
**PCB** -- polychlorinated biphenyl  
**PCE** -- Tetrachloroethene  
**RA** -- Remedial Action  
**RD** -- Remedial Design  
**RI** -- Remedial Investigation  
**RI/FS** -- Remedial Investigation/Feasibility Study  
**ROD** -- Record of Decision  
**SI** -- Site Inspection  
**TCA** -- Trichloroethane  
**TCE** -- trichloroethylene  
**UST** -- underground storage tank  
**VACKC** -- Vietnamese American Community of Greater Kansas City  
**VOC** -- Volatile Organic Compound

**Overview**

As part of the U.S. General Services Administration’s (GSA) environmental cleanup efforts at the former Hardesty Federal Complex, GSA created this document -- the Hardesty Community Involvement Plan (CIP) -- in 2014 to enable meaningful community involvement throughout the cleanup process.

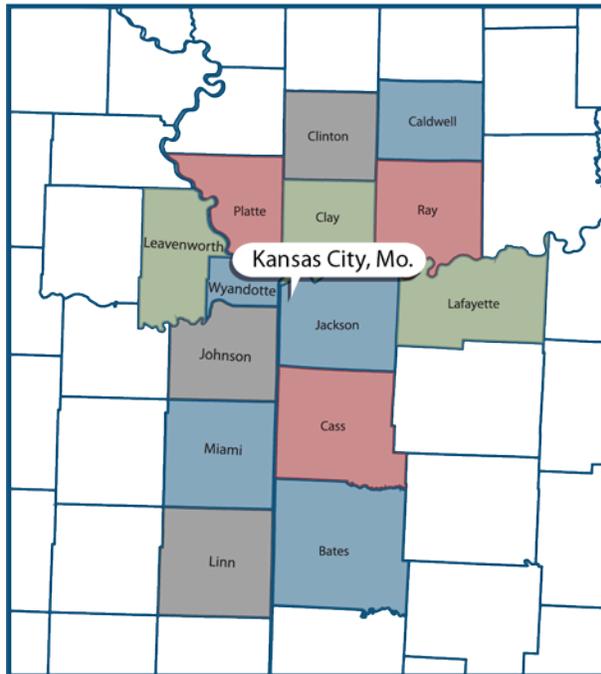
The former federal complex is an 18-acre property in Kansas City, Mo., located east of downtown. The site has been under private ownership since 2011, but it has environmental issues dating back to its historical government operations.

States of Kansas and Missouri Map



Source: Mid-America Regional Council

Kansas City Metropolitan Statistical Area



Source: Mid-America Regional Council

Northeast Kansas City,  
as situated in Jackson County, Missouri



Source: Mid-America Regional Council

The GSA previously owned the property and is responsible for addressing environmental contamination in surface soils and underground, along with making sure the site is safe for redevelopment. The property's owner, Hardesty Renaissance Economic Development Corporation (Hardesty Renaissance), is responsible for above-ground cleanup within buildings and related to building materials, including asbestos and lead-based paint.

Recognizing that people prefer to receive information in a variety of ways and have different levels of interest in environmental activities, this Community Involvement Plan shows what GSA has done to identify the community's issues, needs and concerns and the specific actions GSA will take to address them. The plan outlines how GSA will inform community members about environmental testing and results and the opportunities community members will have to participate in decision making throughout the cleanup process. The plan also provides information about the site and its surrounding community.

GSA will update this CIP as necessary, based on additional community feedback, testing results, community involvement activities and other factors. The plan will be revised at least every five years for as long as GSA retains environmental remediation responsibility for the site. A hard copy of this CIP is available at the North-East Branch of the Kansas City Public Library at 6000 Wilson Road, Kansas City, Mo., and

electronically on the Missouri Department of Natural Resources (MDNR) website at <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

For specific questions about the Hardesty environmental project or this Community Involvement Plan, please contact the GSA Heartland Region at (816) 926-6903 or [r6environment@gsa.gov](mailto:r6environment@gsa.gov).

### **Community Involvement Plan Objectives**

The Hardesty CIP seeks to:

- Provide readers with enough background and context to understand the environmental situation at the former federal complex and the resulting need for community involvement;
- Share information about GSA's actions regarding environmental testing and community involvement;
- Describe how GSA determined this community's specific community outreach needs;
- Specify how GSA will engage the community moving forward and how community members can get involved in environmental decision making; and
- Comply with Environmental Protection Agency (EPA) guidelines for community involvement.

For more information about community involvement plans, refer to Appendix 1.1, or the EPA website <http://www.epa.gov/superfund/community/index.htm>.

### **Roles and Responsibilities**

During the World War II era, the site served as the Kansas City Army Quartermaster's Depot. As mentioned above, the property is currently owned by Hardesty Renaissance and was previously owned by GSA. Hardesty Renaissance is responsible for above-ground cleanup within buildings and related to building materials, and GSA is responsible for addressing environmental contamination in surface soils and underground.

Over the past several years, GSA has conducted environmental testing and studies of the former Hardesty Federal Complex and surrounding area in an effort to monitor and put in place plans to ensure the protection of the health and environment of all who live and work in the community.

GSA hired a private industry environmental consulting firm to address the impact associated with past operations at the site. As of 2014, Terracon Consultants, Inc. is the contracted environmental consultant. Previous investigations revealed soil and

groundwater contamination due to leaks from petroleum underground storage tanks (USTs) and releases of trichloroethylene (TCE).

For several years, GSA has worked to investigate the source and the extent of the pollution in and around the site. The Missouri Department of Natural Resources (MDNR) provides oversight at this facility under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as the Superfund Law. View the legal agreement between GSA and MDNR in Appendix 1.2.

Additionally, GSA is working with the Missouri Department of Health and Senior Services (MDHSS) and the Kansas City Health Department (KCHD). MDHSS reviews and provides guidance regarding the human health risk assessments produced by GSA's environmental contracting firm. KCHD is a human health resource for GSA and the community.

Contact information for GSA, partner agencies, elected officials and community groups is available in Appendix 1.3.

### **Additional Information**

Throughout this Community Involvement Plan, you will find references to supporting documentation. The Remedial Investigation/Feasibility Study Work Plan, or simply the Work Plan, was prepared in March 2013 by GSA's environmental consulting firm and is the primary source for information regarding environmental sampling and results. The 2013 Work Plan characterizes the nature and extent of risks associated with the site. The Work Plan may be viewed on MDNR's website at <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>. The MDNR website provides other site-specific information, as well.

This environmental project's Public Viewing Record is another source of information. The record will be available in electronic and hard copy formats at the North-East Kansas City Library beginning in late 2014. The record is a collection of documents and information that explains site cleanup activities and the factors, including public involvement, that went into the selection of those activities.

### **GSA's Commitment**

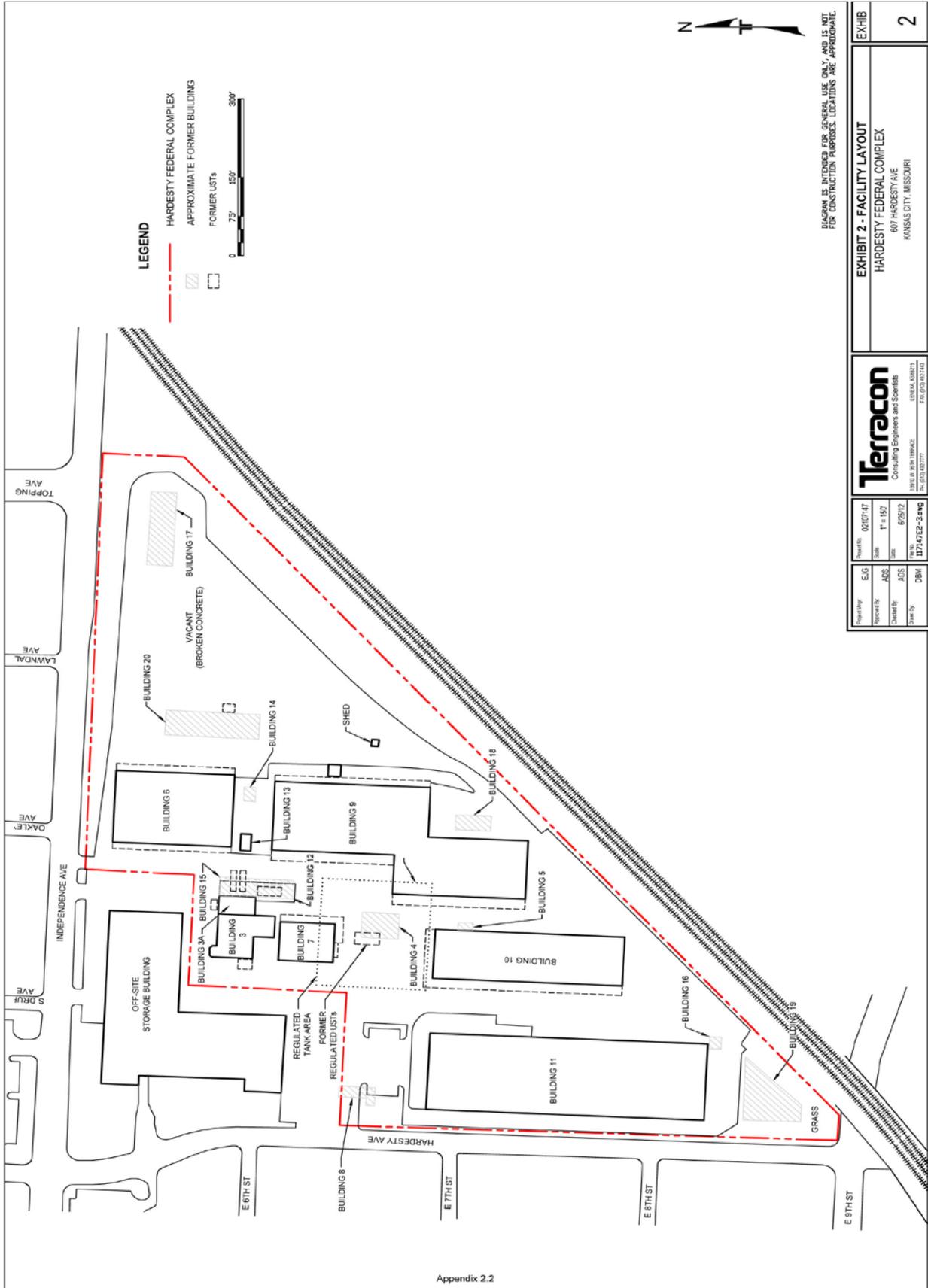
GSA is committed to ensuring that any potential environmental concerns are addressed as quickly as possible, relying on the best available science and the guidance of experts at our partner agencies. GSA is also committed to providing the community with opportunities to engage in meaningful discussions and decision making regarding the environmental conditions at and near the former federal complex.

## Section 2: Site Description and Operational History

Much of the information in this section was drawn from the 2013 Work Plan, available on MDNR's website at <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

### **Physical Setting**

The former Hardesty Federal Complex is east of downtown Kansas City, Mo., at 607 Hardesty Avenue, in an area known as Northeast Kansas City. The site is just southeast of the intersection of E. Independence Avenue and Hardesty Avenue. Appendix 2.1 contains a topographic map of the general location. A diagram of the complex is below and is located in Appendix 2.2



PROGRAM IS INTENDED FOR GENERAL USE ONLY, AND IS NOT FOR CONSTRUCTION PURPOSES. LOCATIONS ARE APPROXIMATE.

EXHIBIT 2 - FACILITY LAYOUT

HARDESTY FEDERAL COMPLEX  
807 HARDESTY AVE  
KANSAS CITY, MISSOURI

**Terrecon**  
Consulting Engineers and Scientists  
LISA M. SMITH, P.E.  
10010 100TH ST  
OVERLAND PARK, MO 66214

Project No.	E-6
Revision	ASG
Drawn By	ADJ
Check By	ADJ
Date	02/07/17
Scale	1" = 150'
Sheet No.	171412E-3.04G
Drawn By	DBM

EXHIBIT 2

Appendix 2.2

The site covers approximately 18 acres of commercial and light industrial land, and the surrounding area generally consists of mixed commercial, light industrial and residential land use. Several unoccupied buildings are on the site.

The property is fenced by a seven-foot chain-link fence with a locked entrance gate at the facility's driveway from Hardesty Avenue. A secondary entrance from Independence Avenue is also gated and locked. Virtually all of the site is covered with buildings or paved areas, with the exception of a small grass-covered area between buildings 6 and 9.

### **Facility Layout**

Based on information obtained from historic Sanborn fire insurance maps, the western portion of the site was previously a cultivated field in 1909. By 1920, buildings 1, 2 and 3 were constructed on the northwest corner of the site. Building 3 was identified as an independent electric power facility supporting buildings 1 and 2.

When the federal government purchased the site in 1940, it included buildings 1, 2 and 3. Between 1940 and 1943, 15 additional buildings -- for a total of 18 structures -- were constructed. Two other buildings were constructed at the site after 1943. Structures were identified as buildings 1 through 20.

In 1980, buildings 1 and 2 were sold to Megaspaces, Ltd., and they are no longer considered part of the former federal complex or the site. Buildings 4, 5, 8, 12, 14, 15, 16, 17, 18, 19 and 20 were demolished in the 1970s and 1980s.

The site is currently developed with eight buildings (3, 3A, 6, 7, 9, 10, 11, and 13) as shown in the diagram above and in Appendix 2.2. See Appendix 2.3 for more information about these buildings.

### **Site Ownership**

The Army's Kansas City Quartermaster Depot was located at the site from 1940 to 1953. In 1960, the site transferred ownership from the Department of Defense to the General Services Administration (GSA), as noted on page 21 of the historic report in Appendix 2.4. GSA owned the site from 1960 until September 2011, at which time the property was transferred to Hardesty Renaissance Economic Development Corporation, a Missouri nonprofit corporation, through a Quitclaim Deed. A copy of that deed is provided in Appendix 2.5.

## **Operational History**

The site was used as the Kansas City Quartermaster Depot during World War II. The function of the Quartermaster Depot was to purchase, store and issue Quartermaster supplies for posts, camps and stations in Kansas, Missouri, Arkansas, Nebraska, Oklahoma, Wyoming, South Dakota and Utah. Part of the mission of the depot was to receive and store protective and impermeable clothing, laundry supplies, dry-cleaning supplies, inks, lithographic chemicals, petroleum products and petroleum handling equipment. Other parts of the mission included: reclaiming petroleum containers; chemically treating clothing to ward off effects of gas attacks; and procuring graphic arts supplies and chemicals.

Several government agencies used the buildings for storage from 1960 until the early 2000s. Agencies using buildings at the site included the Army Mapping Department, National Weather Service, Federal Aviation Administration, U.S. Marines, Department of Energy, Federal Emergency Management Agency, U.S. Army Corps of Engineers, and the U.S. Postal Service.

Refer to Appendix 2.6 for a present-day aerial photo of the site. Refer to Appendix B of the 2013 Work Plan for historical photos and diagrams.

## **Water Systems**

Drinking water for the complex and surrounding neighborhoods is provided by The City of Kansas City, Missouri, Water Services Department through a network of water mains and lines from its treatment plant. The main domestic water supply for the area is the Missouri River.

There is an aquifer underground at the site, but aquifer water is not used for drinking and it would not be suitable for drinking regardless of any pollutants related to the property's operations. This is because the aquifer under the site -- along with almost one-third of those in the State of Missouri -- has saline water, meaning the water contains at least 1,000 parts per million (ppm) of dissolved solids. The site is in Jackson County, Mo., where aquifers lie 250-400 feet below ground and range 1,200-4,000 feet thick.

The water in the aquifer beneath the former federal complex is the primary focus of GSA's environmental investigation. This water is not drawn upon for any use on or around the site, but GSA is working to determine the extent and concentration of potential pollutants in the groundwater.

## Section 3: Site Environmental History

Since 1997, GSA and its contractors have conducted more than 20 investigations to evaluate environmental conditions related to the complex. A few of these investigations included: Phase I Environmental Site Assessments (ESAs), a Preliminary Assessment (PA), a Site Inspection (SI), Underground Storage Tank (UST) removals, and on- and off-site soil and groundwater investigations. Summaries of the investigation reports are provided in Sections 3.4.1 through 3.4.22 of the 2013 Work Plan on MDNR's website at <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>. GSA's overall environmental investigation and cleanup process is outlined in Section 4 of this Community Involvement Plan.

During the development of the 2013 Work Plan, the environmental contracting firm used investigation reports to identify areas of potential environmental concern, as discussed below.

As noted in the 2011 property sale agreement, located in Appendix 2.5, GSA is responsible for investigating and remediating the exterior environment, including surface soils and contamination underground. As the owner of the complex, Hardesty Renaissance is responsible for above-ground cleanup within buildings and related to building materials, including but not limited to asbestos and lead-based paint.

### **Primary Issues**

GSA's current environmental testing focus is on pollutants in groundwater on- and off-site. The primary materials present in the groundwater are dry cleaning by-products and fuel, most likely due to operations during and immediately following World War II.

When the complex served as an Army Quartermaster's Depot, soldiers' uniforms were cleaned and chemically treated onsite. The treatments were designed to protect the soldiers against enemy chemical weapons like mustard gas. Due to these operations, chemicals released or spilled into the soil and groundwater. These released chemicals are sources of current groundwater pollution, both on- and off-site.

At the end of World War II, many of the records from the war were destroyed as a part of demobilization activities, as described on page 24 of the historical report in Appendix 2.4. Records showing the ingredients and disposal methods of the chemical treatments were among those that were destroyed, so there is limited historical information about related potential pollutants.

Two storage tanks between buildings 6 and 9 are believed to have contained the uniform cleaning and treatment chemicals. These tanks were removed prior to 1999.

During the Site Investigation (SI) in 2002, chlorinated Volatile Organic Compounds (VOCs) -- such as Tetrachloroethene (PCE), Trichloroethane (TCA), Trichloroethylene (TCE), and cis-1,2-Dichloroethene (cis-DCE) -- were detected in the groundwater at the site in concentrations above the MDNR Cleanup Levels for Missouri guidance. The investigation showed VOCs in the onsite groundwater to the north, northeast, east, and southeast of the area formerly associated with the storage of clothing treatment chemicals. Investigations also identified that chlorinated VOCs were migrating offsite to the northeast. Potential human health risks associated with such chemicals are discussed in Section 7 of this Community Involvement Plan.

The results of the SI prompted several additional onsite and offsite soil and groundwater investigations. These investigations are discussed below and are summarized in 2013 Work Plan Sections 3.4.12, 3.4.13, 3.4.14, 3.4.15, 3.4.18, 3.4.19, and 3.4.20. Diagrams outlining the historical sampling locations and data tables are in 2013 Work Plan Appendix A.

### TCE

Trichloroethylene (TCE) is the primary chemical of concern present in on- and off-site groundwater. In the past, TCE was used in solvents for dry cleaning, but according to the U.S. Department of Health and Human Services Centers for Disease Control, most dry cleaners now use different chemicals. TCE is also used in metal degreasers and in consumer products like adhesives, paint removers and spot removers.

As the 2002 Site Investigation (SI) identified, TCE and other VOCs are in groundwater onsite in levels that exceed MDNR cleanup levels for Missouri's Risk-Based Corrective Action guidance. This guidance provides a framework for remediation decisions at contaminated sites. The guidance is located on MDNR's website at <http://www.dnr.mo.gov/env/hwp/mrbca.htm>.

Three onsite groundwater investigations from 2003 to 2011 produced laboratory results for TCE and other VOCs that were similar to those of the SI. Results indicated little change over time in the concentration and location of the chemicals, other than that they slightly sunk and slightly spread horizontally, which was expected because they have higher densities than water. GSA will continue to investigate TCE and other VOCs, and when the extent and boundaries of the pollutants are fully known, GSA, its partner agencies and the community will consider cleanup options.

Five offsite groundwater investigations were conducted from 2003-2011. While TCE was detected in the groundwater, each investigation showed that TCE was not present offsite in levels or depths that required more extensive testing. That determination was made through an MDNR-approved scientific modeling process.

In a spring 2013 offsite groundwater investigation, however, GSA and its environmental contractor received preliminary data indicating TCE was present closer to the ground's surface than previously recorded just north of the complex. Additionally, EPA released new guidance with more stringent screening levels than were previously in place. GSA quickly consulted with the Missouri Department of Health and Senior Services (MDHSS) and an independent human health risk assessor. These experts indicated that despite the change in TCE depth and the newer science, there was no immediate known threat to human health. As of the 2014 publication of this Community Involvement Plan, the Vapor Intrusion Screening Level Calculator is used to calculate risk.

As a precaution, GSA expanded sampling in the residential area north of the site during 2013 and 2014.

A diagram of onsite groundwater sampling locations is in Appendix 3.1, and offsite groundwater sampling locations are represented in Appendix 3.2. Onsite soil testing locations are in Appendix 3.3.

Results from the expanded 2013-2014 sampling efforts will determine GSA's next steps.

GSA held public information sessions in June and December 2013 to make sure the community was aware of the investigation results and expanded sampling efforts. The public information sessions are discussed further in Section 6 of this Community Involvement Plan.

### Fuel

In addition to dry cleaning chemicals, petroleum fuel was stored in underground tanks in support of World War II operations. Testing indicates that these tanks leaked fluids into the ground. Motor fuel tanks have been remediated and have achieved their cleanup goals. Heating oil tanks are being handled in GSA's current investigation.

In the past, fuel contaminant levels were compared to the MDNR cleanup levels for Missouri's Risk-Based Corrective Action guidance, and at that time, those contaminants did not exceed MDNR thresholds onsite. As science has changed over the years, however, GSA and its environmental consulting firm must now sample and test the onsite fuel pollutants against newly revised EPA standards to determine if there are any

potential risks to human health and to identify cleanup options. That investigation, underway as of the 2014 publication of this CIP, is outlined in the Sampling and Analysis Plan available on MDNR's website at <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

Fuel pollutants related to site operations have not been found offsite.

### **Other Areas of Potential Concern**

As the site has served many purposes throughout its history, and environmental standards have become more stringent over time, several items onsite have been identified by GSA's contracted environmental consulting firm as issues of potential environmental concern. Polychlorinated biphenyl (PCB) chemicals from transformer fluid, insecticide storage and the use of lead paint are a few of these issues.

In some cases, these items of potential concern have already been investigated and addressed. For example, GSA cleaned up the lead contamination in an old firing range onsite in 2010. In 2007, oil that had been released from old transformers was remediated. GSA removed three underground fuel tanks, and in 2000, approximately 2,600 cubic yards of petroleum-polluted soil was removed from the site.

Again, now that Hardesty Renaissance owns the property, they are responsible for above-ground cleanup related to buildings, but GSA is still responsible for surface soils and underground investigation and remediation.

For information about other items of potential concern, refer to 2013 Work Plan Section 4.3 and 2013 Work Plan Table 2.

## Section 4: Explanation of Environmental Cleanup Process

To comply with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) – commonly known as the Superfund Law – GSA must follow a specific process to address environmental issues at the Hardesty complex. The following pages feature a flow diagram (also found in Appendix 4.1) and description of the CERCLA procedure.

For more information about the CERCLA process, visit <http://www.epa.gov/superfund/community/process.htm>.

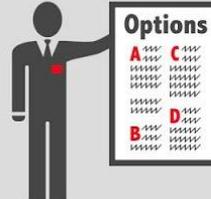
Several of the documents required by CERCLA, discussed on the following pages, will be included in the project's Public Viewing Record as they become available.

# CERCLA Environmental Investigation and Cleanup Process

A First Look



A Closer Look What are our options?



1

Preliminary Assessment (PA)/Site Inspection (SI)

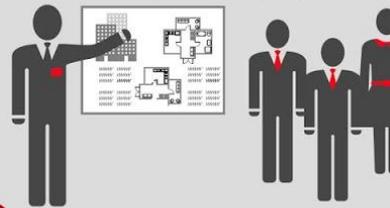
2

Feasibility Study (FS) and Remedial Investigation (RI)

Document agreed-upon cleanup strategy



Choose best options & get public input



4

Record of Decision (ROD)

3

Proposed Plan

Specifics of cleanup plan



Cleanup of physical site



5

Remedial Design (RD)

6

Remedial Action (RA)

Monitoring, reporting and new use of property



7

Long-Term Maintenance and Site Reuse

### **Preliminary Assessment and Site Inspection**

The environmental investigation and cleanup process begins by evaluating the site and searching for possible releases of hazardous substances through an initial Preliminary Assessment (PA) and Site Inspection (SI).

The Preliminary Assessment is designed to determine if the site poses a threat to human health and the environment. If there are possible threats, a Site Inspection is conducted. An SI typically collects soil and groundwater samples to determine if substances are being, or have been, released into the environment. The SI also assesses if substances have reached nearby points of interest, such as buildings or rivers.

At the Hardesty complex, the PA and SI were completed in 2002. Additional investigations were conducted over the next few years to further evaluate and supplement the items found in the SI. Information collected during the PA and SI is used to calculate a hazard ranking system score to determine if the site needs to be included on the EPA's National Priority List (NPL), also known as the Superfund List. The Hardesty complex score did not rank high enough to be listed as a National Priority site.

### **Remedial Investigation and Feasibility Study**

After the Preliminary Assessment and Site Investigation, a Remedial Investigation (RI) and a Feasibility Study (FS) are performed – often at the same time. The Hardesty complex remediation process is in the RI/FS stage, as of the 2014 publication of this Community Involvement Plan.

The RI:

- Characterizes site conditions;
- Determines the nature of the waste;
- Assesses risks to human health and the environment; and
- Conducts treatability testing to evaluate the potential performance and costs of treatment technologies under consideration.

A site characterization is completed as part of the RI, as noted above. Soil, water and waste samples are collected and evaluated to determine if human health or the environment has been affected. This data helps to determine the exact location and amounts of contamination, and to identify the existing or potential risks to human health and the environment. Again, the Hardesty complex is in this phase in 2014.

A Human Health Risk Assessment (HHRA) can be conducted during the RI/FS in order to analyze the potential adverse effects on humans that may result, either now or in the

future, from the presence of hazardous chemicals at the site or released from the site. For Hardesty, a Preliminary Human Health Conceptual Site Model was developed in August 2012. Read more about the HHRA in Section 7 of this Community Involvement Plan (CIP).

The Feasibility Study uses the information from the RI to evaluate several remedial options and determine the best option for cleaning up the site. During this process, each cleanup option is evaluated against nine criteria, as outlined in Section 6.1.1 of the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA. This guidance was provided by the EPA's Office of Emergency and Remedial Response. Section 6.1.1 of the guidance is located in Appendix 4.2 of this CIP. The complete guidance is located online at

<http://www.epa.gov/superfund/policy/remedy/pdfs/540g-89004-s.pdf>.

### **Proposed Plan and Record of Decision**

After all of the RI and FS data has been collected and a risk assessment has been completed, the cleanup options that seem to best fit the specific site are selected and a proposed plan for remediation is created.

For the Hardesty site, the community will have an opportunity to review the evaluation of cleanup options, review the proposed cleanup plan, and have a voice in the decision making. The opportunities for participation are outlined in Section 9 of this Community Involvement Plan.

Once a decision has been reached about which cleanup method(s) to use, the plan is documented in the Record of Decision (ROD). Any significant questions and concerns raised by the community at this time are addressed in the Responsiveness Summary. That document is included in the project's Public Viewing Record (discussed in Section 1 of this CIP).

GSA anticipates that the proposed plan and ROD will occur in 2015.

### **Remedial Design and Remedial Action**

In the Remedial Design (RD) phase, specific steps and timelines for cleanup actions are prepared. In Remedial Action (RA), the physical cleanup activities occur and the pollution is neutralized or removed from the soil, groundwater or other objects.

Remediation techniques for the Hardesty site have not been determined because the site is still in the RI/FS stage and cleanup options have not yet been evaluated.

Potential techniques may include:

- Excavation of the impacted soils. Polluted soil is physically removed from the property and taken to a certified disposal location.
- Pump and treat. Groundwater is brought to the surface and treated.
- In-situ technologies. Chemicals are inserted into the ground to break down – and in a way, counteract – the pollutants.
- Soil vapor removal. Soil vapors are removed from the soil beneath a building or other location.
- Other technologies.

Dozens of cleanup options exist. The RI/FS will evaluate and help determine which solutions may work best at the Hardesty site.

GSA anticipates that the RD and RA phases will occur in 2016.

### **Long-term Maintenance, Cleanup Completion and Site Reuse**

After remediation techniques have been used to eliminate pollutants, or reduce them to levels determined by regulatory guidelines, GSA will follow a long-term plan to protect human health and the environment from anything originating from the Hardesty site's exterior environment. GSA will continue to monitor site conditions and work with the Missouri Department of Natural Resources (MDNR).

Once MDNR agrees the remediation is complete and levels are safe for human health and the environment, the property will be available for use by Hardesty Renaissance. This may occur in late 2017. The property may be cleared for reuse in sections over time instead of all at once.

### **Recap of the Remediation Process at Hardesty**

At the Hardesty complex, the Preliminary Assessment (PA) and Site Inspection (SI) were completed in 2002. Additional investigations were conducted over the next few years to further evaluate and supplement the items found in the SI. The PA and SI information was used to calculate a hazard ranking system score for the Hardesty property, but it did not rank high enough to be listed on the EPA's National Priority List (NPL).

In 2014, the Hardesty site is in the Remedial Investigation (RI) and Feasibility Study (FS) stage. GSA and its environmental consulting firm are working to determine the precise location and amounts of contamination, on- and off-site, and to identify the existing or potential risks to human health and the environment. GSA partnered with the Missouri Department of Health and Senior Services (MDHSS) and an independent

health risk assessor in summer 2013 to evaluate potential risks to human health from offsite groundwater, based on sampling and modeling at that time. Per MDHSS and GSA's contractor, that information did not indicate an immediate threat to human health.

Once the RI and FS are complete, GSA will partner with MDHSS, MDNR, Kansas City Health Department (KCHD), the environmental consulting firm, and the community to create and evaluate a proposed cleanup plan for the site and surrounding areas. This may occur in mid-2015.

When the cleanup plan is final and documented in the Record of Decision (ROD), GSA will begin physical cleanup of the site through Remedial Design (RD) and Remedial Action (RA). This may occur in 2016. GSA will follow a long-term plan for monitoring site conditions and will continue to act under MDNR guidance. As MDNR declares the property suitable for reuse – either in sections or in its entirety – Hardesty Renaissance will be able to redevelop the site. This may occur by late 2017.

View the Hardesty complex tentative cleanup timeline in Appendix 4.3. This timeline is subject to change.

Many of the documents discussed in this CIP will be included in the Hardesty project's Public Viewing Record.

## Section 5: Community Description

### Neighborhoods

As mentioned in Section 2, the Hardesty site is located in Northeast Kansas City, Mo. Approximately 30,000 people reside in this area, according to the 2012 Health, Education, Labor & Public Safety Community Resource Guide provided to GSA by the Northeast Kansas City Chamber of Commerce.

The area consists of several neighborhoods, most of which have neighborhood associations. Parts of four Northeast Kansas City neighborhoods are located within one mile of the Hardesty complex. Those neighborhoods are Lykins, Indian Mound, Sheffield and Scarritt Renaissance. A neighborhood map is located in Appendix 5.1.

### Demographics

The Hardesty site is located in close proximity to residences. The EPA delivered to GSA in June 2013 an Environmental Justice (EJ) screening report (discussed further below). The screen indicated that 5,311 individuals live within a half-mile radius of the facility. This population contains high percentages of minority and low-income populations when compared with state averages. Demographic information from the EJ report is as follows:

Selected Variables	Raw Data	State Avg.	State %ile	EPA	EPA	USA Avg.	USA %ile
				Region Avg.	Region %ile		
Minority population	68%	19%	92	17%	95	35%	80
Low income population	65%	34%	92	32%	93	32%	91
Linguistically isolated population	31%	1%	99	2%	99	5%	96
Population with less than high school education	49%	14%	99	12%	99	15%	97
Population under 5 years of age	10%	7%	84	7%	82	7%	82
Population over 64 years of age	8%	14%	21	14%	22	13%	29

Demographic Data

Source: EPA Environmental Justice Screening Report, June 2013

The Raw Data column indicates what percentage of the total 5,311 individuals qualifies for each particular category, or row. The State Avg. column shows what percentage of all individuals in the State of Missouri qualify for each category. The State %ile column

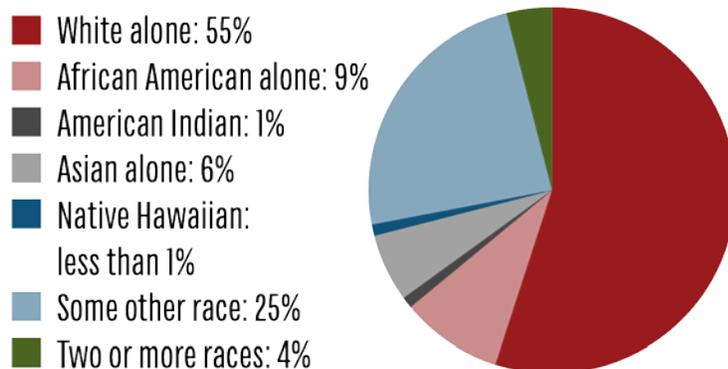
indicates how the Hardesty complex area compares to other areas of Missouri. For example, in the Minority Population category, the Hardesty area has a higher percentage of minority population than 92 percent of other areas in Missouri. In another example, the Hardesty area has more people over the age of 64 than 21 percent of other areas across the state. The average and percentile columns for EPA Region and USA are to be read in the same way as the State columns.

According to the EPA EJ report, 68 percent of the people within a half-mile of the Hardesty complex are minorities, 65 percent have low income, and almost half have less than a high school education. Additionally, 31 percent of the population is considered linguistically isolated, a designation discussed below.

Additional demographic information -- based on 2010 U.S. Census data -- was provided to GSA by Mid-America Regional Council (MARC), a local nonprofit association of city and county governments. Census data is not available for the exact area covering a half-mile radius from the Hardesty complex, but for each category below, Census Block data was used for an area slightly larger and as close as possible to that specific radius. See the Census Block map in Appendix 5.2.

## Race

Total householders: 2,182  
(different than total population)

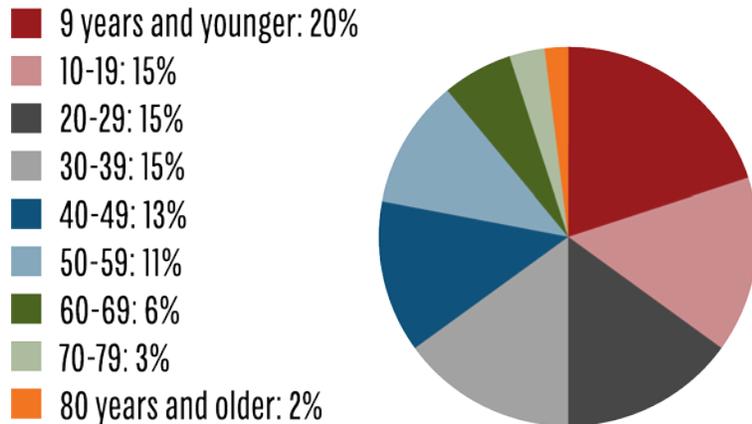


Race Distribution Near Former Federal Complex  
Source: Mid-America Regional Council, 2010 U.S. Census

Hispanic and Latino classifications are represented as ethnicity, not race.

# Age

Total population: 6,830



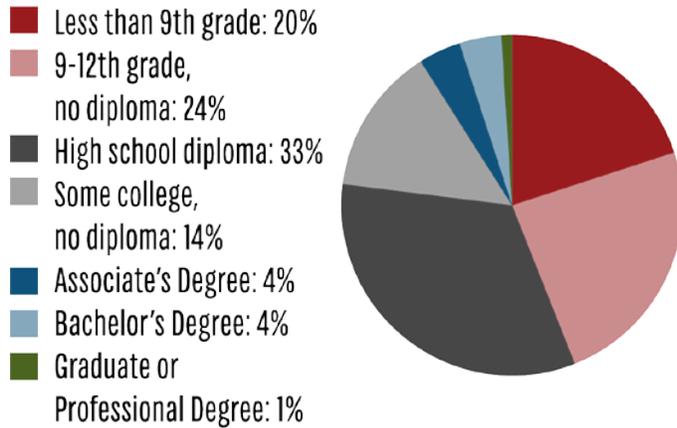
Age Distribution Near Former Federal Complex

Source: Mid-America Regional Council, 2010 U.S. Census

Information about the categories below was not available at the Census Block level, so MARC used information from larger Census Tract areas. Parts of four Census Tracts are present in the half-mile radius of the Hardesty complex. The 5-year (2007-2011) American Community Summary from the Census Bureau informed the information below that MARC shared with GSA.

# Educational Attainment

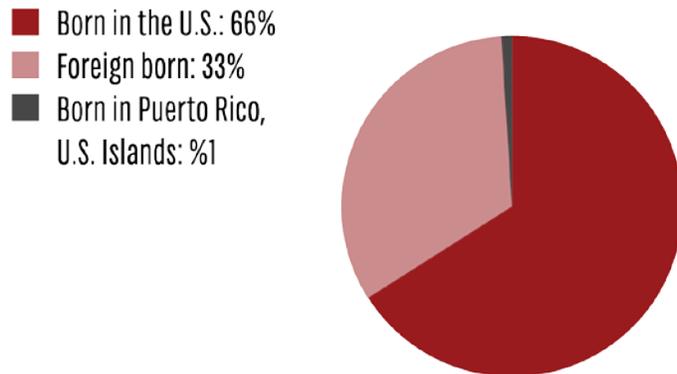
Total population 25 years and older: 8,629



Education Level Distribution  
Near Former Federal Complex  
Mid-America Regional Council,  
Census Bureau 2007-2011  
American Community Summary

# Place of Birth

Total population: 14,983

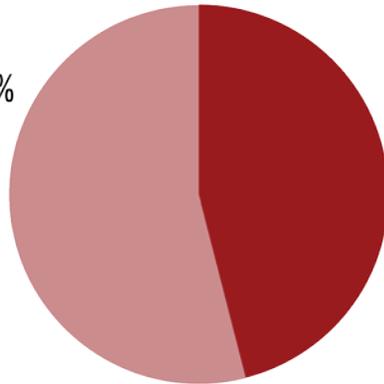


Birthplace Distribution  
Near Former Federal Complex  
Mid-America Regional Council,  
Census Bureau 2007-2011  
American Community Summary

# Hispanic or Latino Ethnicity

Total population: 14,983

- Hispanic or Latino  
(of any race): 46%
- Not Hispanic or Latino: 54%



Hispanic or Latino Ethnicity  
Distribution Near Former Federal Complex  
Mid-America Regional Council,  
Census Bureau 2007-2011  
American Community Summary

The demographic charts and information GSA received from MARC are located in Appendix 5.3.

## Languages

The population surrounding the Hardesty site is “characterized by a very high percentage of linguistically isolated individuals,” according to the EPA Environmental Justice (EJ) report.

According to the 2001 Language Use and Linguistic Isolation paper from the U.S. Census Bureau, “Linguistic isolation is dependent on the English-speaking ability of all adults in a household. A household is linguistically isolated if all adults speak a language other than English and none speaks English ‘very well.’ Adult is defined as age 14 or older...”

Used by EPA to inform their EJ report, data from the 2010 U.S. Census shows that there are a number of languages spoken by individuals who have identified their English

comprehension as “less than very well.” The EJ table below identifies language proficiency for Census Tract 19 -- the area EPA selected to reflect the community near the former federal complex.

Language	Total Speakers	Speak English “very well”	Speak English “less than very well”
Spanish or Spanish Creole	1,457	341	751
German	37	37	0
Gujarati	30	22	8
Other Indo-European Languages	20	5	15
Chinese	12	0	12
Vietnamese	416	232	184
Arabic	123	43	80
African Languages	285	30	255

Language Proficiency, Census Tract 19  
Source: EPA Environmental Justice Screening Report, June 2013

### **An Environmental Justice Community**

Environmental Justice (EJ) refers to the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to environmental issues.

To help guide government agencies, the National Environmental Justice Advisory Council (NEJAC) created Model Guidelines for Public Participation. These guidelines emphasize, “Regardless of the language used...any and all persons and groups who are potentially interested, concerned or affected by an action should be included (or given equal opportunity to participate) in the decision-making process.”

NEJAC guidance explains that communities affected by EJ issues -- like race, income and education level -- often already face many challenges and barriers regarding the development, implementation and enforcement of environmental policies. Many affected communities are considered to be vulnerable or sensitive populations, due to factors such as cumulative exposure to toxins and pollutants, and have historically been left out of decision-making processes.

An EPA EJ screening process indicated the Hardesty complex area has the potential for EJ concerns. View the screening report in Appendix 5.4. Twelve EJ indexes and

environmental and demographic information were considered in the screen. The area's high minority, low-income and linguistically isolated populations are also key indicators of EJ needs. As a result, GSA used EJ principles and guidance when creating this Community Involvement Plan. GSA's community involvement goals and its plans to engage the community, including the EJ population, are outlined in Sections 8 and 9.

For more information about Environmental Justice, visit <http://www.epa.gov/environmentaljustice/>.

### **Community Characteristics Impact Environmental Outreach**

The demographic, language and Environmental Justice characteristics of the community were a few of the factors that helped shape GSA's outreach strategy, discussed in Section 8. For example, 33 percent of residents are foreign-born and 31 percent are linguistically isolated. This led GSA to involve interpreters at public meetings and to commit to providing fact sheets and other written materials in the three statistically most common languages in the area: English, Spanish and Vietnamese. GSA will provide materials in other languages, as needed. For example, fliers and fact sheets for a December public information session were provided in Somali, in response to a community group request, in addition to the three aforementioned languages.

In another example, nearly half (49 percent) of the population has less than a high school education, leading GSA to try to make fact sheets that are easy to read and that use plain language principles.

In preparing this Community Involvement Plan, GSA learned anecdotally that many in the community may not have access to the internet, so GSA is using many low-tech communication channels, such as fliers in community gathering places and handouts at neighborhood association meetings.

Learn more about GSA's community outreach goals and strategy in Sections 8 and 9 of this Community Involvement Plan.

### **Community Improvement Efforts and Support Organizations**

Several projects to improve community conditions are underway in Northeast Kansas City.

- "Invest Northeast," an initiative bringing together city officials, community groups and the neighborhood coalition called Northeast Alliance Together (NEAT), kicked off in summer 2014. The City of Kansas City, Missouri, plans to invest at least \$400,000 through property tax abatement, minor home repair, business

training scholarships and micro-loans for businesses. View a news article in Appendix 5.5.

- The Indian Mound Neighborhood conducted a Quality of Life Study and residents are pursuing neighborhood renewal and improvement.
- The Truman Plaza Area Plan was approved by City Council in January 2012 as a guide for development, redevelopment and public investment in that area. The project's Implementation Committee is comprised of local stakeholders and is working through multiple issues and action items.
- A project to improve the intersection of Independence and Benton avenues was awarded more than \$1.4 million in federal funding. The funding request was for year 2015-2016.
- Several groups are building community gardens. The gardens encourage residents to build relationships, increase pride in the community and provide sources of locally grown food.
- The Scarritt Neighborhood is organizing cleanup efforts, including dumpster days and tire collection days.
- Part of the Pendleton Heights Neighborhood was rezoned to decrease the population density allowed in its single-family core, and the neighborhood is working to improve sidewalks.
- The City Council approved a Community Improvement District along Independence Ave. in spring 2013. Proposals include adding new walking paths and streetscapes, creating a pedestrian plaza, installing community gardens and enticing new business to the area.

These are just a few of the community improvement projects GSA found in researching for this Community Involvement Plan. Sources include The Kansas City Star website, residents GSA interviewed in fall 2013, and the 2012 Health, Education, Labor & Public Safety (HELP) Community Resource Guide provided to GSA by the Chamber of Commerce. Contact information for many of the groups and efforts above is located in Appendix 1.3.

There are also several community interest, advocacy and support organizations in Northeast Kansas City, as identified by interviewees and the HELP Resource Guide. A few of these organizations include:

- Churches
- Neighborhood associations
- Kansas City Library North-East Branch
- Don Bosco Center
- Northeast Community Center
- Vietnamese American Community of Greater Kansas City (VACKC)

- Hispanic Economic Development Corporation (HEDC)
- Local Initiative Support Corporation (LISC)
- North East Alliance Together (NEAT)

GSA has reached out to many of these organizations and will continue to do so through future community involvement activities, as discussed in Section 9 of this Community Involvement Plan. Contact information for several community groups is in Appendix 1.3.

### **Historical Communication**

Prior to 2013, GSA's public and community communication was primarily related to selling the former Hardesty Federal Complex.

GSA published a public notice in the Kansas City Star in summer 2004 explaining that the federal government planned to ask the Governor of Missouri -- through a CERCLA Covenant Deferral Request (CDR) -- for permission to sell the property while retaining environmental cleanup responsibilities. The notice acknowledged hazardous substances onsite, invited the public to comment, and offered contacts for the public to seek additional information about environmental conditions. View the CDR Public Notice in Appendix 6.1.

Advertisements for the property sale appeared in late spring 2011 in the Kansas City Business Journal and the Kansas City Star on May 15, May 29, and June 12. A GSA Property Disposal Specialist also advertised the sale through mass emails in Appendix 6.2. These advertisements did not reference environmental conditions. GSA provided interested parties who directly contacted the agency with information about potential conditions of the sale, including environmental issues.

The property sold through GSA's online auction house at [www.realestatesales.gov](http://www.realestatesales.gov) in 2011, with the auction opening May 5 and closing July 12 that year. The online auction page linked to environmental information about the site and noted the property's CERCLA 120 (h)(3)(C) assurance, indicating the presence of pollutants. View the online auction page in Appendix 6.3. The Northeast News, a local newspaper in Northeast Kansas City, published an article about the property sale. This article is in Appendix 6.4.

Information about the former federal complex has been available for several years on MDNR's website at <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm> and by directly contacting the department.

### **Recent Community Involvement**

#### Public Information Session 1

In spring 2013, GSA received preliminary data indicating TCE was shallower than previously recorded in offsite groundwater to the north of the complex. In response to this, and to new EPA screening levels, GSA expanded sampling efforts in the area. GSA began a public outreach campaign and scheduled a public information session. GSA wanted to make sure the community knew about the new sampling results and had the opportunity to ask questions and get involved in environmental testing and

cleanup conversations.

GSA Heartland Regional Administrator Jason Klumb met with U.S. Representative Emanuel Cleaver, II; Missouri State Representative John Rizzo; and City of Kansas City, Missouri, Councilmembers John Sharp and Scott Wagner to discuss the preliminary data and to invite them and their constituents to the Public Information Session. Regional Administrator Klumb also met with the Kansas City Health Department.

GSA employees walked door-to-door delivering information about the complex and flier invitations to the Public Information Session. Approximately 50 fliers were hand-delivered in early June to residences and businesses immediately north of the complex. View the flier in Appendix 6.5.

The information session was announced in local newspaper The Northeast News and by local television station KCTV 5 through their TV broadcast and website. News articles are available in Appendix 6.6.

The information session was held June 20, 2013, at the North-East Kansas City Library about a half-mile from the former federal complex. Representatives from GSA, MDNR, MDHSS, KCHD, environmental consultant Terracon and Hardesty Renaissance were present to distribute information and answer questions. A Spanish language interpreter was also there to provide assistance. Approximately 30 community members attended and many shared their contact information with GSA.

The Public Information Session and related outreach were GSA's first efforts to involve the community in the environmental testing and cleanup around the former Hardesty complex. This document outlines GSA's plan to continue to engage the public. To assist in building this plan, GSA sought more input from the community through personal interviews.

### Community Interviews

In late August 2013, two GSA representatives interviewed 16 community members to gather public input to help create this Community Involvement Plan. GSA wanted to learn about the community's dynamics, organizations, norms, gathering places and concerns. GSA also wanted to learn what types of information the public wants and how to best communicate with this specific community.

To make sure the residents and business owners nearest to the complex had an opportunity to participate in the interviews, GSA mailed invitation letters to 1,050

addresses within a half-mile radius of the property. Letters were written in English and Spanish, as there is a large Hispanic population in the community. The mailings also contained pre-paid postcards for community members to respond to the invitation and to share their contact information with GSA. View the letter and postcard in Appendices 6.7 and 6.8, respectively. Approximately 50 mailers were returned due to property vacancies, insufficient addresses and other factors. Of the roughly 1,000 letter invitation recipients, 16 residents mailed their postcards to GSA, and eight of those postcards indicated interest in participating in the interviews. GSA interviewed four of the eight interested residents, as the other four people could not be reached after several attempts to schedule.

GSA invited eight community leaders, as identified by a member of Hardesty Renaissance through his community networking, to participate in the interviews. Attendees of the June 2013 Public Information Session who shared their contact information with GSA were also invited to participate in the interviews. Twenty-six people were invited via email through that effort.

Representatives from GSA attended a neighborhood association meeting for the Lykins neighborhood to share environmental information about the complex and to invite that meeting's approximately 20 attendees to participate in the interviews. Three residents from the Lykins meeting agreed to interviews, including the Lykins Neighborhood Association President.

GSA also interviewed the Scarritt Renaissance Neighborhood Association President and discussed the Hardesty environmental project with the president of the Sheffield Neighborhood at the June Public Information Session.

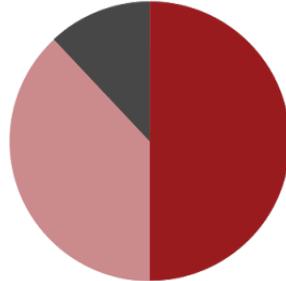
As recommended by EPA guidance documents and Environmental Justice (EJ) principles, GSA let community members' individual preferences dictate the method, location and timing of the interviews.

Information about the interviews, the participants and their responses is represented below. For a copy of the interview questions and more detailed interview analysis, refer to Appendices 6.9 and 6.10.

## Interview Method

Total participants: 16

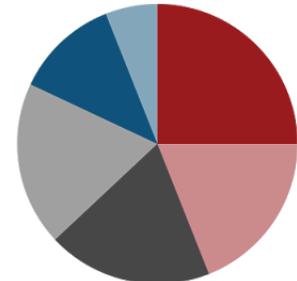
- In person at the local library: 8
- Phone: 6
- Email: 2



## Years in the Community

Total participants: 16

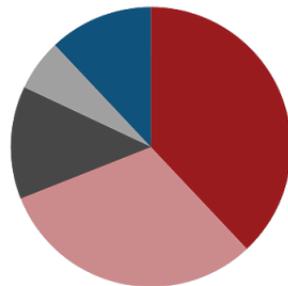
- More than 20 years: 4
- 16-20 years: 3
- 11-15 years: 3
- 6-10 years: 3
- 3-5 years: 2
- Less than 3 years: 1



## Neighborhood

Total participants: 16

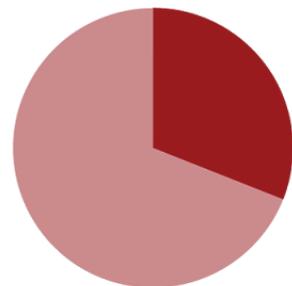
- Indian Mound: 6
- Lykins: 5
- Scarritt Renaissance: 2
- Sheffield: 1
- Other: 2



## Type of Stakeholder

Total participants: 16

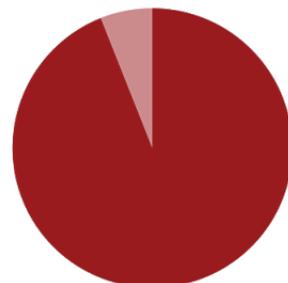
- Formal or informal community leader: 5
- Resident: 11



## Language Spoken in Interview

Total participants: 16

- English: 15
- Spanish: 1



Roughly one-fourth of interview participants were minorities and one participant was of Limited English Proficiency (LEP) with Spanish as her primary language. GSA used an interpreter to conduct the Spanish interview. GSA will continue to reach out to community organizations and to follow EJ principles to promote participation in the Hardesty environmental discussions by a group more representative of the local population, as described in Section 5.

As GSA reviewed and analyzed interview responses, a few themes emerged.

- **Community engagement will be a challenge.** One theme in interview responses suggested that much of the community near the former federal complex is apathetic to the environmental situation. As less than 1 percent of residents and business owners closest to the complex responded to invitation letters with interest in the interviews, GSA anticipates it will be difficult to engage much of the population in environmental discussions and decision making. Interviewee responses support this notion, as one-third of those interviewed stated that the community at large is not engaged or concerned about anything going on there. When asked, “How involved do you think the community wants to be in the cleanup conversations and decision making?” only one interviewee answered “very involved” and one answered “somewhat involved.” Most respondents indicated they believe the community at large will not want to be involved but that some individuals will. Interviewees cited low income levels and large renter and immigrant populations as potential causes for lack of engagement. Several people mentioned immigrant fear and distrust as specific hurdles. The participant in the interview conducted in Spanish, however, said that if GSA provides more information, more of the community will be interested. Two interviewees stated that most people will simply want to know that someone is going to clean up the environment, that it will be cleaned up properly, and when it will be finished.
- **Messages to the community should be clear and simple.** Another theme identified a need for plain language explanations of the site history, environmental testing processes, separation of water systems, and potential human health concerns. The communication channels GSA will use to reach the public -- based on findings from these interviews -- are discussed in Section 9.
- **The community did not know much about the current state of the complex.** Half of the interviewees knew the complex was used by the Army in the past. A few other historical facts were included in responses, as well. However, more than half of those interviewed said they did not know much about the complex

other than what they had learned recently from GSA and Hardesty Renaissance.

- **The community is anxious for the site to be redeveloped.** The words “blight,” “eyesore,” and “abandoned” were used countless times by interviewees. Many people see the potential in the site and believe that the community needs the site to contribute to the neighborhood once again. Responses from several interviewees seemed to indicate they would support -- or are already awaiting -- a future use related to healthy food alternatives.

Additional themes from interviews and other stakeholder conversations surfaced as community concerns. Those topics are discussed in Section 7.

### Public Information Session 2

In December 2013, GSA hosted its second public information session. This session was also held at the North-East Kansas City Library and, once again, representatives from GSA, MDNR, MDHSS, Terracon and KCHD were present to distribute information and answer questions. Based on community member recommendations, GSA and environmental consultant Terracon gave a 15-minute presentation explaining the roles of each agency, history of the complex, testing process, results to date, next steps and opportunities for community involvement. View the fact sheets and handouts GSA used in the public information sessions and at neighborhood association meetings in Appendix 6.11.

Spanish and Vietnamese language interpreters were onsite to provide assistance. Approximately 20 community members attended, 16 of whom shared their contact information with GSA. Two neighborhood association presidents attended and extended invitations for GSA to speak at their upcoming meetings. While attendance was lower than the June session -- likely in part due to winter weather and the holiday season -- GSA remains optimistic about community involvement at public meetings.

A few themes across resident comments at the December information session included: skepticism that the TCE is not a risk to human health; eagerness to see the site put to positive use; skepticism that the sampling process is accurate enough; and appreciation for transparency and outreach efforts.

In preparation for the December information session, GSA invited approximately 1,000 residents within a half-mile radius from the complex via letter and 40-50 community members -- including June session attendees, interviewees and other contacts -- via email. GSA representatives personally delivered public notice fliers to about a dozen community organizations and churches and emailed notices to several more

organizations. Fliers were provided in English, Spanish, Vietnamese and Somali. The Vietnamese American Community of Greater Kansas City featured GSA's invitation notice on both its English and Vietnamese websites, and a representative from that organization attended the information session. MDNR also promoted the information session on its website. View the letter and public notice fliers in Appendices 6.12 and 6.13.

The local newspaper, The Northeast News, published articles before and after the information session. Copies of the articles are located in Appendix 6.14.

Finally, GSA representatives attended the Scarritt Renaissance Neighborhood Association meeting to share information and invite its approximately 20 resident attendees. The president of the Lykins Neighborhood Association -- the neighborhood GSA personally invited to participate in interviews -- announced GSA's invitation at one of their meetings.

#### Neighborhood Association Meetings

From summer 2013 through spring 2014, GSA representatives attended meetings of five neighborhood associations near the former federal complex: Lykins, Indian Mound, Sheffield, Scarritt Renaissance and Pendleton Heights. A neighborhood map is located in Appendix 5.1. GSA presented information about historical site operations, present-day environmental testing efforts, the mandated environmental cleanup process, the project's community involvement plan, and opportunities to get involved in the decision-making process.

Moving forward, GSA will continue to host public meetings and cultivate relationships with community members and organizations, as outlined in Section 9 of this Community Involvement Plan.

## Section 7: Community Concerns

Several topics related to environmental concerns surfaced during community interviews, public information sessions and other conversations with stakeholders. Chief among the concerns are potential threats to human health, cleanup methods, effect on property values, and site redevelopment and future use. As additional information about these topics becomes available, GSA will share that information with the community through the methods outlined in Section 9 of this Community Involvement Plan.

### **Human Health**

Nearly half of the community interviewees and many of the information session attendees mentioned human health concerns. Primarily, they want to know about potential pathways of exposure to chemicals and potential negative health effects.

As mentioned in Section 3, Trichloroethylene (TCE) is the primary chemical of concern related to the former federal complex, and it is present in on- and offsite groundwater.

According to a U.S. Department of Health and Human Services (HHS) fact sheet, found in Appendix 7.1, potential pathways of exposure for TCE include: 1) drinking, swimming, or showering in contaminated water; 2) direct contact with and swallowing contaminated soil; and 3) breathing air inside homes or buildings that have been contaminated by TCE as it evaporates from the soil or groundwater underneath the building. The last scenario is called vapor intrusion.

According to the Missouri Department of Health and Senior Services (MDHSS), vapor intrusion is the primary potential pathway of offsite exposure in the Hardesty complex situation. Liquid volatile organic compounds (VOCs) like TCE can sometimes evaporate into gases. When gaseous volatile chemicals from contaminated soil and groundwater plumes migrate into buildings, they are shown to enter through cracks in foundations and openings for utility lines. Atmospheric conditions and building ventilation are shown to influence vapor intrusion.

MDHSS used the Site Investigation and MDNR-approved scientific models to determine that VOCs in the groundwater near Hardesty either are not evaporating above ground or are evaporating at levels too low to be a health concern. To verify the scientific models, GSA and its environmental contracting firm have asked homes north of the complex to grant access for a series of indoor air quality tests in 2014 and 2015. GSA will share the results of these tests, like other sampling events, with the public.

With regard to the other two pathways of exposure, The City of Kansas City, Missouri, draws and treats water from the Missouri River to provide for drinking, showering and public pools in the neighborhoods surrounding the former federal complex. Water from the underground aquifer is not used for those purposes. Likewise, excess water in drains and rainwater runoff have not come in contact with TCE. The complex property has some contaminated soils, which will be remediated through the CERCLA process.

As mentioned in Section 4, a Human Health Risk Assessment (HHRA) is part of the Remedial Investigation and Feasibility Study (RI/FS) phase of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) environmental process. For Hardesty, a Preliminary Human Health Conceptual Site Model was developed to show the potential exposure scenarios, as of August 2012, in connection with the site. The model will be carefully maintained and updated throughout the RI/FS process. The model is located in Appendix 7.2.

Refer to Work Plan Section 8 for a detailed description of the Hardesty project procedures for evaluating human health risk levels, including calculations used to determine levels of risk for various potential pathways of exposure.

For more information about Human Health Risk Assessments, visit [http://www.epa.gov/risk\\_assessment/health-risk.htm](http://www.epa.gov/risk_assessment/health-risk.htm). For more information about TCE and vapor intrusion, refer to Appendices 7.1 and 7.3.

### **Cleanup Timeline and Methodology**

During community interviews and information sessions, several participants were interested in GSA's plans to clean up pollutants on- and off-site.

Many community members questioned why the pollutants are still present if the government has known about the contamination for years. For many years, GSA was seeking a new owner for the facility. As a use for the property had not been determined, GSA and environmental regulators did not initiate a cleanup plan. A cleanup plan is driven by how the property will be redeveloped. Different cleanup standards exist for residential, commercial or industrial use. With a new owner and plans for redevelopment, GSA and Missouri Department of Natural Resources (MDNR) began moving forward in the CERCLA process. Since testing began in 1997, no results indicated that an immediate health hazard existed.

As of 2014, GSA is in the Remedial Investigation (RI) and Feasibility Study (FS) stage of the CERCLA process, with a tentative timeline for part or all of the property to be declared suitable for reuse by late 2017. For more information about the CERCLA

process and the Hardesty complex's tentative timeline, refer to Section 4 and Appendix 4.3.

Remediation techniques for the Hardesty site have not been determined because the site is still in the RI/FS stage and cleanup options have not yet been identified or evaluated. After reaching the appropriate stage of the CERCLA process, GSA will engage the community. The community will have an opportunity to review the evaluation of cleanup options, review the proposed cleanup plan, and have a voice in the decision making.

### **Property Values**

Twenty percent of interviewees cited potential negative effects on property values as a concern related to the complex. It is unknown if property values have suffered or will suffer as a result of the environmental issues. The area has been economically depressed for a variety of reasons for decades. GSA will continue to work closely with MDNR in remediating the property to ensure it is in the best position possible for redevelopment or reuse, which will support growth in the community.

### **Redevelopment and Future Use**

Interviewee comments about redevelopment and future use centered around desires to make sure the site is safe before redevelopment and to put it to productive use as soon as possible. One interviewee stressed that he believes the site can become a source of goodwill, pride and ownership in the community. Another community member's primary concern was that the environmental contaminants are truly removed and that the site is truly safe for use before community members start congregating there.

GSA is working to clean up the site as quickly as the science and environmental process allows, and Hardesty Renaissance is investigating the feasibility of several potential uses for the property. As more information becomes available, GSA will communicate that information to the public.

### **Potential Presence and Detection in Homes**

One interviewee suggested GSA provide test kits residents can use to determine if elevated levels of pollutants are present in their homes. GSA is not pursuing this idea at this time, as the amount and physical boundaries of the contaminants have not yet been finalized, and in-home tests administered by residents can be affected by countless factors unrelated to the former federal complex.

While, risk assessments through summer 2014 indicate no immediate risk to human health, GSA is pursuing Vapor Intrusion testing, as discussed above, to confirm the

scientific modeling data. The series of indoor air quality tests will likely be conducted in targeted residences north of the complex in 2014 and 2015.

### **Community Concerns Unrelated to Environmental Conditions at the Former Federal Complex**

During interviews, community members cited several concerns unrelated to the former federal complex. A few such concerns include:

- Prostitution;
- Homelessness;
- Urban decay and blight;
- Lack of access to healthy food;
- Poor drainage under a local train bridge;
- Too many residential vacancies;
- High rentership and resident turnover;
- Crime;
- Lack of a sense of the larger community in favor of subgroups or subcultures;
- Illegal drug use;
- Child predators; and
- Failing schools.

### **Some Community Members Do Not Have Environmental Concerns**

Despite expressing concerns of their own, one-third of interviewees told GSA that the majority of the community is not engaged or concerned about anything. Those who are active, concerned residents, one interviewee explained, will not make Hardesty environmental conditions a priority because the community is faced with so many challenges and concerns which seem more imminently threatening than pollutants.

However, numerous community improvement efforts are underway in Northeast Kansas City, as discussed in Section 5, indicating some residents are willing to engage. GSA hopes to overcome these challenges and to encourage many residents to participate in the Hardesty environmental discussions and decision-making process.

Two more interviewees expressed no environmental concerns related to the complex, with one saying she knows every chemical can be cleaned up with the right treatments and the other stating he is more concerned with electronics pollution.

## Section 8: Community Involvement Goals

Public participation plays an integral role in environmental management. This process brings government and citizens together to make important decisions about environmental testing and remediation.

GSA is committed to providing opportunities for nearby residents, community leaders and interested citizens to engage in a two-way conversation about current and future environmental efforts at the former Hardesty Federal Complex.

GSA's community involvement goals are:

- To help facilitate an exchange of information with the community about environmental testing and remediation of the former federal complex;
- To increase community awareness of environmental testing and remediation efforts of the former Hardesty federal complex;
- To increase community engagement and participation in environmental planning and decision making;
- To increase participation by minority and Environmental Justice (EJ) community members in Hardesty environmental discussions;
- To send at least 2,000 communication pieces to the community during the initial education phase in 2013 and 2014; and
- To send at least 1,000 communication pieces to the community each year at least until the Long-Term Operations and Monitoring phase of the CERCLA cleanup process.

Communication pieces can take many forms. For example, if GSA mails a printed newsletter to 900 residents and emails a public meeting invitation to 80 community leaders, that is 980 communication pieces. If, in addition, GSA posts a flier in 20 community gathering places, that's a total of 1,000 communication pieces.

GSA will measure progress toward these goals by:

- Tracking the number of communication pieces extended annually;
- Gathering community comments, opinions and feedback through channels like public meetings, discussions, surveys, interviews and correspondence;
- Monitoring the number of attendees at public meetings, number of respondents for mailed surveys and number of community interview responses; and
- Gathering feedback from formal and informal community leaders regarding EJ participation.

View reports on GSA's progress toward these goals in Appendix 8.1.

## Section 9: Planned Community Involvement Activities

GSA understands that transparency in its cleanup process builds public confidence and encourages public participation. In this spirit, GSA plans to provide timely, informative communication and public education throughout the cleanup process.

To increase community awareness, engagement and participation in environmental planning, testing and remediation, GSA will implement several communication channels to engage in two-way conversation with concerned community members. GSA will also work to enhance relationships with a diverse group of community leaders and associations, partnering with these groups to help disseminate information and gather feedback from community members.

### **Methods of Communication**

Based on data gathered during initial community interviews, residents prefer to receive information via mail, community meetings, the Northeast News local newspaper, Spanish-speaking radio, and community organizations and leaders. As a result, GSA will focus its communications efforts through these channels. Based on area demographic information and Environmental Justice (EJ) guidance, any materials publicly provided will be available in English, Spanish and Vietnamese languages. These are the most common languages in the area near the complex, according to U.S. Census data referenced in Section 5. GSA will consider expanding to additional languages if a community need is identified. For example, in preparation for the December 2013 public information session, GSA distributed public notices and printed information in the Somali language, per requests from two community groups.

GSA will host annual or bi-annual community meetings to outline plans and seek community feedback on environmental practices. During the meetings, GSA will seek oral and written public comment on testing and remediation efforts. This feedback will be used to determine if changes are needed to the environmental Work Plan or to this Community Involvement Plan. If changes are made, GSA will communicate those changes through the selected communication channels. GSA will also attend meetings of neighborhood associations and other community groups, as needed.

GSA will distribute by mail an annual or bi-annual printed newsletter to all residences and businesses within a half-mile radius from the complex, to community organizations, and to other interested community members. The newsletter will inform residents about ongoing environmental efforts, provide notices for public meetings and include contact information.

As the community has indicated a strong reliance on local leadership for information, GSA will seek five to ten volunteers to serve as community ambassadors. The ambassadors will represent diverse groups and interests and will serve as liaisons for members of the community. GSA will provide environmental updates to the ambassadors for them to share with their fellow community members. Ambassadors will funnel community needs and concerns to GSA. Relationships between GSA and community ambassadors will provide a unique opportunity for the groups to discuss plans and preferences for site cleanup and remediation. Additionally, EJ principles support the use of formal and informal community leaders as information channels.

The community meeting schedules and ambassador contact information will be published via the newsletter, local newspaper, and public notices in community gathering places like the library, coffee shop, churches and nonprofit organizations.

Fact sheets, maps and fliers are a few of the print materials GSA will share with community ambassadors, distribute to residents, and post at gathering places, as needed.

Half of those interviewed in preparation for this CIP indicated that email is a preferred method of communication. As interested community members provide their email addresses to GSA, the agency will send information and notices through that channel, as well.

GSA will maintain a public website with information regarding the Hardesty site and its environmental investigation and cleanup activities. Although they were not identified as a preferred method of communication for the majority of residents in this community, websites and social media are popular with community organizations in the area. GSA's Hardesty webpage is <http://gsa.gov/portal/content/173655>. The bulk of online information regarding Hardesty environmental remediation will be hosted on the Missouri Department of Natural Resources (MDNR) website at <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>. GSA will post updates about the Hardesty project to its Facebook page at [www.facebook.com/GSAHeartlandRegion](http://www.facebook.com/GSAHeartlandRegion).

GSA will use the complex's Public Viewing Record to communicate with the community. The record will be housed at the Kansas City Library North-East Branch, approximately a half-mile from the complex, as the library was identified as a natural gathering place by community members during the community interview process. The record is a collection of documents that will be available in electronic and hardcopy formats. It will include information that explains site cleanup activities and the factors, including public involvement, that went into the selection of those activities.

Finally, GSA will use this Community Involvement Plan as a tool to communicate with the public. The CIP will be updated as necessary, at least every five years. Between formal updates to the body of this CIP, GSA may add samples of community involvement communications to Appendix 9.1 and may update portions of the body and appendices.

If any environmental results indicate a need to communicate quickly with community members, GSA will seek to alter its timeline for communications.

### **Recap of Community Involvement Opportunities**

In short, community members can get involved in environmental discussions and decision making by attending public meetings, becoming a community ambassador, talking with an existing ambassador or community leader, or contacting GSA directly. GSA welcomes responses to newsletters, fliers, notices and other materials via mail, email and phone, and community members can contact GSA at any time with concerns or ideas. Contact information for GSA, partner agencies and community contacts is located in Appendix 1.3.

Community members will receive Hardesty environmental information through at least the following channels:

- Mail;
- Northeast News (local newspaper);
- Spanish-speaking radio;
- Community organizations, leaders and ambassadors;
- Printed newsletters;
- Notices at gathering places;
- GSA and MDNR websites;
- GSA Heartland Region Facebook account;
- Public meetings;
- Administrative Record; and
- Community Involvement Plan.

**Appendix 1**

- 1.1 Description of community involvement plans
- 1.2 Hardesty Administrative Order on Consent and Agreement between the State of Missouri and the United States General Services Administration
- 1.3 Contact information for GSA, partner agencies, community groups and elected officials

**Appendix 2**

- 2.1 Topographic map
- 2.2 Diagram of complex
- 2.3 Description of present-day buildings onsite
- 2.4 Historic Report, Phase I Environmental Audit
- 2.5 Hardesty Renaissance Economic Development Corporation Quitclaim Deed
- 2.6 Present-day aerial photos of site

**Appendix 3**

- 3.1 Diagram of onsite underground water well sampling locations
- 3.2 Diagram of offsite underground water well sampling locations
- 3.3 Diagram of soil boring locations

**Appendix 4**

- 4.1 Diagram of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Process
- 4.2 Criteria for Evaluating Potential Remediation Actions, an excerpt from the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA
- 4.3 Tentative Timeline for Remediation Activities

**Appendix 5**

- 5.1 Neighborhood map
- 5.2 Census Block map
- 5.3 Demographic information from Mid-America Regional Council
- 5.4 Environmental Justice Screening Report
- 5.5 The Kansas City Star news article covering “Invest Northeast” initiative

**Appendix 6**

- 6.1 Covenant Deferral Request Public Notice
- 6.2 Email advertisements for property auction
- 6.3 Online property auction webpage
- 6.4 Northeast News article covering sale of property
- 6.5 June 2013 Public Information Session Flier
- 6.6 Northeast News articles covering June 2013 Public Information Session
- 6.7 Fall 2013 Community Interviews Invitation Letter

- 6.8 Fall 2013 Community Interviews Response Postcard
- 6.9 Community Interview Questions
- 6.10 Community Interview Analysis Report
- 6.11 Public fact sheets and handouts from 2013-2014 meetings
- 6.12 December 2013 Public Information Session Invitation Letter
- 6.13 December 2013 Public Information Session Public Notice Flier
- 6.14 Northeast News articles covering December 2013 Public Information Session

#### **Appendix 7**

- 7.1 U.S. Department of Health and Human Services TCE Factsheet
- 7.2 Human Health Risk Assessment Conceptual Site Model
- 7.3 Missouri Department of Health and Senior Services Vapor Intrusion Factsheet

#### **Appendix 8**

- 8.1 GSA progress toward community involvement goals

#### **Appendix 9**

- 9.1 Recent samples of community involvement communications





# Community Involvement Plans

## Description

A Community Involvement Plan (CIP) is a site-specific strategy to enable meaningful community involvement throughout the Superfund cleanup process. CIPs specify planned community involvement activities to address community needs, concerns, and expectations that are identified through community interviews and other means.

The CIP is both a *document* and the culmination of a *planning process*.<sup>1</sup> As such, the CIP provides the backbone of the community involvement program and serves as a useful reference that the Site Team often turns to during the Superfund cleanup for advice on appropriate activities for community involvement. A well-written CIP will enable community members affected by a Superfund site to understand the ways in which they can participate in decision making throughout the cleanup process.

## Required Activity?

Yes. The National Contingency Plan (NCP) requires the lead agency -- in the case of the former Hardesty Federal Complex, U.S. General Services Administration (GSA) -- to prepare a Community Involvement Plan “based on community interviews and other relevant information, specifying the community relations activities that the lead agency expects to undertake during the remedial response.” The NCP specifies that the CIP must be in place before remedial investigation field activities start, “to the extent practicable.”

The NCP further requires that EPA review the CIP prior to initiating the remedial design (RD) “to determine whether it should be revised to describe

further public involvement activities during Remedial Design/Remedial Action (RD/RA) that are not already addressed or provided for” in the CIP.

For removal actions lasting 120 days or more, the NCP specifies that the lead agency must prepare a CIP based on community interviews and other relevant information “by the end of the 120-day period.” For removal actions with a planning period of at least six months, the NCP requires the CIP to be completed prior to the completion of the Engineering Evaluation/Cost Analysis (EE/CA).

These requirements are equally applicable to federal facilities and sites using the Superfund Alternative Approach (SAA).

## Making it Work

A carefully prepared CIP provides a game plan or road map for the Site Team’s use throughout the cleanup process. The Community Involvement Coordinator has primary responsibility for the CIP, but all members of the Site Team—the Remedial Project Manager or On-Scene Coordinator, CIC, Risk Assessor, the enforcement case team, EPA contractor, state, tribal, or local agency staff, or others—should be involved in the development and implementation of the CIP.

The CIP should be a “living” document and is most effective when it is updated or revised as site conditions change. The CIP document:

- Describes the release and affected areas (a.k.a., “the site”), including relevant history, type and extent of contamination, and environmental exposures and concerns, both related to the site and in a broader sense;

<sup>1</sup>Hellier, Justin, *Planning for Participation: Trends & Opportunities in Superfund’s Community Involvement Plan*, 2010: Report prepared for the U.S. EPA by National Network for Environment Management Studies Fellow. Many of the ideas for this tool were informed by this report.



- Describes the community in a comprehensive Community Profile that includes demographics, local government structure, and any relevant community characteristics;
- Identifies key community needs, questions, and concerns, as well as expectations and unique needs of the community (e.g., translation and disability services) or unique cultural behaviors, customs, and values. This information is typically collected through *Community Interviews* and depicted in the *Community Profile*;
- Describes the need for technical assistance services and, if appropriate, identifies appropriate programs and mechanisms for providing access to *Technical Assistance for Communities*;
- Specifies EPA's planned outreach activities and community involvement mechanisms, including a projected sequence of project milestones tied to site activities (with projected timeframes, whenever possible), and describes the mechanisms that will be used to explain to the public how community feedback is considered during the cleanup process;
- Identifies any additional special services or approaches EPA will use to address unique needs of the community, which may include encouraging the formation of a Community Advisory Group (CAG), providing *Facilitation/Conflict Resolution/Alternative Dispute Resolution (ADR)* services for community meetings or groups, *Translation Services*, or supporting an approach for *Community Visioning* (i.e., allowing open-ended brainstorming for community stakeholders to envision the future potential reuse of the site);
- Allows for community comment on the draft CIP and describes the mechanisms used to receive and consider feedback before issuing the "final" CIP (e.g., formal or informal public comments, community meetings, public meeting, etc.); and
- Describes future plans for updating or revising the CIP.

To get involved in the creation of the Hardesty Complex CIP, contact U.S. General Services Administration at (816) 926-6903 or [r6environment@gsa.gov](mailto:r6environment@gsa.gov).



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

## DEPARTMENT OF NATURAL RESOURCES

[www.dnr.mo.gov](http://www.dnr.mo.gov)

March 28, 2014

Mr. Joshua L. Trader  
GSA Public Buildings Service – Heartland Region  
1500 East Bannister Road, 6PC  
Kansas City, MO 64131

RE: Hardesty Administrative Order on Consent and Agreement

Dear Mr. Trader:

Enclosed please find a fully signed copy of the "*Hardesty Avenue Property Administrative Order on Consent and Agreement between the State of Missouri and the United States General Services Administration.*" The completion of this agreement is a great step toward protecting human health, welfare and the environment as well as achieving a number of important public goals for the state and local communities. The Missouri Department of Natural Resources looks forward to continuing to work with the General Service Administration on the investigation and remedial activities for the Hardesty site.

Thank you for your participation in completing this agreement. If you have any questions, please do not hesitate to contact me at (573) 751 -7757. You may also direct any written inquiries to my attention to the Hazardous Waste Program, P.O. Box 176, Jefferson City, MO 65102-0176.

Sincerely,

HAZARDOUS WASTE PROGRAM

A handwritten signature in blue ink that reads "Ruben Zamarripa".

Ruben Zamarripa, Chief  
Defense Sites Restoration Unit

RZ:dd



**BEFORE THE DEPARTMENT OF NATURAL RESOURCES  
STATE OF MISSOURI**

IN RE: Hardesty Avenue Property,  
Kansas City, Missouri

**ORDER NO. HWP-2014-001**

**ADMINISTRATIVE ORDER ON CONSENT  
AND AGREEMENT**

HARDESTY AVENUE PROPERTY  
ADMINISTRATIVE ORDER ON CONSENT AND AGREEMENT

between

The State of MISSOURI

and

The UNITED STATES GENERAL SERVICES ADMINISTRATION

This Administrative Order on Consent and Agreement (Agreement) is entered into by and between the General Services Administration (GSA), the Missouri Department of Natural Resources (Department), and the Missouri Attorney General's Office (AGO). The Department and the AGO are collectively referred to in this Agreement as "the State." This Agreement sets out GSA's commitment to ensure that all remedial action necessary to protect human health and the environment will be taken with respect to the property located at 607 Hardesty Avenue, Kansas City, Missouri 64124 (Property), title to which has been transferred by GSA to the Hardesty Renaissance Economic Development Corporation (Hardesty) in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) § 120(h), 42 U.S.C. § 9620(h).

**I. Background**

1. In 1940 the United States purchased land, including the Property, for use as a Quartermaster Depot. National Cloak and Suit Company originally owned and occupied buildings 1, 2, and 3. Staff working out of the Quartermaster Depot purchased, stored and

distributed supplies to the Army posts, camps, and stations in Kansas, Missouri, Arkansas, Nebraska, Oklahoma, Wyoming, South Dakota and Utah. Part of the mission of the Quartermaster Depot was to receive and store protective and impermeable clothing, laundry and dry-cleaning supplies, inks, lithographic chemicals, petroleum products, and petroleum handling equipment. Staff at the Quartermaster Depot also reclaimed petroleum containers, impregnated clothing to ward off effects of gas attacks, and procured graphic arts operating supplies and chemicals.

2. Between 1940 and 1943, fifteen additional buildings, for a total of eighteen structures, were constructed on the site. Two other buildings were constructed on the site after 1943. The structures on the site were identified as Buildings 1 through 20. The site was transferred to the GSA on October 1, 1960. Buildings 1 and 2 were sold to Megaspaces, Ltd. in 1980 and are no longer considered part of the Property. Buildings 4, 5, 8, 12, 14, 15, 16, 17, 18, 19, and 20 were demolished in the 1970s and 1980s.

3. Various government agencies have used the site buildings for storage since 1960, including the Army Mapping Department, National Weather Service, Federal Aviation Administration, U. S. Marines, Department of Energy, Federal Emergency Management Agency, U. S. Army Corps of Engineers, and the U. S. Postal Service.

4. The aforementioned activities on the Property resulted in the contamination of the soil and groundwater on and surrounding the Property. Specifically, investigations conducted by

the GSA detected the presence of petroleum products, polychlorinated biphenyls (PCBs), asbestos containing material, metals, dioxins and volatile organic compounds (VOCs).

5. In response to meeting EPA Federal Facility Docket requirements and the release of hazardous substances at or from the Property, the GSA commenced a Preliminary Assessment/Site Inspection on or about November 4, 2002.

6. CERCLA § 120(h), 42 U.S.C. § 9620(h)(3)(A), describes various requirements related to federally owned facilities. Generally, when a federal agency transfers to a non-federal person real property on which hazardous substances are known to have been released or disposed of or stored for one year or more, the deed from the federal agency to the non-federal person must contain a covenant warranting that all remedial action necessary to protect human health and the environment has been taken before the date of the transfer. However, the federal agency may transfer the real property to a non-federal person prior to the completion of all necessary remedial action, provided the transfer complies with certain conditions. These include the federal agency submitting a covenant deferral request to the governor of the state where the property is located and obtaining the governor's approval for the transfer. CERCLA § 120(h), 42 U.S.C. § 9620(h)(3)(C).

7. Prior to completing all the necessary environmental remediation on the Property, the GSA declared the property in excess to its needs, making the site available for transfer.

8. The GSA submitted the covenant deferral request for the Property on February 24, 2006.

9. On February 8, 2007, Governor Blunt conditionally approved the covenant deferral request, a copy of which is attached as Exhibit 1.

10. The GSA transferred the Property to Hardesty by quitclaim deed on or about September 13, 2011, and recorded Instrument Number 2011E0086320 with the Jackson County, Missouri, Recorder of Deeds. The quitclaim deed placed a use restriction on the Property limiting the usage to non-residential industrial uses. Additionally, the deed contained a warranty that the GSA will take all response action required by CERCLA § 120(h), 42 U.S.C. § 9620(h)(3)(C). A copy of the 2011 quitclaim deed is attached as Exhibit 2.

11. On August 20, 2012, the GSA submitted for the Department's review the Remedial Investigation/Feasibility Study (RI/FS) Work Plan for the Property. The Department approved the RI/FS on April 4, 2013.

12. The parties recognize that this Agreement has been negotiated in good faith and implementation of this Agreement will expedite the cleanup of the Property. This Agreement is fair, reasonable, and in the public interest.

## **II. Jurisdiction**

13. The State and the GSA enter into this Agreement pursuant to CERCLA § 120(h), 42 U.S.C. § 9620(h)(3)(C); the Missouri Hazardous Waste Management Law, §§ 260.350 and 260.375, RSMo; the National Contingency Plan, 40 C.F.R. Part 300; and Executive Order 12580.

### **III. Parties Bound**

14. The provisions of the Agreement shall be binding upon the parties to this action as well as their agents, servants, employees, heirs, successors, assigns and to all persons, firms, corporations and other entities who are, or who will be, acting in concert or privity with, or on behalf of the parties to this action or their agents, servants, employees, heirs, successors, and assigns. The GSA shall provide a copy of this Agreement to all persons or entities retained to perform work required by this Agreement.

### **IV. Reservation of Rights**

15. This Agreement shall not be construed to limit the rights of the State to obtain penalties or injunctive relief under federal or state laws. Without limiting the foregoing, the parties expressly agree that:

- a. Nothing in this Agreement shall prevent the State from seeking further orders or relief if violations of this Agreement occur.
- b. Nothing in this Agreement shall preclude the State from seeking equitable or legal relief for future violations of Missouri laws or regulations.
- c. The State of Missouri further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Property or the GSA's acts or omissions.

- d. The State expressly retains its authority to clean up the Site and seek recovery of the costs incurred pursuant to Section 260.530, RSMo.
- e. The GSA agrees not to challenge the issuance of this Agreement or the State's authority to bring, or the authority of a court of competent jurisdiction to hear, any action to enforce the terms of this Agreement.

#### **V. Objectives of the Parties**

16. By entering this Agreement, the mutual objective of the parties is to fulfill their roles and responsibilities under CERCLA § 120, 42 U.S.C. § 9601, and coordinate the expedient characterization and remediation of the contamination on the Property for which GSA is responsible. However, nothing herein authorizes any action that would pose a threat to the public health or welfare or the environment.

#### **VI. Determinations**

17. The following are defined:
- a. The GSA is a "person" as defined in 42 U.S.C. § 9601(21).
  - b. The Property is a "facility" as defined by 42 U.S.C. § 9601(9).
  - c. The United States is the "owner," of the Property as defined in 42 U.S.C. §§ 9601(20) and 9607(a)(1). The GSA is a responsible federal cleanup agency for the Property.

18. This Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

## VII. Agreement

19. This Agreement enables and requires the GSA to fulfill its remedial action obligations under CERCLA § 120, including, but not necessarily limited to, addressing the releases of hazardous substances, hazardous wastes, hazardous constituents, pollutants, or contaminants at or from the Site. The Site shall include the Property and any areas contaminated by the migration of hazardous substances from the Property. Nothing herein releases the GSA from any obligation under CERCLA.

20. The GSA recognizes and affirms that it is ultimately responsible for ensuring that the contamination at the Site for which it is responsible is remediated such that the GSA can provide a covenant warranting that all necessary response actions have been completed.

21. The scope of this Agreement extends to the entirety of the Site, including off-site contamination, as it is listed in the EPA Federal Facility Docket and, where necessary, shall extend beyond the Property boundaries as necessary to effectuate the purposes of this Agreement.

22. Unless modified or extended in accordance with this Agreement, the GSA shall adhere to the timelines set forth in the “Hardesty Schedule for CERCLA Deliverables” revised September 12, 2013, attached hereto as Exhibit 3 and incorporated as part of this Agreement. The GSA shall address and promptly respond to the State’s comments on all submittals to the State’s satisfaction.

### **VIII. Entry Upon Site**

23. The GSA shall ensure the Department, upon reasonable notice under the circumstances presented, has the right of entry upon the Property or areas in the vicinity of the Property upon which the GSA completes investigations and remedial work. At all times while on the Property, the Department shall abide by reasonable health and safety rules in effect for the Property for (i) inspecting and sampling related to the contamination at the Property; (ii) implementing the activities under this Agreement; and (iii) testing and any other activities necessary to ensure the GSA's compliance with this Agreement.

24. Nothing herein shall be construed to alter the rights of access the Department and the GSA hold under law or regulation.

### **IX. Institutional Controls**

25. Should institutional controls be a necessary component of the GSA's remediation requirement for the Property, the parties agree the controls will comply with the Missouri Environmental Covenants Act, §§ 260.1000-260.1039, RSMo.

### **X. Availability of Funds**

26. The parties intend that the GSA's obligations arising under this Agreement will be fully funded. The GSA will take all steps necessary to submit, as soon as possible but in no event later than the next budget cycle, a budget request to allow for the timely allocation of funds to ensure the remediation of the Site. Such requests shall be to the Director of the Office of Management and Budget and shall be for appropriations that adequately address schedules for

investigation and completion of all necessary response action, including long term maintenance, operations and closeout, as required by CERCLA § 120(c), 42 U.S.C. § 9620(h)(3)(c). Any such funds received for the remediation of the Site shall not be used for any other purpose. The GSA shall provide the State with a copy of its budget request for the Site.

27. Any requirement for the payment or obligation of funds by the GSA established by the terms of this Agreement shall be subject to the availability of appropriated funds. No provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Antideficiency Act, 31 U.S.C. § 1341. In cases where payment or obligation of funds would constitute a violation of the Antideficiency Act, the dates established requiring the payment or obligations of such funds may be appropriately adjusted as provided in Section XI (Extensions).

## **XI. Extensions**

28. The GSA may request an extension of any deadline for good cause. The request shall be made at least seven (7) days prior to the deadline, if practicable, and shall specify:

- a. the timetable, deadline, or schedule that is sought to be extended;
- b. the length of the extension sought;
- c. the good cause for the extension; and
- d. the extent to which any related timetable and deadline or schedule would be affected if the extension were granted.

29. Good cause means:

- e. an event of force majeure;
- f. an obligation or event that requires GSA to pay or obligate funds in violation of the Antideficiency Act, 31 U.S.C. § 1341.
- g. a delay caused by the Department's failure to meet any requirement of this Agreement provided the delay is directly related to the matter that is the subject of the proposed extension;
- h. a delay caused by the good faith invocation of dispute resolution or the initiation of judicial action;
- i. a delay caused, or likely to be caused, by an extension of another timetable and deadline or schedule;
- j. a delay in the Department's review of a permit application or issuance of a permit or other forms of authorization required to perform activities undertaken pursuant to this agreement; and
- k. any other event or series of events mutually agreed to by the parties as constituting good cause.

30. Absent agreement of the parties with respect to the existence of good cause, the GSA may seek and obtain a determination through the dispute resolution process that good cause exists.

## **XII. Force Majeure**

31. “Force majeure,” for purposes of this Agreement, is defined as any event arising from causes beyond the control of the GSA, its contractors, or any entity controlled by the GSA, that delays or prevents performance of any obligation under this Agreement despite the GSA’s best efforts to fulfill the obligation. The requirement that the GSA exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate and prevent any potential force majeure event and best efforts to minimize the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. “Force Majeure” does not include unanticipated increased costs or expenses associated with implementation of this Agreement. Failure to apply for a required permit or approval, or to provide in a timely manner all information required to obtain a permit or approval necessary to meet the requirements of this Agreement, are not Force Majeure events.

32. If any event occurs or has occurred that may delay the performance of any obligation under this Agreement, whether or not caused by a force majeure event, the GSA shall provide notice verbally or by electronic transmission to the State as soon as possible, but not later than 24 hours of when the GSA first knew that the event might cause delay. Within seven (7) days thereafter the GSA shall provide in writing to the State an explanation and description of the reasons for the delay, all action taken or to be taken to prevent or minimize the delay, a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay, the GSA’s rationale for attributing such delay to a force majeure event if it

intends to assert such a claim, and a statement as to whether, in the opinion of the GSA, such event may cause or contribute to an endangerment to public health, welfare or the environment. The GSA shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure event. Failure to comply with the above requirements shall preclude the GSA from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. The GSA shall be deemed to know of any circumstance of which the GSA, or any entity controlled by the GSA, or the GSA's contractors knew or should have known.

33. If the State agrees that a force majeure event has occurred, the State may agree to extend the time for GSA to perform the obligations under this Agreement that are affected by the force majeure event for the time necessary to complete those obligations. An extension of the time to perform the obligations affected by the force majeure event shall not, by itself, extend the time to perform any other obligation. Where the State agrees to an extension of time, the appropriate modification shall be made pursuant to Section XVI (Modifications).

34. If the State does not agree that a force majeure event has occurred, or does not agree to the extension of time sought by the GSA, the State's position shall be binding, unless the GSA invokes Dispute Resolution under Section XIII (Dispute Resolution). If the GSA elects to invoke the dispute resolution procedures set forth in Section XIII (Dispute Resolution), it shall do so no later than fifteen (15) days after receipt of the State's notice. In any such proceeding, the GSA shall have the burden of demonstrating by a preponderance of the evidence that the

delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that the GSA complied with the requirements of this Section. If the GSA carries this burden, the delay at issue shall be deemed not to be a violation by the GSA of the affected obligation of this Agreement identified to the State.

### **XIII. Dispute Resolution**

35. The dispute resolution procedures of this Section shall be utilized to resolve disputes arising under or with respect to this Agreement before any party initiates legal action to enforce this Agreement. However, nothing in this Agreement shall be construed to prevent the State from taking appropriate action to address any imminent hazard that may arise in the future.

36. Informal Dispute Resolution. Any dispute over the meaning of any of the terms of this Agreement or a decision by the State to deny a force majeure request shall in the first instance be the subject of informal negotiations between the parties to the dispute. Notice of the dispute shall be given by the party alleging the dispute. The notice shall state the specific grounds for the dispute, including any supporting documentation and the relief requested. The parties shall have thirty (30) days from the receipt of the notice of the dispute to resolve the dispute through informal negotiations. If agreement is reached, the resolution shall be reduced to writing. The time for informal negotiations may be extended by written agreement of the parties.

The period for informal negotiations shall not exceed sixty (60) days from the date of the notice of the dispute, unless modified by written agreement by the parties to the dispute.

37. In the event that the parties cannot resolve a dispute by informal negotiations under the preceding Paragraph, the State's position shall stand unless the GSA seeks judicial resolution of the dispute. Any judicial resolution must be initiated by filing an appropriate legal pleading with the court asking the court to resolve the dispute. The court hearing the dispute may determine which party has the burden of proof as well as what that burden is (preponderance of the evidence or something else). The pleading shall describe the dispute, state that the party filing the pleading has made a diligent, good faith effort to resolve the dispute through informal negotiation, and include a proposal for resolving the dispute.

38. The invocation of the dispute resolution procedures under this Section shall not extend, postpone or affect any obligation of the GSA under this Agreement unless expressly provided herein or unless the parties agree to the extension, postponement, or effect.

#### **XIV. Enforceability**

39. Consistent with CERCLA § 120(a), 42 U.S.C. § 9620(a), the State has the right to enforce this Agreement.

40. All schedules and deadlines shall be enforceable, including those associated with the development, implementation and completion of the Remedial Investigation/Feasibility Study (RI/FS) and primary deliverables set forth in the Hardesty Schedule for CERCLA Deliverables, attached as Exhibit 3.

41. Any final resolution of a dispute pursuant to Section XIII (Dispute Resolution), which establishes a term, condition, timetable, deadline or schedule, shall be enforceable.

#### **XV. Notices**

42. Notice to the individual parties pursuant to this Agreement shall be sent to the addresses specified by the parties. Initially these shall be as follows:

If to the Department:

Ruben Zamarripa  
Missouri Department of Natural Resources/HWP  
P.O. Box 176  
Jefferson City, MO 65102  
[Ruben.Zamaripa@dnr.mo.gov](mailto:Ruben.Zamaripa@dnr.mo.gov)

If to the GSA:

Kevin Phillips  
Environmental Team Lead  
GSA – Heartland Region 6  
1500 East Bannister Road  
Kansas City, MO 64131 – 3088

If to the AGO:

Kara L. Valentine  
Assistant Attorney General  
Missouri Attorney General's Office  
P.O. Box 899  
Jefferson City, MO 65102  
[Kara.Valentine@ago.mo.gov](mailto:Kara.Valentine@ago.mo.gov)

The parties reserve the right to designate additional or different addresses for communication upon written notice to the other parties.

## **XVI. Modifications**

43. The terms of this Agreement constitute the complete and entire agreement between the State and the GSA concerning implementation of the activities required by this Agreement. Modifications to the terms, conditions, or schedules specified in this Agreement shall only be binding if made by written agreement between all parties.

## **XVII. Severability**

44. If any provision of this Agreement is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not be affected or impaired.

## **XVIII. Termination of Agreement**

45. The provisions of this Agreement shall be deemed satisfied and this Agreement will terminate upon the GSA's completion of all response actions necessary to protect human health and the environment. The GSA shall submit a final document that demonstrates the remedy has been constructed, is in place, and operating successfully to the State for review and approval. Within thirty (30) days of the State's approval, the GSA shall record and deliver the Notice of CERCLA Covenant pursuant to CERCLA § 120(h), 42 U.S.C. § 9620(h)(3)(C)(iii). The Department's finding that no further remedial action is necessary shall not be construed to negate or eliminate the GSA's residual responsibilities, such as Five Year Review or Long-Term Monitoring requirements and/or liability under CERCLA section 120(h), 42 U.S.C. §

9620(h)(3)(A). The GSA shall provide the State with a copy of the document containing the CERCLA Covenant.

46. This Agreement will become final, effective, and fully enforceable upon the date signed by all parties. The Department will send a fully signed copy of this Agreement to the parties at the addresses listed herein.

#### **XIX. Authority to Sign**

47. By signing this Agreement, all signatories assert that they have read and understood the terms of this Agreement, with the opportunity to consult with counsel, and that they have the authority to sign this Agreement on behalf of their respective party.

48. This Agreement may be signed in counterparts, and its validity shall not be challenged on that basis.

**Signatures**

**FOR THE STATE OF MISSOURI:**

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**

3/21/14

**Date**

  
\_\_\_\_\_  
**Leanne Tippet Mosby, Director  
Division of Environmental Quality**

**MISSOURI ATTORNEY GENERAL'S OFFICE**

3/20/14

**Date**

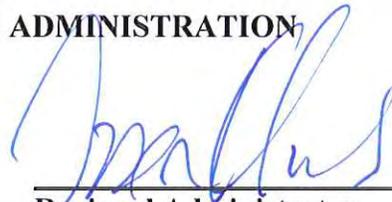
  
\_\_\_\_\_  
**Kara L. Valentine  
Assistant Attorney General**

**FOR THE UNITED STATES OF AMERICA:**

**UNITED STATES GENERAL SERVICES ADMINISTRATION**

12-Feb-14

**Date**

  
\_\_\_\_\_  
**Regional Administrator  
Heartland Region**

## Former Hardesty Federal Complex Environmental Remediation Project Contact Information

Name	Organization	Role	Phone	Email/Website/Address
<b>Federal Leadership</b>				
Jason Klumb	U.S. General Services Administration (GSA)	Regional Administrator	816-926-7201	jason.klumb@ggsa.gov
<b>Public Affairs/ Media</b>				
Angela Brees	GSA	Public Affairs	816-823-2931	angela.brees@ggsa.gov
<b>Community Involvement</b>				
Leslie LaMar	GSA	Communications Specialist	816-823-2712	leslie.lamar@ggsa.gov
Althea Moses	U.S. Environmental Protection Agency (EPA)	Environmental Justice	913-551-7649	moses.althea@epa.gov
<b>Project Management</b>				
Josh Trader	GSA	Project Manager	816-806-5069	joshua.trader@ggsa.gov
Kevin Phillips	GSA	Lead Environmental Engineer	816-823-1220	kevin.phillips@ggsa.gov

<b>Regulatory Oversight</b>						
Jim Harris	Missouri Department of Natural Resources (MDNR)	Environmental Specialist	573-522-1892	jim.harris@dnr.mo.gov		
Ruben Zamarripa	MDNR	Unit Chief, Defense Sites Restoration Unit	573-751-7757	ruben.zamarripa@dnr.mo.gov		
<b>Human Health Professionals</b>						
Dennis Wambuguh	MDHSS	Health and Risk Assessment Unit Chief	573-751-6102	dennis.wambuguh@health.mo.gov		
Andrew McKinney	MDHSS	Risk Assessor	573-751-6102	andrew.mckinney@health.mo.gov		
Bert Malone	Kansas City Health Department (KCHD)	Deputy Director	816-513-6166	bert.malone@kcmo.org		
<b>Property Redevelopment &amp; Future Use</b>						
Adam Jones	Hardesty Renaissance Economic Development Corporation	Property Owner's Representative/ Property Manager		425 Washington St. Suite 410 Kansas City, MO 64105		

Jim Turner	Hardesty Renaissance	Board Member		
<b>Community Organizations</b>				
	Indian Mound Neighborhood Association			<a href="mailto:president.imna@gmail.com">president.imna@gmail.com</a> <a href="http://www.indianmoundneighborhood.org/">http://www.indianmoundneighborhood.org/</a> P.O. Box 6660 Kansas City, MO 64123
	Scarritt Renaissance Neighborhood Association			<a href="mailto:president@scarrittneighborhood.org">president@scarrittneighborhood.org</a> <a href="http://www.scarrittkc.org/">http://www.scarrittkc.org/</a> P.O. Box 17641 Kansas City, MO 64123
	Lykins Neighborhood Association			<a href="mailto:LykinsKC@gmail.com">LykinsKC@gmail.com</a> <a href="http://www.lykinsneighborhood.com">lykinsneighborhood.com</a>
	Sheffield Neighborhood Association			
	Pendleton Heights Neighborhood Association			<a href="mailto:board@pendletonheights.org">board@pendletonheights.org</a> <a href="http://www.pendletonheights.org">www.pendletonheights.org</a>

Independence Plaza Neighborhood Council			<a href="http://www.ipnckc.org/">http://www.ipnckc.org/</a> P.O. Box 240156 Kansas City, MO 64124
Kansas City Public Library North-East Branch	816-701-3485		6000 Wilson Rd. Kansas City, MO 64123 <a href="http://www.kclibrary.org/north-east">http://www.kclibrary.org/north- east</a>
Northeast Community Center	816-231-7738		<a href="http://www.necc-kc.org/">http://www.necc-kc.org/</a> 544 Wabash Ave. Kansas City, MO 64124
The Don Bosco Center	816-691-2900		<a href="http://www.donbosco.org">www.donbosco.org</a> 580 Campbell St. Kansas City, MO 64106
Vietnamese American Community of Greater Kansas City (VACKC)			<a href="mailto:admin@vackc.org">admin@vackc.org</a> <a href="http://vackc.org/vackc/index3.php">http://vackc.org/vackc/index3. php</a>
Independence School District, Adult Education & Literacy Program			318 Benton Blvd. Kansas City, MO 64124
St. Anthony Parish			318 Benton Blvd. Kansas City, MO 64124

	Whatsoever Community Center		816-231-0227	<a href="http://whatsoevercc.org">whatsoevercc.org</a> 1201 Ewing Ave. Kansas City, MO 64126
	American Sons of Columbus			<a href="http://americansonsofcolombuskc.org">americansonsofcolombuskc.org</a> 2415 Independence Ave. Kansas City, MO 64124
	Holy Cross Parish			5106 St. John Ave. Kansas City, MO 64123
	Sheffield Family Life Center		816-241-LIFE	sflc.net 5700 Winner Road Kansas City, MO 64127
	Kansas City Restoration Church		816-231-2755	<a href="http://kcrestorationchurch.com">kcrestorationchurch.com</a> 1208 Belmont Ave. Kansas City, MO 64126
	Jesus Cristo El Buen Pastor (in Budd Park Church)			4925 St. John Ave. Kansas City, MO 64123
	Guadalupe Center		816-421-1015	<a href="http://guadalupecenters.org">guadalupecenters.org</a>
	Invest Northeast			<a href="http://www.hnekc.com/">http://www.hnekc.com/</a>

	Northeast Health, Education, Labor and Public Safety (Northeast HELP)			<a href="mailto:info@northeastHELP.org">info@northeastHELP.org</a> <a href="http://www.northeastHELP.org">www.northeastHELP.org</a>
<b>Community Ambassadors</b>				
GSA is seeking volunteers to serve as Community Ambassadors	To volunteer, or for more information contact the GSA Hardesty Project Team		816-926-6903	<a href="mailto:r6environment@gsa.gov">r6environment@gsa.gov</a> 1500 E. Bannister Rd. Kansas City, MO 64131

Federal, State and Local Official Contact List  
Former Hardesty Federal Complex Area

**U.S. Senator Claire McCaskill**

Contact: Cory Dillon  
816-421-1639

**U.S. Senator Roy Blunt**

Contact: Matt Haase  
816-471-7141

**U.S. Representative Emanuel Cleaver**

Contact: Geoff Jolley  
816-842-4545

**Missouri Governor Jay Nixon**

Contact:

**Kansas City Mayor Sly James**

Contact: John McGurk  
816-513-3500

**Councilwoman District 4**

Contact: Councilwoman Jan Marcason  
816-513-6517

**Councilman District 3**

Contact: Councilman Jermaine Reed  
816-513-6513

**Missouri State Senators**

Contact: District 11 Sen. Paul LeVota  
573-751-3074

**Contact: District 9 Sen. S. Kiki Curls**

573-751-3158

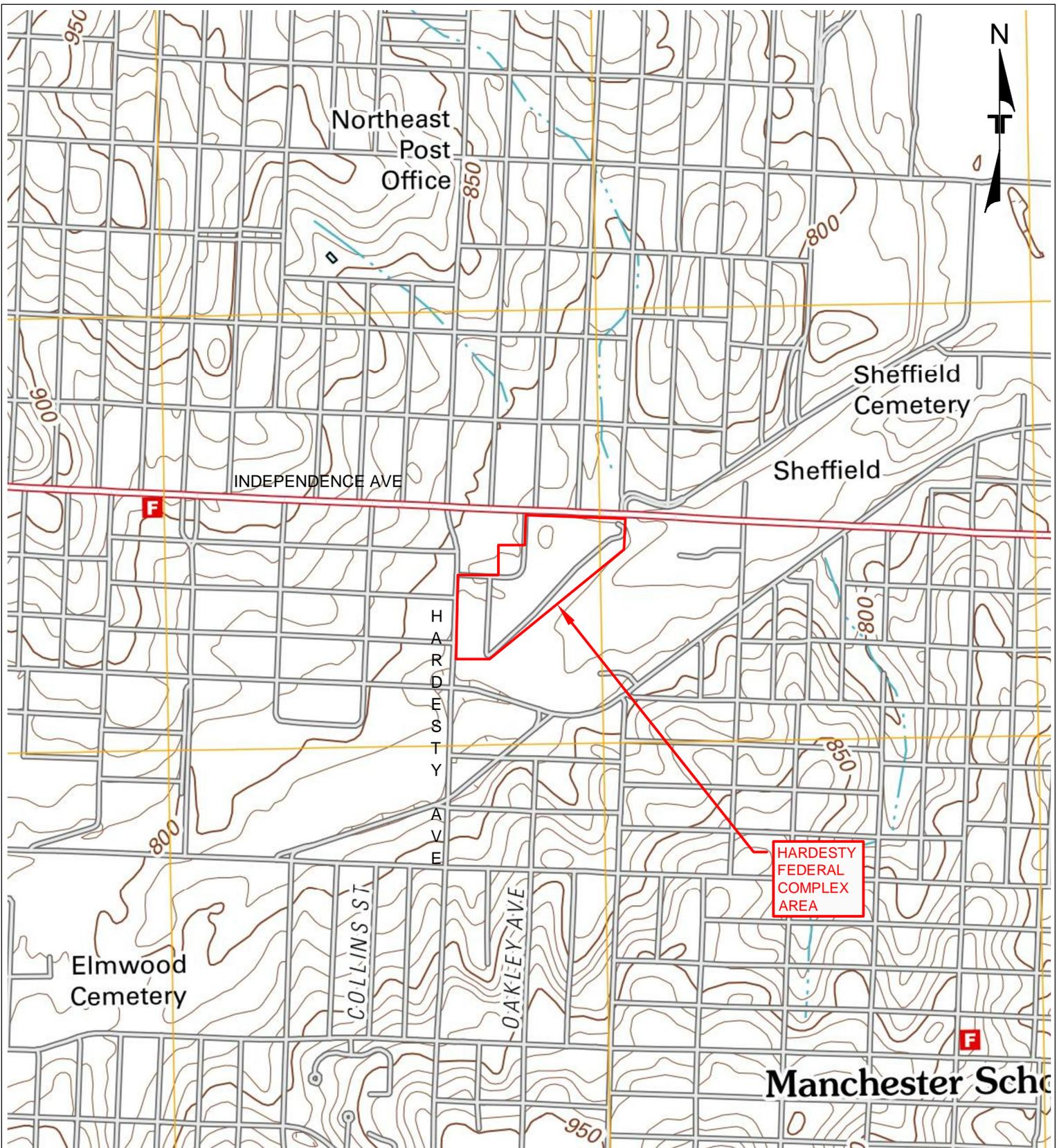
**Missouri State Representative**

Contact: District 19 Rep. John Rizzo  
573-751-3310

**Kansas City Health Department**

Contact: Bert Malone  
816-513-6008





U.S.G.S. 7.5 MINUTE SERIES TOPOGRAPHIC MAP

STATE OF MISSOURI-KANSAS QUADRANGLES  
KANSAS CITY 2012



DIAGRAM IS INTENDED FOR GENERAL USE ONLY, AND IS NOT FOR CONSTRUCTION PURPOSES. LOCATIONS ARE APPROXIMATE

Project Mngr:	ADS	Project No.	02137011
Approved By:	ADS	Scale:	1" = 2000'
Checked By:	ADS	Date:	6/9/14
Drawn By:	ADS	File No.	

**Terracon**  
Consulting Engineers and Scientists  
13910 W. 96TH TERRACE  
LENEXA, KS 66215

**- FORMER SITE LOCATION AND TOPOGRAPHIC MAP**

HARDESTY FEDERAL COMPLEX  
607 HARDESTY AVE  
KANSAS CITY, MISSOURI

Appendix 2.1

EXHIBIT



DIAGRAM IS INTENDED FOR GENERAL USE ONLY, AND IS NOT FOR CONSTRUCTION PURPOSES. LOCATIONS ARE APPROXIMATE.

EXHIBIT 2

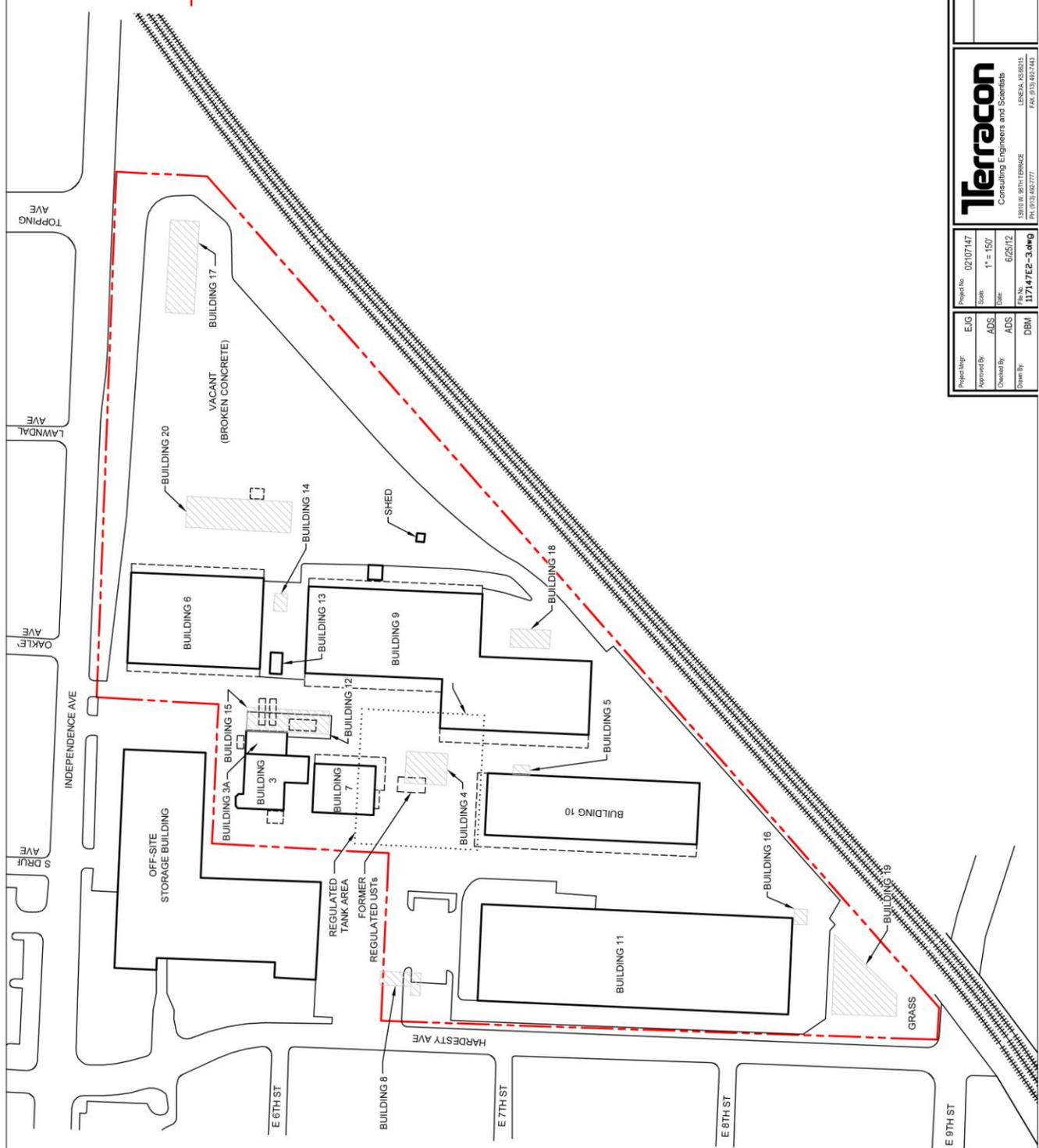
**EXHIBIT 2 - FACILITY LAYOUT**  
 HARDESTY FEDERAL COMPLEX  
 607 HARDESTY AVE  
 KANSAS CITY, MISSOURI

**Terracon**  
 Consulting Engineers and Scientists  
 13910 W. 96th TERRACE  
 LEWIS, MISSOURI  
 PH: (816) 452-7777 FAX: (816) 452-4443

Project No:	02107147
Scale:	1" = 150'
Date:	6/25/12
File No:	17147E2-3.dwg
Project Mgr:	EG
Approved By:	ADS
Checked By:	ADS
Drawn By:	DBM

**LEGEND**

- HARDESTY FEDERAL COMPLEX
- APPROXIMATE FORMER BUILDING
- FORMER USTs



Appendix 2.2

## **Buildings currently on the former Hardesty Federal Complex site**

### **Building 3**

Building 3 is located on the northwest portion of the site. This building was the previous power plant for the facility. Reportedly, there are steam tunnels that lead from this building to other on-site buildings. The exterior building walls are of brick and cinder block construction. Buildings 3 and 3A combined total approximately 18,098 square feet. Terracon conducted a limited walkthrough of Building 3 in April 2012. Limitations were due to the deteriorating structure and water in the basement. However, the following is a summary of the observations made in Building 3.

- Boilers and associated equipment are still present in the east and west portions of the building.
- The eastern portion of the main of the building is open from the ground level to the basement. The bottom of this room currently has approximately 3 feet of water in it and was between 15 and 20 feet below ground surface.
- The floor of the western portion of the building is at a sub-basement level (i.e. the floor is sitting approximately 5-8 feet below ground level) with only one building level in this portion of the building.
- The small addition connected to the south side of Building 3 was observed to be divided into two different sections. The eastern portion included a small room at ground level; a void space appeared to be directly beneath the room (unable to be fully seen to determine the extent of it). The western portion of this addition was an open room from the ground level to a basement level; water was observed in the bottom of this room.
- The base of a former smokestack was observed associated with this building. Observations associated with the former smokestack and ash room are discussed in Section 4.3.2 of the Work Plan.

### **Building 3A**

Building 3A is located immediately east of Building 3. This building is constructed with tin siding. The floor at the ground level appeared to be constructed of wood. Inside Building 3, Terracon noted several doors located in the basement along the eastern walls. These doors appeared to be leading to beneath Building 3A.

### **Building 6**

Building 6 is an approximately 56,000-square foot, two-story warehouse building constructed on a concrete slab. No basement is present. The building's exterior walls are of transite panel construction.

### **Building 7**

Building 7 is an approximately 8,970-square foot, one-story storage building constructed on a concrete slab. A crawl space with a concrete foundation is present beneath this building. The building's exterior walls are of transite panel construction.

### **Building 9**

Building 9 is an approximately 178,379-square foot, two-story warehouse building with a basement. The basement floor is approximately 15 feet below the exterior ground surface. The building's exterior walls are of brick construction with some transite panels. A large tunnel is present leading from the basement of Building 9 into Building 10. In late 2011 when Terracon was inside Building 9, the basement in the northern portion of the building had water intrusion with puddles of standing water on the floor.

**Building 10**

Building 10 is a two-story warehouse building with a basement consisting of approximately 92,728 square feet. The basement floor is approximately 15 feet below the exterior ground surface. The building's exterior walls are of brick construction with some transite panels. A large tunnel is present leading from the basement of this building into Building 9.

**Building 11**

Building 11 is an approximately 216,992-square foot, two-story warehouse/office building with a basement. The building's exterior walls are of brick construction and a large tunnel is present leading from the basement of this building into Building 10.

**Building 13**

Building 13 is an approximately 200 square foot, one-story substation transformer building. The floor of this building is located several feet below the surrounding ground surface. It is not known if this building is currently accessible and the condition of the inside of the building is unknown.



U.S. GENERAL SERVICES ADMINISTRATION  
The Heartland Region

---



General Services Administration

Work Order 7

Environmental and Cultural Services

MO0000AE

Hardesty Federal Complex

Kansas City, Missouri





**CULTURAL RESOURCES ASSESSMENT**

**HARDESTY FEDERAL CENTER  
607 HARDESTY AVENUE  
KANSAS CITY, MISSOURI**

**GS06P98GYD0018  
August 19, 1999**

*Prepared for:*

**UNITED STATES GENERAL SERVICES ADMINISTRATION  
Kansas City, Missouri**

*Prepared by:*

**THREE GABLES PRESERVATION  
Kansas City, Missouri**



---

## INTRODUCTION

---

In anticipation of the disposal of the Hardesty Federal Complex property (formerly the Kansas City Quartermaster Depot, and herein referred to as such) located in Kansas City, Missouri, mitigation measures were developed through a Memorandum of Agreement with the owner of the property, General Services Administration, in conjunction with the Historic Preservation Program, Missouri Department of Natural Resources. The mitigation measures included additional research to detail activities that occurred at the complex during and after World War II when it functioned as a Quartermaster Depot, and to place those activities in the context of other such depots in the overall war effort. Three Gables Preservation was hired to conduct this research. Deon Wolfenbarger served as project manager, with Brad Finch assisting.

---

## METHODOLOGY

---

Archival research was conducted for the former Kansas City Quartermaster Depot site. Sources originally consulted for the preliminary evaluation in 1997 were reviewed, and included files at the Kansas City Landmarks Commission at City Hall in Kansas City, Missouri; the Missouri Valley Room at the Kansas City Public Library; and the building files at GSA in Kansas City, Missouri. Historical monographs prepared for the Department of the Army provided general historic context for the United States Quartermaster Corps. Files specific to the functions of the Kansas City Quartermaster Depot were examined at the Kansas City branch of the National Archives. As is typical of many such operations, a great deal of information was available on the "start-up" or the beginning of the Quartermaster operations at the Hardesty site. Specifics relating to the shut-down or closing of the site were sparse, and details were not available among the files located at the National Archives branch in Kansas City.

---

## UNITED STATES QUARTERMASTER CORPS: *HISTORIC CONTEXT*

---

### **Background development**

Military historians have spent centuries researching and writing about strategy and tactics, often ignoring the more mundane topics concerning the day-to-day logistics of the military. However, around World War II, the study of the history of the logistical operations of the military was increasingly recognized as critical to insure smooth operations in the future. To those responsible for responding to the crisis of World War II in the Quartermaster Corps, for example, it was clear that operational histories would have greatly aided the effort at the time. Without the knowledge of what did and did not work beforehand, many mistakes from World War I were initially repeated as the United States quickly geared up to respond to the new war. The supply lessons learned painfully under the pressure of one war were often completely lost to quartermasters removed from the demands of war by decades of peace. We now better understand the vital role that logistics -- the supply of personnel and equipment for battle -- plays in warfare.<sup>1</sup>

The Quartermaster Corps is one of the oldest and most important supply agencies of the United States Army. Its origins can be traced to 16 June 1775, when the Second Continental Congress passed a resolution to create the position of a "quarter master general."<sup>2</sup> Operating within what was first known as the Quartermaster's Department, the agency initially followed the example set by the British army to shelter and provision the Army. Over the next two centuries, the Quartermaster's Department suffered many tribulations, including temporary extinction on several occasions. The first of these occurred right after the Revolutionary War when the department was competing against various other agencies or personnel which had been assigned to supplying the Army. The job of Quartermaster was thus viewed as superfluous, and it ceased to exist in the post-Revolutionary period. At this time, it was decided that the duties of providing the small peacetime Army with rations and quarters would fall to the Secretary of

War. The fact that Secretary had enough responsibilities and should be relieved of such duties wasn't seen as reason enough to reinstate the Quartermaster Department. It wasn't until the War of 1812 that the military realized that the Army must function efficiently in peace in order to be able to quickly gear up for war, and that a permanent supplies department would better be able to handle such military emergencies. A fundamental change in the concept of the Quartermaster Department occurred in 1818, and the tenure of the Quartermaster General was no longer limited to a war period.<sup>3</sup> The first Quartermaster Depot was established this year in Washington, D.C., and it served as a storage facility for quartermaster supplies and records.

The Civil War introduced a divisional organization of duties under the Quartermaster so that it now operated largely along commodity lines. Other primary depots had been established, and were involved with supplying the Union Army with clothing, equipment, animals, forage and transportation. Additionally, increasing workloads for the Quartermaster Department eventually necessitated hiring civilian employees, and after the Civil War, the practice of female clerks became common. Civilian workers were often difficult to control, however, and when civilians were not available, commanders detailed soldiers on extra duty. This posed a hardship on the Army, and the militarization of the Corps was a reform that was finally achieved in 1912.<sup>4</sup> The service corps of men proved so useful during World War I that by the end of the war, there were 26 different types of units in the Quartermaster Corps in the A.E.F.

Originally the Quartermaster General was responsible for quartering the troops, although his primary function was the transportation of men and supplies. Procurement was limited to the purchase of tents and other supplies for quarters. Throughout the nineteenth century, transportation and construction continued to be the major functions of the Quartermaster's Department. The changes in warfare during the Civil War ultimately brought a major reassignment of Quartermaster responsibilities. Transportation was made a separate agency, and by World War II, the responsibility for transportation and construction were permanently removed from the Corps. Instead, the Quartermaster Corps emerged in the decades before World War II as the Army's chief supply agency.

After any war, Congress usually focused on reducing costs in the War Department. This meant demobilizing the Army, releasing rented storage facilities, and disposing of surplus supplies. When any war broke out, though, the Quartermaster General was at once required to transport, shelter, clothe, and equip a rapidly expanding force. After the Civil War, for example, there was no incentive for maintaining a progressive agency and the Quartermaster's Department just drifted. When the Spanish-American War broke out, however, supply broke down when the Department was suddenly called upon to clothe and equip more than 250,000 men (compared to the peacetime force of 26,000). Troops were sent to the tropics with winter uniforms, and the congestion of supplies and men at ports of embarkation was unbelievable.<sup>5</sup> Investigations and recommendations after this fiasco resulted in legislation which consolidated the Army Subsistence, Pay, and Quartermaster's departments, and up to the beginning of World War I, the Corps level of responsibility throughout the Army Department was at its most widespread.

When World War I began, the Office of the Quartermaster General (OQMG) was still organized on a commodity basis consisting of five divisions -- Administrative, Finance and Accounting, Construction and Repair, Transportation, and Supplies. The office's functions were largely administrative and supervisory, as the operations of procurement and distribution were decentralized to the field.<sup>6</sup> The distribution of supplies was taken care of by the post and camp quartermasters, who in turn submitted requisitions to the quartermasters of the territorial departments. There were seven general depots and other specialized depots which had been designated as points of supply. This decentralization led to several difficulties, though, as each supply bureau worked independently of all others. Competition for materials, facilities, and transportation was compounded by typical wartime shortages, and the need for more centralized control became evident.<sup>7</sup> The failure to plan in advance for mobilization, as well as other problems, led to yet another reorganization in 1920. The lessons of World War I were soon forgotten, however, as many people believed it was meant to be "the war to end wars." A victory indicated that this was achieved, and complacency set in as the Corps was reorganized for peacetime. Public indifference to the Army prevailed, and the supply bureau slipped into the typical state of unpreparedness that preceded every war.<sup>8</sup>

### **World War II and the Quartermaster Corps**

The story of the Quartermaster Corps in World War II is a vast and complex history, requiring volumes in even an abridged form. A complete understanding cannot be presented in a succinct manner, but for the purposes of this report, those aspects which more closely pertain to the development of the Kansas City Quartermaster Depot will be outlined. At the onset of World War II, the rapid expansion of the Army placed unexpected demands on the Quartermaster Corps, which in turn required organizational readjustment in the middle of certain operations, improvisation in other areas, and the cessation of some operations that proved inadequate. The mission of the Quartermaster Corps during World War II was to supply the troops with food, clothing, equipage, fuel, and general supplies. These needed to be supplied in proper quantity, quality, and delivered at the right time and in the right place.

When the war began in Europe in September 1939, the Quartermaster Corps (QMC) was a small supply agency of the War Department, although it did have some potential for expansion in an emergency. Its activities were directed through a Washington headquarters, and it was organized on a commodity basis. Field installations, such as depots, procured and distributed the supplies, and certain Quartermaster schools trained the military personnel required by the Corps itself. Most of the depots were located in the eastern half of the United States (see figure 1), which proved unfortunate for the coming war in the Pacific

The QMC was able to handle the initial limited increase of approximately 17,000 men in the Army in 1939, which increased its size to 227,000 troops. However, the dramatic enlargement of the Army after the fall of France to 1,400,000 men in September 1940 placed a great deal of pressure on the QMC.<sup>9</sup> To meet these needs brought on by the vastly expanded Army, as well as to meet new responsibilities imposed on the QMC, the Corps was obviously required to expand its personnel and organization both in Washington and the field. The headquarters went from four to thirteen divisions, and increased its military personnel from less than 12,000 to more than 500,000. The field organization was greatly expanded as well, with depots quickly established in the south and western half of the United States. New training centers, such as those for dogs in war, were also established. Repair sub-depots and expanded repair shops resulted from the shortage of supplies and the need to conserve materials.<sup>10</sup>

In the initial emergency period, the commodity organization was simply expanded. However, Pearl Harbor initiated more radical changes. The OQMG shifted from a commodity organization to a functional basis. Under commodity organization, each of the various commodity branches was responsible for the procurement of the various items, their storage, and eventual distribution. With the change to a functional basis, instead of a single commodity branch being responsible for the procurement and distribution of specific items of supply (such as footwear at the Boston Quartermaster Depot), single divisions were responsible solely for the procurement of most supplies, or for their storage and distribution.<sup>11</sup> This change occurred in the midst of the war, during a drastic and fundamental reorganization of the War Department in March 1942.

World War II not only resulted in administrative modifications of previous military methods, but actually introduced new operations, procedures, and principles from the private business world. Procurement methods, supply procedures, and storage and distribution were all streamlined after research of their usage. Although profits were not the measure of success in the QMC, it was still necessary to provide maximum service to the troops at a minimum cost. Modern methods were employed whenever possible, and "IBM machines" and teletypes helped speed supply operations at headquarters and the depots. Fork-lift trucks and other mechanical equipment were necessary to handle the tremendous tonnage of supplies required for this global war.

### **Depot Operations in World War II**

During World War II, the QMC not only provided food, clothing, fuel, and other supplies to the Army (which was about 8,000,000 men during its peak strength), it also furnished various supplies to the Navy, Marine Corps, Coast Guard, and other agencies. This involved the movement of millions of tons of supplies into and out of the Quartermaster depots. During the emergency period and the months



following Pearl Harbor, the primary objectives of the QMC was the rapid expansion of its depot system in addition to the prompt delivery of supplies to troops. By the end of 1942, these goals had largely been achieved and more attention was directed to improving inventory control for more balanced and equitable distribution.<sup>12</sup>

Prior to the establishment of the Depot Division within the QMC in May 1941, the Quartermaster depots and Quartermaster sections of general depots tended to operate as separate autonomies rather than as parts of an overall depot system. Each depot used various methods or systems for getting the job done, paying little attention to the fact that other organizations might be doing similar work in a more effective manner. Once established, the Depot Division's mission was to standardize and coordinate activities in order to make each depot more efficient.<sup>13</sup> Other changes were first wrought at the higher levels, such as the previously noted transformation of the QMC from a commodity-based one with a field organization to that of a more functional organization. Several civilian experts working with the OQMG, coming from commercial organizations employing the functional principle, advocated an immediate and fundamental change in the way the Quartermaster was organized. In March 1942, with little time for discussion, the OQMG abandoned its traditional commodity-type organization and reorganized on a functional basis.<sup>14</sup> Everything from the chain of command to the way in which supplies were procured by the depots was affected.

**Storage:** One of the key mistakes made during World War I was the failure to provide sufficient storage facilities. This led to the shipment of goods directly to piers and other port facilities, which were then clogged with goods. Rail lines for miles behind the terminals held loaded cars waiting for movement to shipside. The OQMG thus realized the importance of providing storage space as the country geared up to meet the new conflict during World War II. The problem of too little storage space was not merely due to lack of floorage. Prior to World War II, storage problems were subordinated to those of distribution, and the accountability of property was more important than controlling supplies for equitable distribution and minimum storage. As the war progressed, it became apparent that modern methods of warehousing had to be adapted to the Army system of supply. Up to this point, warehousing had simply been considered a matter of space control -- allocating available storage facilities among the supply services. Using improved equipment for handling supplies or adopting sounder methods of receiving, stacking, packing, and shipping had not been considered.<sup>15</sup>

A study of these problems led to the establishment of a Depot Division in May 1941. A later reorganization led to the formation of the Storage and Distribution Service (later Division), which was responsible for managing and operating the Quartermaster depots. The delivery of goods from depots to embarkation ports, posts, and camps was supervised from headquarters. Depot operations were revised and simplified, and training for both civilian and military personnel was provided in warehousing duties. Control of the supplies by headquarters ceased when they were delivered to the depots.<sup>16</sup> This division of authority allowed for the standardization of warehousing and distribution methods from the depots.

During World War II, the Quartermaster depots were the keystone of the Quartermaster system of supply. At this time, the depot storage system was based on broad principles of decentralization. Depending upon their assignments, the depots were classified as *regional distributing*, *filler*, *key*, or *reserve* depots. Most Quartermaster depots included the functions of three or even all four of these classifications. The continental U.S. was divided into fifteen areas, with each area being served by a *regional distributing* depot. The size of the area served by the depot depended upon the storage capacity of the depot, the density of the military population, and the time required to make deliveries. This system of regional depots was the backbone of the decentralization system. A supply officer of a post, camp or station in the interior zone ordered from only one depot for all of the Quartermaster items, which greatly simplified the task of requisition officers. The regional depots thus furnished supplies directly to all camps, posts, and stations within its area. The only major types of supplies not handled by the depots were perishable subsistence items, issued through Quartermaster market centers, and fuels and lubricants, sent directly to the military stations from the producers.

Key depots handled supplies that were scarce, in limited demand, or that required special handling. Since storage area for these might be comparatively small, the larger regional depots could not

economically handle high numbers of these types of items, which might include war dog equipment or items which served a restricted area, such as desert equipment. Also, items which demanded special handling or storage were kept at key depots, such as clothing chemically impregnated as a protection against poison gas.<sup>17</sup> A key depot's area of distribution might include two or more regional areas, or even the entire zone of the interior.

*Filler* depots were established generally within 100 miles of the seaboard in order to serve specific ports of embarkation, which in turn were assigned to specific theaters of operation. Goods were forwarded only upon the call of the port commander in the quantity requested, at the time requested, and in an orderly and controlled flow. This system was devised in order to avoid the disasters that had occurred with goods and troops at the ports during World War I. *Reserve* depots kept reserves of supplies which replenished stocks of regional distributing and filler depots. They also set aside supplies in anticipation of shortages or in preparation for specific operations.<sup>18</sup> The distributing depots averaged about 3,500 items, but ranged as high as 6,000 or more for those installations with diverse missions. The missions of the depots were not permanently fixed throughout the war, either. They would change as troop concentrations shifted in the zone of the interior or in the various theaters of operations. The new system for the Quartermaster Corps was able to respond more quickly to these changes, and the functions of the depots were thus altered as the direction of the global conflict changed.<sup>19</sup>

As important as an efficient method of distribution to improving the services of the Quartermaster Corps was adequacy of storage facilities. In order to solve this problem, the QMC expanded its depot system during World War II, utilized commercial storage facilities, and developed methods to assure complete utilization of existing storage space. In 1940, there were twelve depots which handled Quartermaster supplies, and all but two of these were east of the Mississippi (see Figure 1). At this time, the amount of permanent warehouse space controlled by the QMC was 7,700,000 square feet. This was far below the estimated seventeen and a half square feet of floorage needed for each of the millions of troops that would be engaged in the war. Since World War I, the needs of the peacetime army had been easily met with this amount of space. Between 1933 and 1940, the Quartermaster Corps had added the responsibility of supplying the Civilian Conservation Corps, which had the fortunate effect of increasing the activities of the QM depots during this period, unconsciously preparing the Corps for the much greater expansion which would soon occur.<sup>20</sup>

As noted earlier, the geographical distribution of the depots in 1940 was not well suited for many aspects of the upcoming global conflict. They were concentrated in the East due to the tendency to locate major distributing agencies in the larger commercial centers, as well as close to the Atlantic ports which were used in World War I. However, the Pacific conflict required more depots in the West if major supply problems were to be avoided. Additionally, training camps would be concentrated in the area east of the Mississippi and south of the Potomac and Ohio Rivers due to the mild climate and areas of open terrain.<sup>21</sup> Unfortunately, this was another area of the country with few depots in 1940. These problems were rectified in the expansion of the depot system in the United States during World War II.

The expansion of the depot system occurred in three phases which paralleled the phases of the United States' involvement with the war. The first phase began in 1939 with the outbreak of the war in Europe and ended with the fall of France in the summer of 1940. During this time, it was anticipated that the depot system would need to be expanded, and the OQMG called for existing depots to submit estimates for the improvements necessary to meet the increased needs. By the end of this period, little more was accomplished than the preparation of plans.<sup>22</sup>

The second phase of the depot expansion lasted until the attack on Pearl Harbor. The first units of the National Guard were called into service, and the Army expanded to about one and a half million men. It was apparent that new and larger depots were needed to handle the vast quantities of supplies; thus a program of expansion included not only enlarging old Quartermaster depots, but constructing new ones as well. By the time of the attack on Pearl Harbor, about 11,500,000 square feet of depot space was ready for Quartermaster use, due to the expansion of older installations and the construction of two new general depots and two new Quartermaster depots. Construction was also well advanced on three other general depots and five additional Quartermaster depots, and about to begin in other cases. The QMC

preferred one-story buildings that had railroad freight sidings with loading platforms level with the car floor on one side of the warehouse, and docks for truck loading on the other. With lofty ceilings and unlimited floor-load capacity, the space could be more fully utilized with high tiering of supplies. Mechanical equipment could be more efficiently used as well. This type of construction required large tracts of land, however, and consequently their construction was often confined to smaller urban communities or areas with more open country.<sup>23</sup>

In determining the location of the new depots, there were many complex factors which had to be studied: troop distribution, the role of the distributing depots in the future system of distribution; the existence of favorable freight rates; adequate labor supply; and the elimination of backhauls and crosshauls.<sup>24</sup> Speedy completion of the new depots was critical once the basics of site selection, size, and type of construction had been settled. Cost-plus-fixed fee contracts were used to expedite construction. This allowed work to begin before the specific allotments of money and before final plans were drawn.

During the third phase of Quartermaster Corps depot expansion, which started after the attack on Pearl Harbor, one of the greatest problems was the shortage of materials and labor. Temporary structures began to be substituted for more permanent buildings. By the beginning of 1943, the expansion program of the Quartermaster depots was substantially completed. Eleven Quartermaster depots and eleven Quartermaster sections of Army Service Forces (ASF) depots contained covered storage of more than 25,000,000 square feet. Existing installations had been enlarged, and millions more square feet of storage had been leased. Six new Quartermaster depots, six new ASF depots with Quartermaster sections, and seven new sub-depots had been built. Most of the new buildings were constructed below the Mason-Dixon line and west of the Mississippi (see Figure 2).

By May 1943, it was decided not to authorize any further building unless it would seriously threaten the efficiency of depot operations. As a result of this decision, depot construction did not keep up with the large increase in troop strength. Originally it has been estimated that 66,000,000 square feet of covered storage space was necessary to supply an army of 3,200,000 men. However, at peak strength during World War II there were more than 8,000,000 men in the Army, and only 75,000,00 square feet of storage -- one hundred and fifty percent over the original estimate of troops, but with only thirteen percent more storage space. Surprisingly, the Quartermaster managed to be successful in World War II even with vastly less than planned for storage space. This was due to the increased use of materials-handling equipment (such as forklifts), improved depot layout and space utilization, a greater use of open storage (sheds with roofs by no side walls, for example), and a greater use of leased and commercial storage.<sup>25</sup> Leasing or purchasing existing commercial warehouses was especially useful in communities where real estate and building costs were exorbitant, where no great postwar need would exist, or where space was immediately required. Leasing had the advantage of quickly acquiring space without a heavy capital outlay.<sup>26 27</sup>

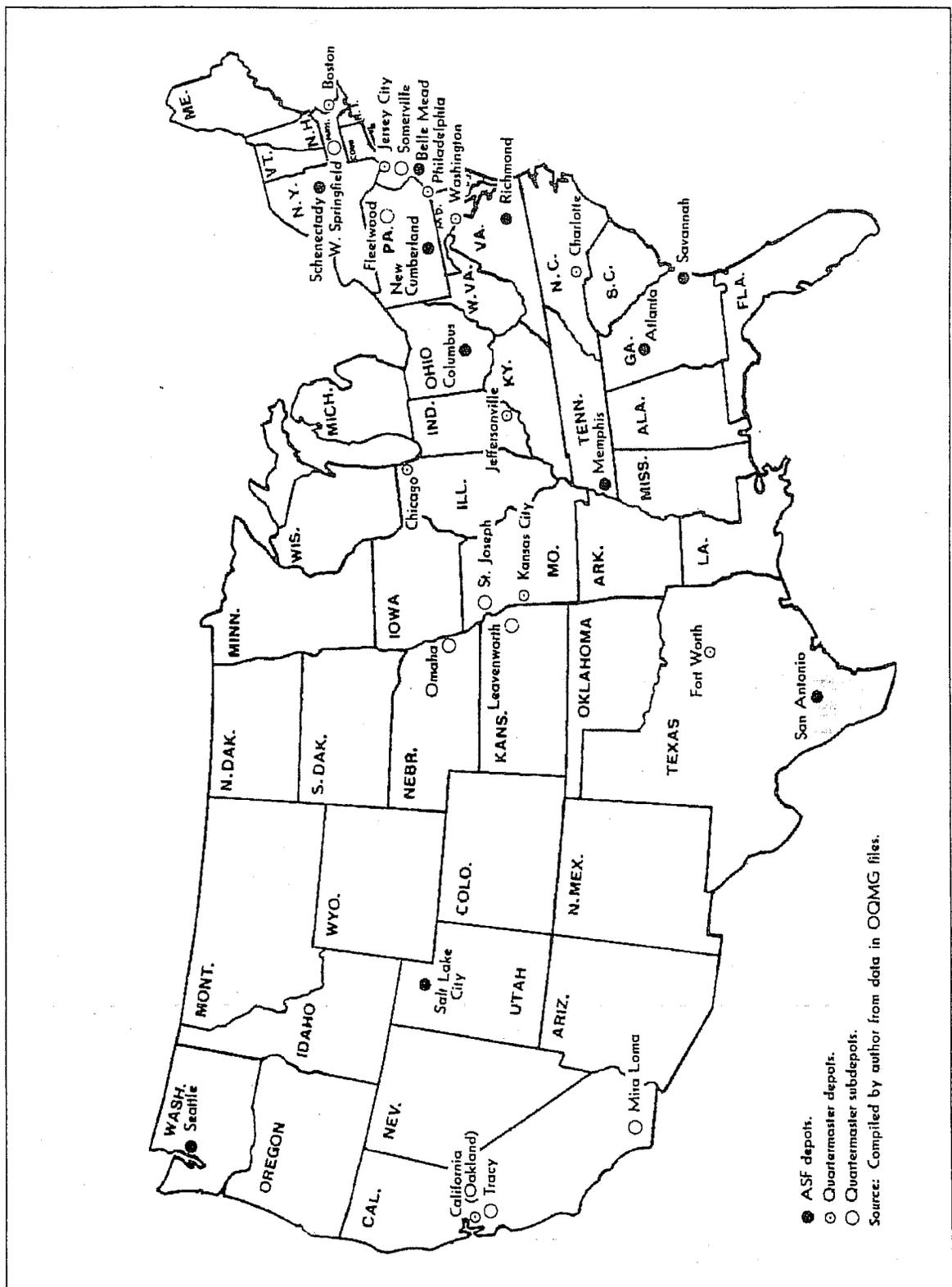


Figure 2: Quartermaster Corps Depot System: 1 December 1944

From: Risch, 1989

## KANSAS CITY QUARTERMASTER DEPOT: 1940 - 1953

Throughout its history, the Quartermaster Corps has had to react quickly in order to gear up for military action in times of need or emergency. The history of the Kansas City Quartermaster Depot vividly reflects the speed in which this department could build up from small-scale peacetime operations to full-scale, world war operations. With the dramatic enlargement of the Army after the fall of France to 1,400,000 men in September 1940, the Corps expanded its personnel and organization both in Washington and the field, with depots quickly established in the south and western half of the United States. The Kansas City Quartermaster Depot was one of these newly established depots built during World War II to serve the western portion of the country.

Lt. Col. C.J. Blake, Q.M.C., Quartermaster of the Purchasing Agency at the St. Louis Arsenal and Quartermaster of the St. Louis Medical Depot, was contacted 23 November 1940 by General Munnikhuysen from the Office of the Quartermaster General at Washington. He immediately arranged for an appointment in Kansas City with an officer of the National Bellas Hess company. After his Kansas City meeting, he left immediately for Washington, D.C. for conference, and upon his return to St. Louis, he announced that the Government had purchased the National Bellas Hess building in Kansas City as a Quartermaster Depot.<sup>28</sup> By 1 December 1940, Col. Blake met with the employees of the St. Louis Quartermaster office and outlined the arrangements for closing the Quartermaster activities in St. Louis (except for those pertaining to the duties of the St. Louis Medical Depot). The next day, he went to Kansas City to organize the new depot. The following Tuesday, many of the St. Louis employees left for Kansas City, and reported for work on 4 December 1940. This date is considered the formal or official opening date of the Kansas City Quartermaster Depot.<sup>29</sup> All of the St. Louis employees that transferred were working in Kansas City by 1 January 1941.

The National Bellas Hess building and property were purchased by the Government for \$1,400,000.<sup>30</sup> The large warehouse building (no longer part of the Hardesty Federal Complex) was built in 1919-20 for the National Cloak & Suit Company. At the time, the National Cloak & Suit Company was the largest mail order wearing apparel house in the eastern United States. Kansas City was chosen for the site of their Western distribution, and it was said to have been the largest initial investment ever made by any company coming to Kansas City to that date. Designed by architect N. Max Dunning of Chicago, the building was estimated to have cost approximately two million dollars. It provided more than fourteen acres of floor space, and its luncheon room would house more than 1200 persons at one time. Sufficient ground was purchased for playgrounds and tennis courts could be added later, as well as a terrace and shrubbery on the front.<sup>31</sup> In 1926-27, the building became a warehouse for the National Bellas Hess Company. Bellas Hess carried a variety of items, from furniture to dress goods. In 1928, Bellas Hess added retail operations in Kansas City at the building, covering nearly the entire first floor.<sup>32</sup> Fortunes of the company declined during the Depression, and by 1932, former employees applied for a receiver for Bellas Hess' Missouri property.<sup>33</sup> Thus by the time the Department of the Army purchased the property in 1940, the National Holding Company as well as the National Bellas Hess Company was involved with the transfer.

The Quartermaster Corps probably selected the site for a number of reasons, many of them the same as when the National Cloak & Suit Company selected it in the 1910s -- for Kansas City's prominence as a major rail hub, a sizable population with reliable work force, and this site's proximity to rail lines. Especially attractive for the Army's purposes were the large number of meat-packing plants in Kansas City, and nearby in St. Joseph and Omaha. Additionally, by the time the Army was scouting for Quartermaster sites, the Hardesty property already contained a large warehouse. To make the site even more enticing, its owners were having financial difficulties and were probably anxious to sell. Since the National Cloak & Suit Company originally had plans for expansion, there was additional land associated with the site which would allow the Quartermaster to expand as well. In all, the site seemed well-suited for its new purpose. Included with the sale were:

- Main building #1                      16,174, 798 cu. ft.                      built 1919
- Annex building #2                      2,277,955 cu. ft.                      built 1919
- Power plant building #3                      200,544 cu. ft.                      built 1919

- Coal unloading shed #3A 68,527 cu. ft. built 1924
- Garage 66,000 cu. ft. built 1924
- Power house machinery
- Furniture and equipment<sup>34</sup>

Although the Bellas Hess building and site was purchased so that it could be immediately placed into use as a Quartermaster Depot, the existing occupants were not able to vacate immediately. In addition to the National Bellas Hess Company, space had been rented to the Goodyear Tire & Rubber Company and Baker-Lockwood Manufacturing Company. Rental rates had to be established for these companies, and a share of operating expenses were charged until they were able to vacate the space.<sup>35</sup>

The mission of the Kansas City Quartermaster Depot (KCQD) when it was initially setup was stated in a letter from the Quartermaster General dated 1 December 1940 (and amended by 1st Indorsement from The Quartermaster General dated 17 December 1940):

The mission of the Kansas City Quartermaster Depot is to purchase, store and issue Quartermaster supplies for posts, camps and stations in the States of Kansas, Nebraska, Oklahoma, Wyoming, South Dakota and Utah (amended to add states of Missouri and Arkansas.)

1st phase: Take over all Quartermaster procurement functions that have been carried on by the Quartermaster at St. Louis; that is, the purchase of subsistence and forage for the area heretofore assigned St. Louis, and the purchase, storage and issue of subsistence for the CCC camps heretofore assigned to St. Louis.

2nd phase: As stocks become available, the Depot will be stocked with stocks of clothing, equipage and general supplies. At the time when sufficient stocks are on hand The Quartermaster General will authorize distribution.

3rd phase: Present Depots will continue to serve the Kansas City Depot area of distribution with budget items for the remainder of the fiscal year. Stocks of budget items will be accumulated at the Kansas City Depot, in order that they may take over the supply of budget items in their area of distribution for the first quarter of the next fiscal year.

The Procurement Planning office now in St. Louis will be moved to Kansas City and will operate with respect to the Kansas City Depot the same as the Chicago Depot; namely, the Commanding Officer of the Depot will be the procurement planning officer and other procurement planning personnel will be assigned to the Depot designated for procurement planning work.<sup>36</sup>

Several divisions began functioning immediately after the opening of the Depot in late 1940. The Procurement Planning Division began talking to manufacturers and industrialists in the area who called offering their facilities and seeking information regarding the procurement program. Several trips were also made to cities throughout the trade area to visit manufacturing plants. A survey was made of needed repairs to the building, and estimates were prepared for building new docks, switch tracks, flood lighting, steel fencing around the property, and erecting a new Utilities building.<sup>37</sup> The Depot's own forces were used to complete the initial railway track work.

By April of 1941, Bellas Hess began vacating the main building and plans were underway for the construction of a new clothing renovation plant. Goodyear Tire vacated by June, and Baker-Lockwood Company by August of that year. Plans for assembling "C" rations required trips to the Chicago Depot for observation of manufacturing methods. To gear up for these new activities, military personnel were transferred or appointed to the KCQD and civilian personnel were hired. By October 1941, the Depot has 583 employees.<sup>38</sup> By March 18, 1942, there were 868 employees; with the Post Utilities and Chemical Warfare divisions, the total was 1024.<sup>39</sup> By November 7, 1942, the total number of employees at the KCQD had grown to 2532.<sup>40</sup>

As the Quartermaster Corps' role increased and shifted during World War II, so did the role of the Kansas City Quartermaster Depot. The organizational manual of 31 August 1945 reveals the breadth of responsibility of the KCQD at its height of operations; many of the operations listed therein had been in existence from the beginning in 1941; others were added later as military needs dictated. The manual lists the regional area of distribution in 1945 as Nebraska, Missouri, Kansas, Colorado, and Wyoming. It also lists six key missions: supply, maintenance, manufacturing, procurement, inspection, and research. Under each of those missions, more specific objectives for the Kansas City Depot were described, as well as the official classification assignments of the depot for each of these areas (such as *regional distributing, filler, key, or reserve depot* as defined earlier). The mission of the Kansas City Quartermaster Depot in 1945 was:

## Supply

### 1. Subsistence

- a) *As a distribution depot.* To receive and store nonperishable subsistence supplies for issue to installations within the distribution area of this depot.
- b) *As an assembly depot.*
  - i) To assemble the components and issue completed "C" rations as directed by The Quartermaster General.
  - ii) To assemble the components and issue "10-in-1" rations and Partial Dinner Units, of the "10-in-1" rations, as directed by The Quartermaster General.

### 2. Clothing and Equipage

- a) *As a distribution depot.* To receive and store clothing and equipage supplies for issue to installations within the distribution area of this depot.
- b) *As a key depot.*
  - i) To receive and store impermeable clothing for issue to installations within all key depot areas, except Area V, and for issue and shipment through the New Orleans Port of Embarkation and the New Orleans Outport of the San Francisco Port of Embarkation.
  - ii) To receive and store protective clothing for issue to installations within all key depot areas, except Area V, and for issue and shipment through the New Orleans Port of Embarkation and the New Orleans Outport of the San Francisco Port of Embarkation.
- c) *As a reserve depot.*
  - i) To receive and store protective clothing.

### 3. General Supplies

- a) *As a distribution depot.* To receive and store general supplies for issue to installations within the distribution area of this depot.

### 4. Packing and Crating Supplies

- a) *As a distribution depot.*
  - i) To receive and store packing and crating supplies for issue to installations within the distribution area of this depot.
  - ii) To receive and store special items for use in the packing and processing of equipment of alerted units for issue to the Seventh Service Command.

### 5. Fuels and Lubricants

- a) *As a distribution depot.* To receive and store petroleum handling equipment for issue to installations within the distribution area of this depot.
- b) *As a reserve depot.* To receive and store operational reserve stock of petroleum products.

### 6. Miscellaneous Supplies (Service Installations)

- a) *As a distribution depot.*
  - i) To receive and store laundry and dry-cleaning supplies; horse, mule and dog food; inks; and lithographic chemicals and other operating supplies for War Department field printing plants (QM operated) for issue to installations within the distribution area of this depot.

- ii) To receive and store Educational Manuals for issue and shipment through West Coast ports of embarkation.

7. **Lend-Lease Supplies**

- a) *As a reserve depot.* To receive and store quartermaster lend-lease supplies as directed by The Quartermaster General.

**Maintenance**

1. **Repairs**

- a) To perform fifth-echelon maintenance on overshoes, shoe pacs, clothing, textiles, tentage, metal and wood items, mess kitchen equipment (except silverplated tableware) as directed by The Quartermaster General.
- b) To perform fifth-echelon maintenance on typewriters within the Seventh Service Command.
- c) To contract for rebuilding of various types of shoes and boots as directed by The Quartermaster General.

2. **Reclamation**

- a) To contract for reclamation of petroleum containers returned from the states of Missouri, Kansas, Nebraska, Wyoming and Colorado.

**Manufacturing**

1. **Manufacturing**

- a) To impregnate clothing.

**Procurement**

1. **Procurement**

- a) To procure recreational and athletic equipment, and such other classes of supplies as may be directed by The Quartermaster General.
- b) To procure forage and dog food.
- c) To procure items of nonperishable subsistence for issue to the distribution area of this depot.
- d) To procure graphic arts operating supplies, chemicals, replacement parts, and contractual services for repairing machines for the War Department field printing plants.

**Inspection**

1. **Inspection**

- a) To supervise inspection of supplies at plants and at depots or points of delivery within the states of Arkansas, Colorado, Kansas, Missouri, Nebraska and Wyoming.

**Research**

1. **Research**

- a) To administrate the Control Laboratory, subject to the technical direction of the Office of The Quartermaster General.

**Miscellaneous**

- 1. To operate the Army Effects Bureau for the receipt, storage and disposition of effects of Army overseas personnel, both deceased and "missing", and the disposition of lost or abandoned property of Army personnel.
- 2. To administrate the Army Service Forces Commercial Warehouse Plan to all facilities located within the distribution area of this depot.

3. To receive and store nonperishable subsistence supplies for the accountability of procuring depots.
4. To receive, assemble, and store certain items of athletic and recreational equipment for issue to the entire Army as directed by Special Services Division.<sup>41</sup>

The Kansas City Quartermaster Depot was thus classified as a *regional distribution depot*, a *reserve depot*, and a *key depot*. It purchased, inspected, and stored such standard Army supplies as clothing and foodstuffs, and subsequently distributed them to Army facilities around the country, and overseas as well. Obviously necessary to perform these functions was a military structure with associated divisions ranging from administrative, personnel, etc. The KCQD had the additional assignment of an *assembly depot*, as it prepared the "C" rations for the U.S. Army. It also performed repair on clothing, mess items, and typewriters; impregnated army clothing to ward off the effects of gas attacks; administered the Army Effects Bureau; and procured and distributed athletic and recreational equipment for the entire Army.

The repair shop at Kansas City was used for training personnel across the country in standards for repairs. A small number of officers were drawn from repair sub-depots and depots in June 1944 and became the nucleus for teaching other classification personnel. These officers were then assigned in groups of three to teach at three central repair shops operated by the Kansas City, Jersey City, and California Quartermaster Depots. Here, instruction was offered for other classification officers from across the country.

The Personnel Effects Bureau was another mission assigned solely to the KCQD (housed in building #1, no longer part of the Hardesty Federal Complex). The care of deceased military personnel, the maintenance and supervision national cemeteries were among the special services that were entrusted to the Quartermaster General. Its functions and administration had undergone drastic changes over the years, and were obviously altered again during the drastically increased demands placed upon these services during World War II. Included among the services were the disposition of the personal effects of missing or deceased military personnel. On 17 February 1942, the Chief of Staff directed that an Effects Bureau be activated in Kansas City "as part of the Kansas City Quartermaster Depot."<sup>42</sup> It received the property of the military and civilian personnel serving beyond continental boundaries of the United States who were deceased, prisoners of war, or missing, and then made disposition to persons entitled to receive it.<sup>43</sup> Later added to the mission was the American Graves Registration Division, which was responsible for the burial or reburial of uniformed wartime casualties.

In the span of a few short years, it is clear that the mission of the Kansas City Quartermaster Depot had greatly expanded from that of merely replacing the St. Louis Depot. Soon after operations began in late 1940, it was clear that additional buildings were needed. Directive P-52 was received by the District Engineer on 16 February 1942 authorizing the expansion of the Depot storage facilities. An additional directive, P-118, was received on 24 March 1942 for the same reason, this time including an estimate for the cost of the expansion at \$2,585,000.00.<sup>44</sup> Most of the new buildings would provide additional storage space -- the Bellas Hess building did not have enough cubic feet to serve the needs of the rapidly expanding military force. The new warehouse facilities were constructed with more modern designs, and were far more accommodating to needs of the Quartermaster. As previously noted, the QMC preferred one-story buildings that had railroad freight sidings with loading platforms level with the car floor on one side of the warehouse, and docks for truck loading on the other. Although most of the warehouse buildings in Kansas City were two-story with a basement, they were constructed with lofty ceilings and had unlimited floor-load capacity on the first floor. This space could then be more fully utilized with high tiering of supplies, and mechanical equipment could be more efficiently used as well. Nearly all had loading docks, and easy access to both rail spurs and roadways (for truck deliveries). At least one building at the KCQD complex was constructed with a specific purpose other than warehousing in mind -- one that was unique in the Quartermaster system. A summary of individual building histories follows.

### **Building #3A**

Building #3A was constructed in 1919 in association with the main warehouse of the National Cloak & Suit Company. It served as the boiler house, providing steam heat for the warehouse located to the north. An addition was built on the south side of this building in 1942, with a transfer to using service occurring on 30 November 1942.

### **Building #6**

The Clothing Renovating Plant was the first new building planned for the KCQD property. The plans for the plant were originally produced for use at Edgewood Arsenal; it was therefore necessary to adapt them to the Hardesty project. Black and Veatch, Consulting Engineers of Kansas City, Missouri, prepared these adaptations.<sup>45</sup> It was constructed by Universal Construction Company, low bidder, at a bid of \$347,900; actual costs were \$17,985.00 less.<sup>46</sup> Delays were encountered with the delivery of critical material, including structural steel, corrugated asbestos siding, valves and unit heaters. Nonetheless, construction began on May 28, 1941, and was completed on 6 November 1941, 69 days ahead of scheduled completion date<sup>47</sup>. This contract included the Clothing Renovation Building (#6), a pump house, transformer substation building, and interior utilities. The furnishing and installation of the machinery was awarded to American Laundry Machinery Company. Work began on the construction of a spur track to serve building #6 in October 1941. This contract was let to Longwill and Scott of St. Louis, Missouri for \$9,674.00.<sup>48</sup>

The purpose of the building was to serve as a Clothing Renovating Plant designed to impregnate army clothes with "Impregnate 'I'" in order to proof them against certain forms of gas attack, such as "mustard gas."<sup>49</sup> It was operated by the Chemical Warfare Service division, and its employees were considered separate from the others at the KCQD. They were, in fact, even required to eat in separate shifts at the KCQD restaurant. The chemicals which were used to form "Impregnate I" were kept in tanks outside the building. The chemicals were mixed, then pumped through pipelines into the second floor of the building. The clothes were washed in the chemical mixture in machines on the second floor. After washing, they were drained upstairs, with an attempt to recover the chemicals during drainage. The clothes were then sent below to dry in clothes dryers. In the same building, they were spread on tables, folded, and packed for shipping.<sup>50</sup>

Soon after the Clothing Renovating Plant began operations, it was noticed that a rash of illnesses were occurring among employees. The operating officer notified his superiors, and soon thereafter a medical department was initiated. Better safety procedures were implemented and experimentation with the chemicals led to a lower concentration.

The majority of employees at the Clothing Renovating Plant were civilian. Operations were ran twenty-four hours a day in three shifts. The plant ceased its operations on 10 August 1945, and all CWS employees were relieved of duty on 12 September. All employees were allowed to transfer to the Personnel Effects division, located in Building #1.<sup>51</sup>

### **Building #7**

Information on Building #7 is limited to that available from original plans, where it was referred to as "Building B: Utilities Building." The plans are dated from August 1941, with the likelihood that construction began shortly after this. Black & Veatch are listed as the "consulting engineers." The Utilities Division was responsible for maintenance and repair of the Quartermaster buildings, site, and equipment, and it is possible that this building was used in for that purpose. In recent years, it served as storage for PMDS Civil Defense Supply.

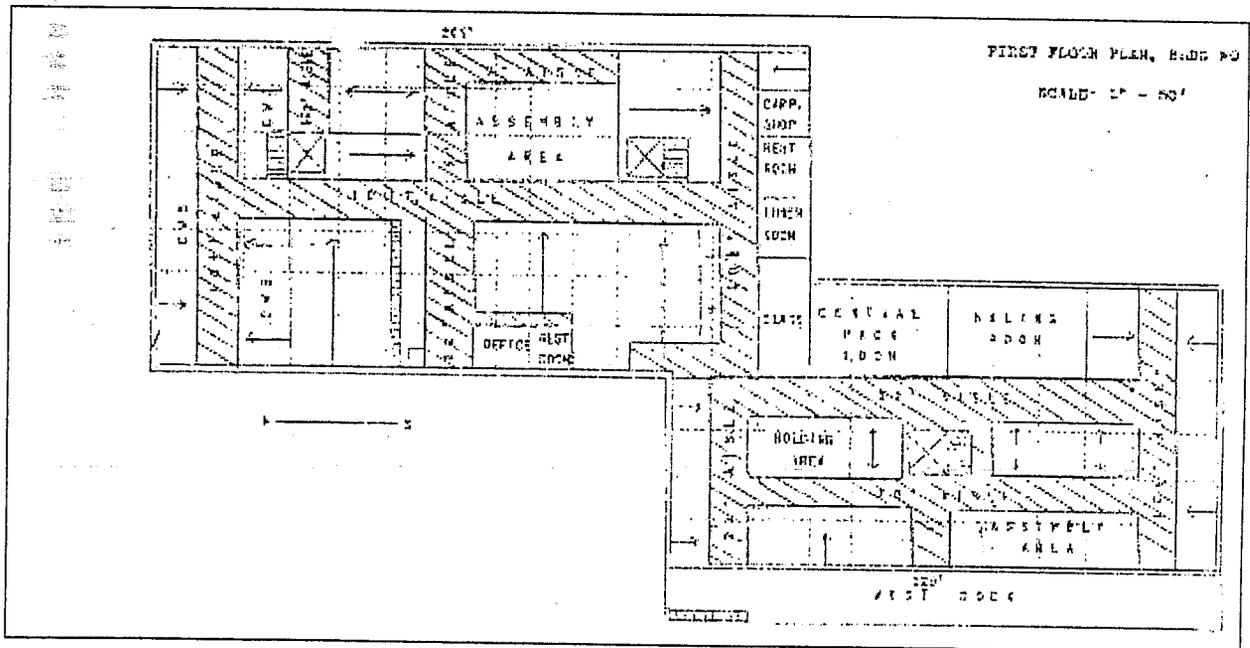
### **Building #13**

Building #13 was built in 1941 in conjunction with #6, the Clothing Renovating Plant. It has always served as an electrical sub-station building, distributing power for the entire complex. Engineers and contractor was the J.H. MacKay Electrical Company, Kansas City, Missouri.

**Building #9**

This "L"-shaped building was originally referred to as Buildings #8 and #9, in reference to the two main sections, but it has always been one building. Planning for the building began on 7 March 1942, and construction commenced on 18 May 1942. Initially, the excavation for the footings was delayed due to the area being traversed by four fingers of a creek, approximately 28 to 30 feet deep, which had been used as a dump. The "objectionable material" had to be removed and backfilled.<sup>52</sup> Construction was also impeded by the fact that the site was congested due to the magnitude of new construction and the functioning at maximum capacity of the existing buildings as a Quartermaster Depot. The limited space did not permit operation of a concrete plant on site, and ready-mixed concrete had to be sent from five miles distant.<sup>53</sup> The Architect-Engineer was [Earl] Horner & Wyatt of Kansas City, Missouri. In writing of the services provided by the group, the completion report for the building noted that "No difficulty was experienced in securing a sufficient number of personnel. The quantity was available, but the quality was lacking."<sup>54</sup> The general contractor was J.E. Dunn Construction Company, and the completion report highly praised their efforts. During the summer months, the company's crews worked on a 24 hour basis, 7 days a week. In addition to originally being the low bidder, the company made a voluntary reduction of approximately \$170,000.00 by setting a precedent for a "non profit job."<sup>55</sup> Completion for the building was planned for 2 December 1942, but beneficial occupancy occurred on 1 October 1942, and Buildings #8 and 9 were officially transferred to using service on 30 November 1942, the same date as the utility systems.

Constructed originally as a "special warehouse," it is likely that Building #9 stored a variety of items during its usage by the Quartermaster. Various plans show a roller conveyor and baling operation, and indicate locations for baled clothing and subsistence cars. Those shown below, from a different date, indicate a ration line in the basement, and an assembly area, baling room, and central pack room.

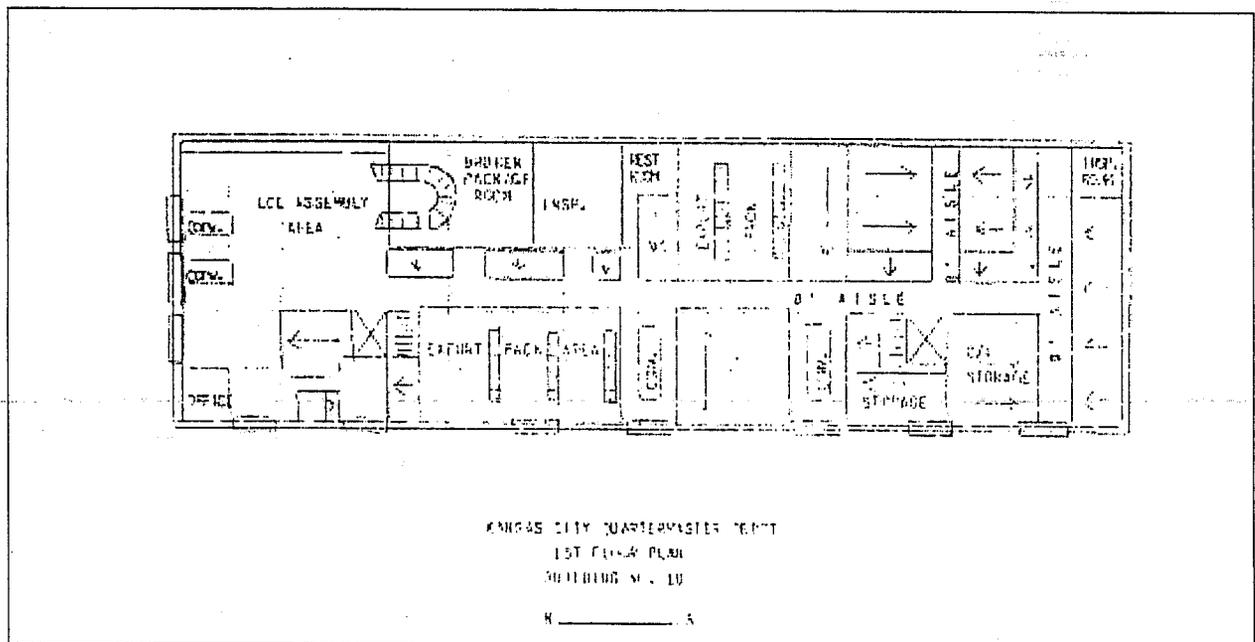


**Figure 3. Building #9**  
 From: Depot Operating Procedure No. 93,  
 "Uniform Floor Plans for Warehouse Buildings,"  
 23 June 1944.

### Building #10

Planning for Building #10 began on 7 March 1942, and construction commenced on 18 May 1942. Initially, the excavation for the footings was delayed due to the area being traversed by four fingers of a creek, approximately 28 to 30 feet deep, which had been used as a dump. The "objectionable material" had to be removed and backfilled.<sup>56</sup> Construction was also impeded by the fact that the site was congested due to the magnitude of new construction and the functioning at maximum capacity of the existing buildings as a Quartermaster Depot. The limited space did not permit operation of a concrete plant on site, and ready-mixed concrete had to be sent from five miles distant.<sup>57</sup> The Architect-Engineer was [Earl] Horner & Wyatt of Kansas City, Missouri. In writing of the services provided by the group, the completion report for the building noted that "No difficulty was experienced in securing a sufficient number of personnel. The quantity was available, but the quality was lacking."<sup>58</sup> The general contractor was J.E. Dunn Construction Company, and the completion report highly praised their efforts. During the summer months, the company's crews worked on a 24 hour basis, 7 days a week. In addition to originally being the low bidder, the company made a voluntary reduction of approximately \$170,000.00 by setting a precedent for a "non profit job."<sup>59</sup> Completion for the building was planned for 2 December 1942, but beneficial occupancy occurred on 17 October 1942, and Building #10 was officially transferred to using service on 30 November 1942, the same date as the utility systems.

Constructed originally as a "special warehouse," it is likely that Building #10 stored a variety of items during its usage by the Quartermaster. Various plans show some of the recreation items that the KCQD supplied for the entire Army, such as baseball bats and fishing kits, being stored in #10. Containers for shipping were critical to the operations of the Depot, and it appears that "knock-down" for boxes occurred in building #10 (with recycling of shipping materials a key operation). Those shown below, from a different date, indicate an assembly area in the basement with conveyors; assembly, broken package, storage, and export pack areas on the 1st floor; and additional storage on the 2nd floor. It has been used by the Army for training and as an Armory since 1950.



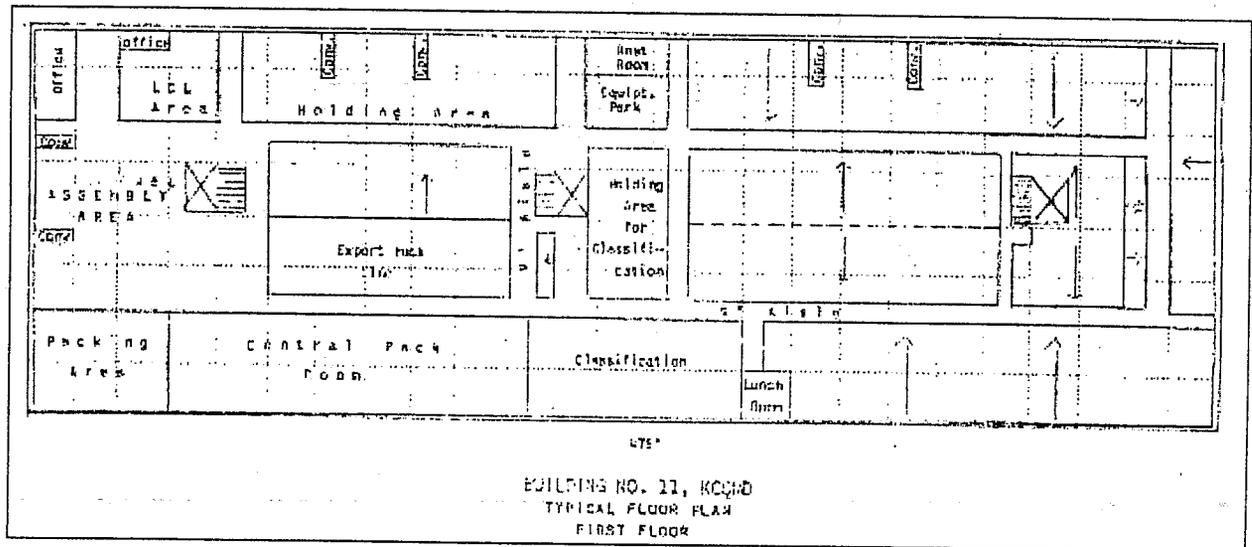
**Figure 4. Building #10**

From: Depot Operating Procedure No. 93,  
"Uniform Floor Plans for Warehouse Buildings,"  
23 June 1944.

**Building #11**

Planning for Building #11 began on 7 March 1942, and construction commenced on 18 May 1942. Initially, the excavation for the footings was delayed due to the area being traversed by four fingers of a creek, approximately 28 to 30 feet deep, which had been used as a dump. The "objectionable material" had to be removed and backfilled.<sup>60</sup> Construction was also impeded by the fact that the site was congested due to the magnitude of new construction and the functioning at maximum capacity of the existing buildings as a Quartermaster Depot. The limited space did not permit operation of a concrete plant on site, and ready-mixed concrete had to be sent from five miles distant.<sup>61</sup> The Architect-Engineer was [Earl] Horner & Wyatt of Kansas City, Missouri. In writing of the services provided by the group, the completion report for the building noted that "No difficulty was experienced in securing a sufficient number of personnel. The quantity was available, but the quality was lacking."<sup>62</sup> The general contractor was J.E. Dunn Construction Company, and the completion report highly praised their efforts. During the summer months, the company's crews worked on a 24 hour basis, 7 days a week. In addition to originally being the low bidder, the company made a voluntary reduction of approximately \$170,000.00 by setting a precedent for a "non profit job."<sup>63</sup> Completion for the building was planned for 2 December 1942, but beneficial occupancy occurred on 11 August 1942, and Building #11 was officially transferred to using service on 17 October 1942.

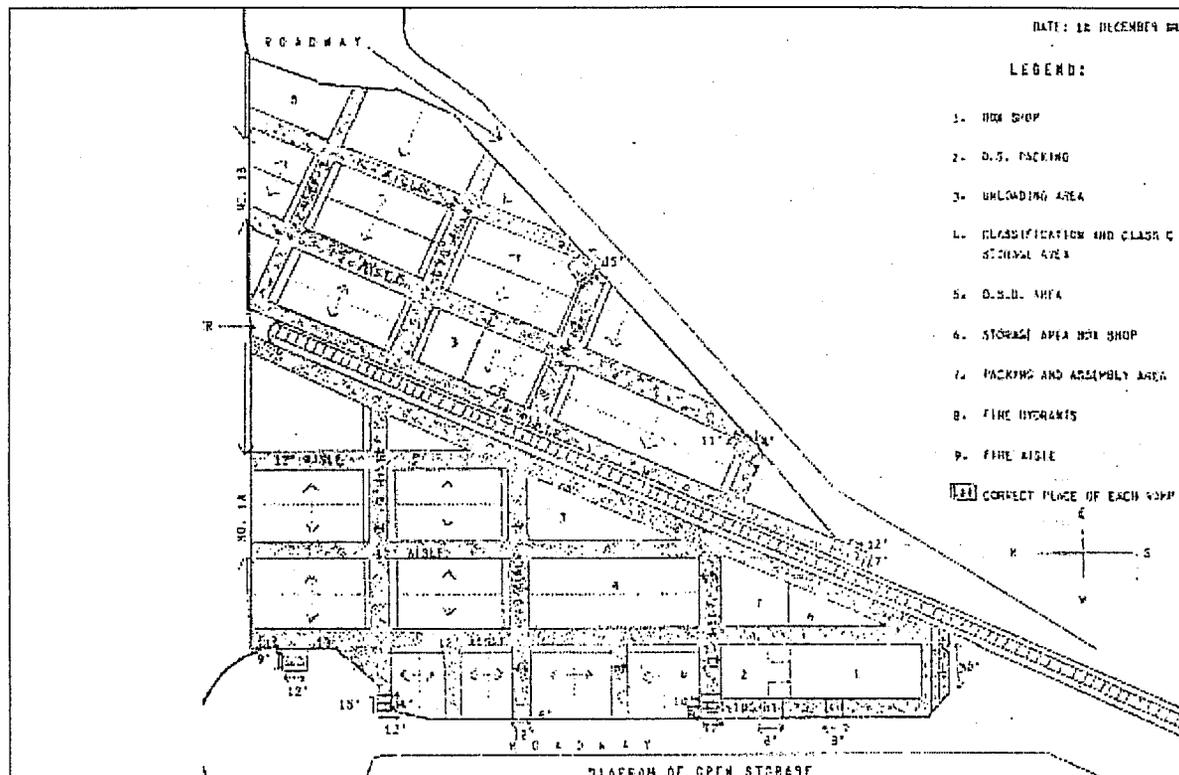
Constructed originally as a "special warehouse," it is likely that Building #11 stored a variety of items during its usage by the Quartermaster. Various plans show freight received from stations and trucks were unloaded here. Those shown below, from a different date, indicate numerous assemble areas in the basement and 2nd floor, with assemble on the 2nd floor as well, in addition to several holding and packing areas. By the mid-1950s, the first floor was used for Army Defense Mapping until their relocation to St. Louis in 1990. Army "Home Town News" was also produced here until the end of the Vietnam War.



**Figure 5. Building #11**  
 From: Depot Operating Procedure No. 93,  
 "Uniform Floor Plans for Warehouse Buildings,"  
 23 June 1944.

**Open storage**

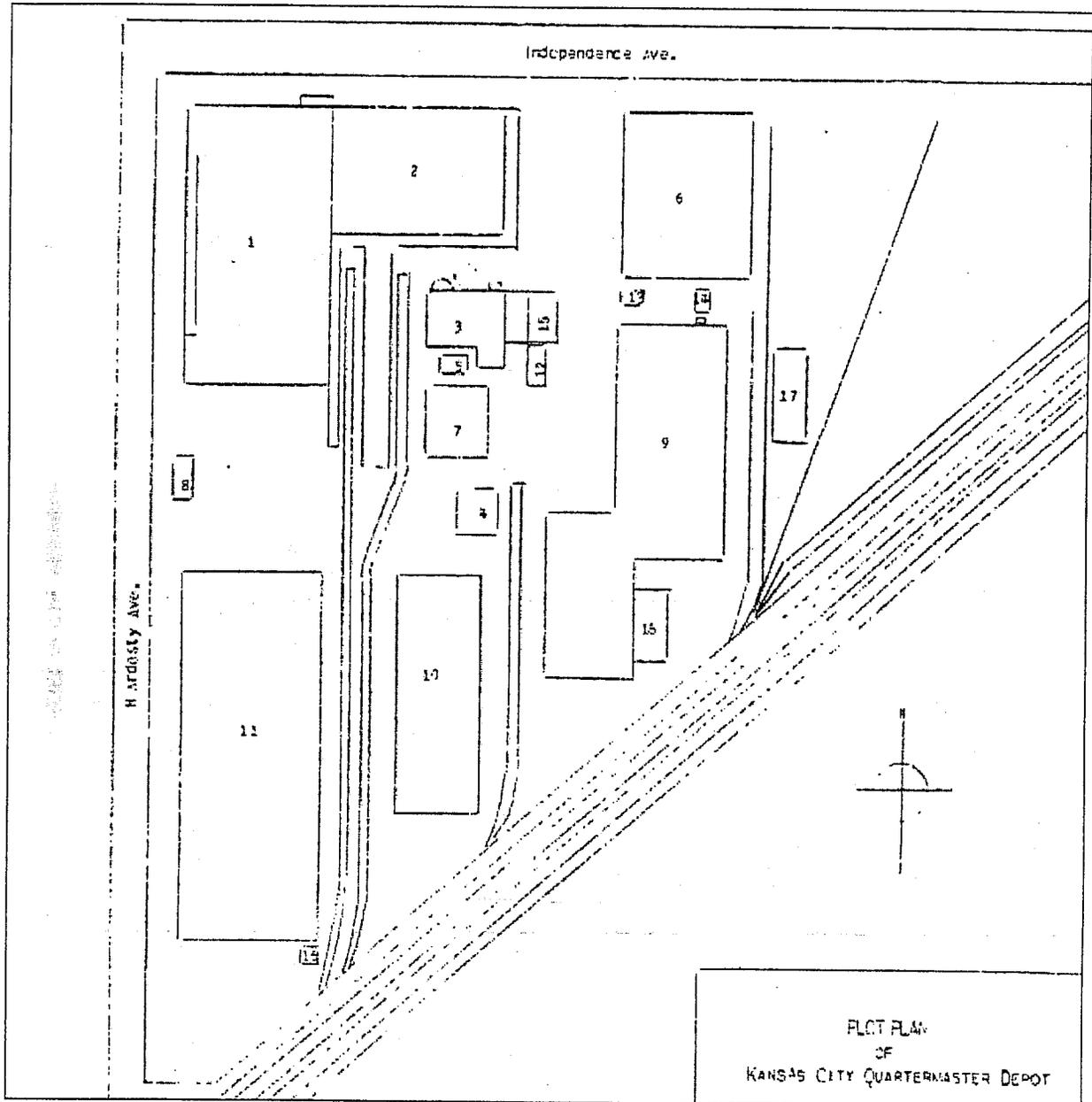
In spite of the vast increase in warehouse space at the Kansas City Quartermaster Depot since its purchase in 1940, as throughout the entire Quartermaster system, it was found to be not enough. Therefore, open storage was used for suitable items. There were some problems experienced with finding suitable methods from keeping the materials from contact with the ground, and the first wooden pallets were cheaply made. A switch to metal pallets only lasted until the first hard rains, when they all sank into the ground. Various plans indicate that 5 gallon water cans, G1 cans, and insecticide were among the items kept in open storage. A layout from 1944 is shown below.



**Figure 6. Open Storage**  
 From: Depot Operating Procedure No. 93,  
 "Uniform Floor Plans for Warehouse Buildings,"  
 23 June 1944.

**Demolished Buildings**

The following buildings were noted on a 7 July 1945 "Plot Plan of Kansas City Quartermaster Depot" but are no longer extant: Buildings 4, 5, 8, 12, 14, 15 (may be presently attached to 3A), 16, 17, and 18. The majority of these buildings were small in relative comparison to the large warehouse buildings, and are shown below.



**Figure 7. Plot Plan**  
 From: "Army Service Forces,  
 Station Storage Conferences: Tour of Kansas City Quartermaster Depot,"  
 19 September 1945.

In addition to the functions performed on site at the Hardesty complex, the Kansas City Quartermaster Depot was responsible for the operation of three sub-depots located in St. Joseph, Missouri; Leavenworth, Kansas; and Omaha, Nebraska. It also supervised the Bluff City Shoe Reconstruction Facility in Hannibal, Missouri.

### **End of World War II**

After the surrender of all German troops of 7 May 1945, May 8th was declared as V-E Day (Victory in Europe). This led to the activation in the Quartermaster Corps of "Period I Plan" for "Readjustment and Demobilization." The plan was issued by the Storage and Distribution Division, and set out in detail the functions and responsibilities, preparatory measures, and activities of the plan. A "Readjustment and Demobilization Officer" was designated. The surrender of Japan on 14 August 1945 brought about "Period II" for "Readjustment and Demobilization." Swift action was taken in the summer of 1945 for the demobilization of the functions of the KCQD. Certain office and warehouse activities were moved to the American Radiator Building. The Chemical Warfare Services ceased its operations on 10 August 1945, and clothing that required deimpregnation was diverted to Columbus, Ohio. All ration assembly was ceased as soon as balanced components were utilized. Certain requisitions were canceled, planned storage space was readjusted, and shipments were diverted enroute. Components of emergency rations were authorized for sale in the Sales Stores at posts, camps, and stations.

The vast majority of work involved after the Allied victory in World War II was strictly related to demobilization. The only new activity recorded was the activation of the American Graves Renovation Division in August 1945.<sup>64</sup> Among the demobilization activities was the routine destruction of records from the period; indeed, the few remaining records from this period at the Kansas City branch of the National Archives pertain only to accounts of the destruction of records, transfer or release of personnel, and disposal of items. Staff working in the procurement division from 1945 through at least 1947 now had objectives completely reversed from their wartime activities -- instead of procuring supplies for the KCQD, they sent out bids in order to dispose of surplus property.<sup>65</sup> The St. Joseph and Omaha Sub-Depots were inactivated in 1946. As part of the "Deactivation of Depots Under Phase Three of the Quartermaster Post War Plan", large quantities of supplies were still received through 1947 from other depots. The Savannah and Montgomery Depots were cleared to ship 3 and 5 cars per day respectively, and the Elmira Depot was also cleared to ship supplies to the KCQD.<sup>66</sup> Although several million dollars worth of surplus property was still available in April of 1947, it had nonetheless decreased in volume to such a degree that consolidation to a very small area in building #9 was possible.<sup>67</sup> Building #6 was now occupied by the Storage Division, and the first and second floors of Building #10 were assigned to AGRD.<sup>68</sup>

Although reductions in force had begun in 1945, returning veterans were nonetheless offered jobs at the KCQD. The Kansas City Quartermaster Depot became a Sub-Depot of the Chicago Quartermaster Depot effective 1 July 1947. A personnel ceiling for the Kansas City Sub-Depot was set at 157 graded employees and 121 ungraded employees as of 30 June 1947, a reduction of force of approximately 400 employees from 11 April 1947. This was in addition to the numerous RIFs which had already taken place. All personnel functions were transferred to the Chicago Depot. Employees who could not transfer to the Chicago office were informed of other employment opportunities as Quartermaster employees were urgently needed in other areas, particularly Tokyo, Okinawa, and Korea.

Files after 1947 are non-existent at the Kansas City branch of the National Archives. City directories indicate that the Quartermaster retained a presence at the site after World War II up through 1953, but the extent of that presence is yet undetermined. From these records, however, it is clear that the main function of the property was in use other than the Quartermaster after World War II:

### **1948**

*Independence & Hardesty:* U.S. War Department Headquarters, KCMO; U.S. Army Air Force Recruiting District; Kansas City Signal Center; Army Effects Bureau; Quartermaster Depot Headquarters  
*601 Hardesty:* U.S. War Department; American Graves Registry Service

**1949**

601-05 Hardesty: U.S. Army & Air Force Kansas/Missouri Recruiting District; Army Organized Reserves Corps; Kansas City Quartermaster Activities; Kansas City Records Center AGO; Kansas City Signal Center; Regional Post Engineers

**1950-53**

601-05 Hardesty: Kansas City Quartermaster Activities; Kansas City Records Center AGO; Kansas City Signal Center; Regional Post Engineers; Missouri Engineer Detachment

**1955**

601-05 Hardesty: Kansas City Records Center AGO

**1956-57**

601-05 Hardesty: Kansas City Records Center AGO; USPO Money Order Center; Reserve Training Center No. 2

**1959**

601-05 Hardesty: Kansas City Records Center AGO; USPO Money Order Center; Reserve Training Center No. 2; Market Center

**1960**

601-05 Hardesty: U.S. Department of Defense-Army; Kansas City Records Center; USPO Money Order; Reserve Training Center No. 2

In 1960, the property transferred ownership from the Department of Defense to the GSA, although some military use has continued up through the end of the 1990s.

**Endnotes**

<sup>1</sup>Erna Risch, *Quartermaster Support of the Army: A History of the Corps 1775-1939* (Washington, D.C.: Center of Military History, United States Army, 1989) p. iii, 740.

<sup>2</sup>*Ibid.*, p. 1.

<sup>3</sup>*Ibid.*, p. 735.

<sup>4</sup>*Ibid.*, p. 736.

<sup>5</sup>Erna Risch, *The Quartermaster Corps: Organization, Supply, and Services*, vol. I (Washington, D.C.: Center of Military History, United States Army, 1989) p. 4.

<sup>6</sup>*Ibid.*, p. 5.

<sup>7</sup>*Ibid.*

<sup>8</sup>Risch, *Quartermaster Support of the Army*, pp. 739-740.

<sup>9</sup>Risch, *The Quartermaster Corps: Organization, Supply, and Services*, vol. I, p. 8.

<sup>10</sup>*Ibid.*

<sup>11</sup>*Ibid.*

---

<sup>12</sup>ibid., p. 323.

<sup>13</sup>ibid., p. 15.

<sup>14</sup>ibid., p. 24.

<sup>15</sup>ibid., pp. 323, 326.

<sup>16</sup>ibid., p. 324.

<sup>17</sup>ibid., p. 325.

<sup>18</sup>ibid., pp. 325-326.

<sup>19</sup>ibid., p. 326.

<sup>20</sup>ibid., 329.

<sup>21</sup>ibid., p. 330.

<sup>22</sup>ibid., p. 332.

<sup>23</sup>ibid., p. 333.

<sup>24</sup>ibid., p. 332-333.

<sup>25</sup>ibid., p. 334, 336-337.

<sup>26</sup>*The Kansas City Plan*: From the beginning of the emergency period, the Quartermaster Corps was interested in civilian facilities that might be available for storage. The problem faced with nonperishable supplies finally forced the QMC to develop a plan that handled this issue. Nonperishable foods were now procured directly from the canners in a centralized manner by field buyers. These canned goods might be stored for as long as a year before needed, and to prevent occupying depot storage space, the government required the canners to store the materials on-site. This soon placed a great burden on the processors, especially the West coast canners who had protracted growing seasons of up to 300 days. The only workable solution was to utilize commercial warehouses. However, the War Department didn't want to lease the space without knowing in advance how much it needed. On the other hand, it still needed to know how much was available in an area on a short notice. In June 1941, the OQMG outlined a method whereby the depots could negotiate a term contract with an association of warehousemen in an area. The War Department Commercial Warehouse Pool Plan, popularly known as *the Kansas City Plan* since it grew out of an agreement devised by the Kansas City Quartermaster Depot and the Kansas City Warehouse Association, utilized a single agreement for all the facilities needed in an urban community. Under the Kansas City Plan, all the warehousemen in a given urban area agreed to handle all the supplies and would guarantee that a certain proportion of the storage space of its members would be available on a short notice. For example, 2 percent might be required with 5 days notice, 5 percent in 10 days, and 10 percent in 15 days. A performance bond was posted as a guarantee. The Kansas City Plan was so widely used that the number of areas in which the Federal Emergency Warehouse Association operated increased from thirteen in November 1942 to forty-two by the fall of 1944. Risch, *The Quartermaster Corps: Organization, Supply, and Services*, vol. I, pp. 336-337.

<sup>27</sup>ibid., p. 333.

<sup>28</sup> "Historical Record: Summary," n.d., p. 1.

- 
- <sup>29</sup> Ibid.
- <sup>30</sup> Ibid., p. 2.
- <sup>31</sup> "National Cloak and Suit Company," The Kansas City Star, 7 June 1919.
- <sup>32</sup> "Store Prepares for Bow," The Kansas City Star, 2 March 1928.
- <sup>33</sup> "Suit Over Bellas-Hess," The Kansas City Star, 12 April 1932.
- <sup>34</sup> "Historical Record: Summary," p. 8a.
- <sup>35</sup> Ibid., p. 2.
- <sup>36</sup> Ibid., p. 3.
- <sup>37</sup> Ibid., pp. 4-8.
- <sup>38</sup> "Historical Record: Week ending October 4, 1941," p. 1.
- <sup>39</sup> "Historical Record: Week ending March 18, 1942," p. 1.
- <sup>40</sup> "Historical Record: Week ending November 7, 1942," p. 1.
- <sup>41</sup> "Functional Organizational Manual Kansas City Quartermaster Depot," 31 August 1945, pp. 2-5.
- <sup>42</sup> "Historical Record: Week ending March 18, 1942," p. 335.
- <sup>43</sup> Schuyler Dean Hoslett, Aspects of Army Depot Administration: Papers on Administration at the Kansas City Quartermaster Depot, (New York: American Historical Company, 1945) p. 38.
- <sup>44</sup> "Completion Report: Construction of Additional Warehouse Facilities, Kansas City Quartermaster Depot, Independence & Hardesty Avenues, Kansas City, Missouri," 30 November 1942, Exhibit "C" Sheet 3 of 7.
- <sup>45</sup> "Completion Report Covering Construction and Completion of Clothing Renovating Plant at Kansas City Quartermaster Depot" Office of the Constructing Quartermaster, Station No. 7047, 1941, p. 19.
- <sup>46</sup> Ibid., p. 10.
- <sup>47</sup> Ibid., p. 24.
- <sup>48</sup> "Historical Record: Week ending October 4, 1941"
- <sup>49</sup> Ibid., p. 16.
- <sup>50</sup> Telephone interview with George Francis, Chemical Warfare Services employee, 2 June 1999.
- <sup>51</sup> Ibid.
- <sup>52</sup> "Completion Report: Construction of Additional Warehouse Facilities", p. 5.
- <sup>53</sup> Ibid.

---

<sup>54</sup> Ibid.

<sup>55</sup> Ibid., p. 6.

<sup>56</sup> Ibid., p. 5.

<sup>57</sup> Ibid.

<sup>58</sup> Ibid.

<sup>59</sup> Ibid., p. 6.

<sup>60</sup> Ibid., p. 5.

<sup>61</sup> Ibid.

<sup>62</sup> Ibid.

<sup>63</sup> Ibid., p. 6.

<sup>64</sup> "Historical Records: Week ending 9 August 1945."

<sup>65</sup> Telephone interview with Kathryn Moore Swaggerty, Employee KCQD, Procurement Division, 26 June 1999.

<sup>66</sup> "Weekly Historical Report," Kansas City Quartermaster Depot Intra-Depot Communications, 8 April 1947.

<sup>67</sup> "Weekly Historical Report," Kansas City Quartermaster Depot Intra-Depot Communications, 15 April 1947.

<sup>68</sup> "Weekly Historical Report," Kansas City Quartermaster Depot Intra-Depot Communications, 29 April 1947.

**BIBLIOGRAPHY**

---

- "Completion Report: Construction of Additional Warehouse Facilities, Kansas City Quartermaster Depot, Independence & Hardesty Avenues, Kansas City, Missouri," Site Files, Portfolio Management Department, GSA; Kansas City, MO [30 November 1942].
- "Completion Report Covering Construction and Completion of Clothing Renovating Plant at Kansas City Quartermaster Depot." Office of the Constructing Quartermaster, Station No. 7047. 1941.
- Francis, George. Chemical Warfare Services employee. Telephone interview, 2 June 1999.
- "Functional Organizational Manual Kansas City Quartermaster Depot." 31 August 1945.
- Kansas City, MO. National Archives. Kansas City Quartermaster Depot. Series Title List. "Army Service Forces, Station Storage Conferences: Tour of Kansas City Quartermaster Depot." 19 September 1945.
- Kansas City, MO. National Archives. Kansas City Quartermaster Depot. Series Title List. Depot Operating Procedures. No. 93, "Uniform Floor Plans for Warehouse Buildings," 23 June 1944.
- Kansas City, MO. National Archives. Kansas City Quartermaster Depot. Series Title List. "Historical Record: Summary." n.d.
- Kansas City, MO. National Archives. Kansas City Quartermaster Depot. Series Title List. "Historical Record." Various dates.
- Kansas City, MO. National Archives. Kansas City Quartermaster Depot. Series Title List. "Weekly Historical Reports." Kansas City Quartermaster Depot Intra-Depot Communications. Various dates.
- Hoslett, Schuyler Dean. Aspects of Army Depot Administration: Papers on Administration at the Kansas City Quartermaster Depot. New York: American Historical Company. 1945.
- Kansas City, Missouri City Building Permits.
- Kansas City, Missouri Public Library. Polk's Kansas City Missouri Directories. Missouri Valley Room. Various years.
- "National Cloak and Suit Company." The Kansas City Star. 7 June 1919.
- Risch, Erna. The Quartermaster Corps; Organization, Supply, and Services. Vol. I. Washington, D.C.: Center of Military History, United States Army. 1995.
- Risch, Erna. The Quartermaster Corps; Organization, Supply, and Services. Vol. II. Washington, D.C.: Center of Military History, United States Army. 1995.
- Risch, Erna. Quartermaster Support of the Army: A History of the Corps 1775-1939. Washington, D.C.: Center of Military History, United States Army. 1989.
- Site Files, Portfolio Management Department & Property Management Division, GSA; Kansas City, MO.
- "Store Prepares for Bow." The Kansas City Star. 2 March 1928.
- "Suit over Bellas-Hess." The Kansas City Star. 12 April 1932.

Swaggerty, Kathryn Moore. KCQD Employee, Procurement Division. Telephone interview, 26 June 1999.



ELECTRONICALLY RECORDED  
JACKSON COUNTY, MISSOURI  
09/19/2011 02:14:09 PM  
QCD FEE: \$ 45.00 9 Pages

INSTRUMENT NUMBER:  
**2011E0086320**

**QUITCLAIM DEED**

STATE OF MISSOURI           X  
COUNTY OF JACKSON       X

**KNOW ALL BY THESE PRESENTS:**

**THIS QUITCLAIM DEED** is made this 13<sup>th</sup> day of September, 2011, by and between the **United States of America** (herein sometimes referred to as the "Government"), acting by and through the Administrator of General Services Administration (hereinafter referred to as "Grantor"), under and pursuant to authority of 40 U.S.C. § 541, et. seq., as amended, and rules, orders, and regulations issued pursuant thereto, and **Hardesty Renaissance Economic Development Corporation, a Missouri non-profit corporation, 607 Hardesty Avenue, Kansas City, MO 64124** (hereinafter referred to as "Grantee"). The terms used to designate any of the parties herein shall include their respective representatives, successors and assigns of said parties.

**I.       Quitclaim of the Fee Estate**

Grantor, for and in consideration of: (i) the sum of Five Hundred Thousand Dollars (\$500,000.00), duly paid by the Grantee, the receipt of which is hereby acknowledged, and (ii) the specific agreements hereinafter made by Grantee, for itself, and its successors and assigns, to abide by and take subject to all reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth in this Quitclaim Deed, does hereby grant, convey, remise, release and forever quitclaim to the Grantee, its successors and assigns, pursuant to the reservations, restrictions, covenants, exceptions, notifications, conditions and agreements hereinafter set forth, fee simple, in and to, that certain real property known as the former National Bellas Hess Property, Jackson County, Missouri, (hereinafter referred to as the "Property"), and described in detail as follows:

**Legal Description – Surface Estate Only**

All the land lying between Independence Avenue on the North, Hardesty Avenue on the West, the Kansas City Terminal right-of-way on the Southeast, and the central line of Topping Avenue (as originally located) on the East, being 21.593 acres, more or less (corrected by government survey 21.795 acres, more or less), formerly known as the National Bellas Hess Property and more particularly described in the legal description of said Property herein, to-wit:

ALL that part of the Northeast quarter of the Northeast quarter of Section 2, Township 49, Range 33, in Kansas City, Jackson County, Missouri, lying north and west of a strip of ground 75 ft. wide, extending in a northeasterly and southwesterly direction across said quarter (¼) quarter (¼) Section, being the right-of-way of Property conveyed to Kansas City Belt Railway Company by deed dated October 20, 1882, and recorded in Book B80 at page 266, in the office of the Recorder of Deeds of Jackson County, Missouri, at Kansas City; and also lying north of a strip of ground 100 ft. wide cutting and partly upon the Southwest corner of said quarter (¼) quarter (¼) Section (and north and west of right-of-way of said Kansas City Belt Railway Company above described), being the right-of-way of Kansas City and Independence Rapid Transit Railway Company; afterward Kansas City Cable Railway Company, and being Property conveyed to Kansas City Cable Railway Company by deed dated October 6, 1894, and recorded in Book B 571, page 513, in the office of the Recorder of Deeds, of Jackson County, Missouri, at Kansas City; except the following portions thereof, to-wit: (a) a strip of ground thirty (30) feet wide off of the west side thereof, being the east half of Hardesty Avenue, a street in Kansas City, Missouri; (b) a strip of ground forty (40) feet wide off of the north side thereof; being the south half of Independence Avenue, a street in Kansas City, Missouri; (c) a strip of ground (30) feet wide off the east side thereof, being the west half of Topping Avenue, a street in Kansas City, Missouri as originally established; being the same land heretofore conveyed to NATIONAL IMPROVEMENT COMPANY by Trackage Realty Company by deed dated June 24, 1919 filed for record, and duly recorded in the Office of the Recorder of Deeds of Jackson County, Missouri, at Kansas City, in Book Series B 1966, Page 554 on June 25, 1919, and by said National Improvement Company to party of the first part by deed dated December 14, 1935 filed for record and duly recorded in the office of the Recorder of Deeds of Jackson County, Missouri at Kansas City, in Book Series B 3228, page 601 on December 31, 1935.

PLEASE RETURN DOCUMENT TO:

**First American Title Insurance Company**  
**National Commercial Services**  
**811 Main, Suite 2500, Kansas City, MO 64105**  
**Attention: Robert L. Patterson**  
**FILE NO. 501077**

Together with the buildings thereon, appurtenances thereto, and easements and rights of way, if any, whether by grant, prescription, estoppel, use or otherwise, now owned, and/or used or enjoyed by the party of the first part in respect of and/or in connection with the described premises.

**LESS AND EXCEPT:**

All that part of the Northeast Quarter of the Northeast Quarter of Section 2, Township 49, Range 33, in Kansas City, Jackson County, Missouri, described as follows:

Beginning at the intersection of the South line of Independence Avenue and the East line of Hardesty Avenue, as said avenues are now established; thence East along said South line, 455.05 feet; thence South, deflecting 90°04'20" right from the last described course, 18 feet; thence East, parallel with the South line, of Independence Avenue, 15 feet; thence South, deflecting 90°04'20" right from the last described course, 165.77 feet; thence West, perpendicular to the last described course, 213.97 feet; thence South, perpendicular to the last described course, 266.43 feet thence West perpendicular to the East line of Hardesty Avenue, 252.72 feet to a point on said East line; thence North along said East line, 451.50 feet to the point of beginning.

The above described tract of land containing 3.528 acres, more or less (hereinafter referred to as the "Property").

**TO HAVE AND TO HOLD** the Property, together with all improvements, hereditaments, appurtenances, therein and all reversions, remainders, issues, profits and other rights belonging or related thereto, and subject all reservations, restrictions, covenants, exceptions, notifications, conditions, and agreements herein set forth in this Quitclaim Deed, either in law or in equity, for the use, benefit, and behalf of the Grantee, its successors and assigns forever.

**II. SPECIAL AND GENERAL EXCEPTIONS AFFECTING THE PROPERTY**

This Quitclaim Deed covering the Property is expressly made subject to the following matters to the extent and only to the extent the same are valid and subsisting and affect the Property:

**A.** All existing licenses, permits, servitudes and right-of-way including, but not limited to State highway department driveway permits, easements and rights-of-way for public streets, roads and highways, public utilities, electric power lines, electric transmission facilities, railroads, pipelines, ditches, conduits and canals on, over and across said land, whether or not of record, including, but not limited to Easements reserved in Quit Claim Deed recorded as Instrument Number 2007E0069815 in the County Clerk's office of Jackson County, Missouri dated May 26, 1981, reserving easements for rail spur lines, gas line, and mutual easement for surface water drainage, and a non-exclusive easement for emergency and service vehicle access.

**B.** All existing interest(s) reserved to or outstanding in third parties in and to water rights, ditch and reservoir rights, as well as oil, gas, and/or minerals, whether or not of record.

**C.** All other existing interests reserved by any grantor(s) in chain of title unto said grantor(s), their respective successors and assigns, which affect any portion of the Property interest(s) hereinabove described, whether or not of record.

**D.** Any survey discrepancies, conflicts, or shortages in area or boundary lines, or any encroachments, or protrusions, or any overlapping of improvements which may affect the subject Property.

**E.** Existing ordinances or resolutions, special purpose district rules and regulations, including soil conservation district rules and regulations and water conservancy district rules and regulations, filed of public record and affecting all or any portion of the subject Property.

**III. RESERVATIONS/COVENANTS COVERING THE PARCELS**

This Quitclaim Deed covering the Property is expressly made subject to the following reservations in favor of Grantor, and its assigns.

**SAVE AND EXCEPT** and there is hereby reserved unto Grantor, and its assigns, all rights and interests which have been previously reserved to the United States in any Patent(s) which cover(s) the Property.

**SAVE AND EXCEPT**, and there is hereby excepted and reserved unto the UNITED STATES OF AMERICA, and its assigns, all right, title and interest in and to all oil, gas, hydrocarbons, and other minerals that may be produced in and under the Property; including, but not limited to the following attributes in connection with its right to take, develop and produce such oil, gas, hydrocarbons, and minerals: (1) the right of ingress and egress to the Property, (2) the right to lease, (3) the right to receive bonus payments, (4) the right to receive delay rentals, and (5) the right to receive royalty payments.

#### **IV. CERCLA NOTICES, COVENANTS AND RESERVATIONS**

This Quitclaim Deed is expressly made subject to the following CERCLA information and specific reservations, covenants and agreements in favor of Grantor, and its assigns.

**Notice of Hazardous Substance Activity.** Pursuant to 40 CFR §373.2 and Section 120(h)(3)(A)(i) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA)(42 U.S.C. §9620(h)(3)(A)(i)), and based upon a complete search of agency files, the United States of America gives notice that **Attachment “A”** provides the following information: (1) the type and quantity of hazardous substances that were known to have been released or disposed of or stored for one year or more on the Property; (2) the time such storage, release or disposal took place; and (3) a description of remedial action taken, if any.

#### **NOTICE Regarding Hazardous Substance Activity**

##### **A. Deferred CERCLA Covenant.**

Grantor warrants to Grantee, its successors and assigns, that it shall take, or cause to be taken, all response action found to be necessary by the appropriate federal and state environmental regulatory authorities after the date of this conveyance regarding hazardous substances located on the Property on the date of this conveyance. When all response action necessary to protect human health and the environment with respect to such hazardous substances remaining in, on or under the Property as of the date of this conveyance has been taken, Grantor shall thereafter execute and deliver to Grantee, or its successors and assigns, its written CERCLA Covenant that all such response action has been taken, together with the making of Grantor’s warranty to satisfy the governmental requirements set forth in 42 U.S.C. 9620(h)(3)(A)(ii)(I).

- 1) The CERCLA Section 9620(h)(3)(A)(ii) covenant shall not apply:
  - a) to the extent that Grantee, its successor(s) or assign(s), or any successor in interest to the Property or part thereof is a Potentially Responsible Party (PRP) with respect to the Property immediately prior to the date of this conveyance.
  - b) to the extent that such additional response action or part thereof found to be necessary is the result of an act or failure to act of the Grantee, its successor(s) or assign(s), or any party in possession after the date of this conveyance that either:
    - i. Results in a release or threatened release of a hazardous substance that was not located in, under, or on the Property on the date of this conveyance; or
    - ii. causes or exacerbates the release or threatened release of a hazardous substance; or
    - iii. in the case of a hazardous substance(s) previously unknown by Grantor and Grantee as of the date of this conveyance but which is hereafter discovered by Grantee, its successor(s) or assign(s), or any party in possession and where after discovery and knowledge of the existence of the hazardous substance, Grantee, its successor(s) or assign(s), or any party in possession causes or exacerbates a release or threatened release of such hazardous substance(s).
  - c) In the event Grantee, its successor(s) or assign(s), seeks to have Grantor conduct any additional response action, and, as a condition precedent to Grantor incurring any additional cleanup obligation or related expenses, the Grantee, its successor(s) or assign(s), shall provide Grantor at least 45 days written notice of such a claim. In order for the 45-day period to commence, such notice must include credible evidence that:
    - i. the contamination existed prior to the date of this conveyance; and
    - ii. the need to conduct any additional response action or part thereof was not the result of any act or failure to act by the Grantee, its successor(s) or assign(s), or any party in possession described in Section II B.I(b).

##### **B. Response Action Access Easement**

Grantor reserves for itself, the United States Government, and its officers, agents, employees, contractors and subcontractors, a non-exclusive limited right of access to and of entry upon all portions of the Property to the extent reasonably necessary for environmental investigation,

remediation or other corrective action. This reservation includes the no cost right of access to the Property. The use of available utilities at reasonable costs to Grantor is further reserved. Grantor shall use these rights only in the event that response action by Grantor or the United States Government is found to be necessary by the Missouri Department of Natural Resources ("MDNR") or the Environmental Protection Agency ("EPA") with respect to the Property after the date of this quitclaim of the Property, or if access to the Property is necessary to carry out response action found to be necessary by MDNR or EPA with respect to adjoining property. These actions may include but are not limited to investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out any remedial or removal actions required by MDNR or EPA, including but not limited to the installation and operation of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner(s), shall be performed in a manner that minimizes interruption with activities of authorized occupants, and shall not unreasonably interfere with the conduct of business on the Property and shall repair any damage to the property, including improvements thereon, resulting from such entry to the condition existing immediately before its entry thereon. The foregoing described easement is hereinafter referred to as the "Response Action Access Easement."

**C. Non-Interference with Response Action**

Grantee, its successors and assigns and every successor in interest to the Property, or part thereof, while in possession of the Property, shall not disrupt or prevent the United States of America, its officers, employees, agents, contractors and subcontractors, and any other authorized party or entity from proper use of the Response Action Access Easement as provided in Subsection 3, above.

**V. OTHER ENVIRONMENTAL NOTICES, COVENANTS, AND AGREEMENTS**

**A. ASBESTOS CONTAINING MATERIALS**

- 1) Grantee is warned that the Property may contain asbestos-containing materials. Unprotected or unregulated exposures to asbestos in product manufacturing, shipyard, and building construction workplaces have been associated with asbestos-related diseases. Both the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) regulate asbestos because of the potential hazards associated with exposure to airborne asbestos fibers. Both OSHA and EPA have determined that such exposure increases the risk of asbestos-related diseases, which include certain cancers and which can result in disability or death.
- 2) No warranties either express or implied are given with regard to the condition of the Property including, without limitation, whether the Property does or does not contain asbestos or is or is not safe for a particular purpose. The failure of any bidder to inspect, or to be fully informed as to the condition of all or any portion of the Property offered, will not constitute grounds for any claim or demand for adjustment or withdrawal of a bid or offer after its opening or tender.
- 3) The description of the Property set forth in this Quitclaim Deed and any other information provided therein with respect to said Property is based on the best information available to the disposal agency and is believed to be correct, but an error or omission, including but not limited to the omission of any information available to the agency having custody over the Property and/or any other Federal agency, shall not constitute grounds or reason for nonperformance of the contract of sale, or any claim by the Purchaser against the Government including, without limitation, any claim for allowance, refund, or deduction from the purchase price.
- 4) The Government assumes no liability for damages for personal injury, illness, disability or death, to the Grantee, or to the Grantee's successors, assigns, employees, invitees, licensees, or any other person subject to Grantee's control or direction, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with asbestos on the Property which is the subject of this sale, whether the Grantee, its successors or assigns has or have properly warned or failed properly to warn the individual(s) injured.
- 5) The Grantee further agrees that in its use and occupancy of the Property it will comply with all Federal, state, and local laws relating to asbestos.

**B. LEAD-BASED PAINT**

The Grantee, its successors and assigns understand that any interest in real property on which a building was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in residential real property is

required to provide the buyer with any information on lead-based paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any known lead-based paint hazards. A risk assessment or inspection for possible lead-based paint hazards is recommended prior to converting the Property to a residential dwelling.

**C. NOTICE OF PESTICIDE APPLICATION**

The Grantee is notified that the Property may contain the presence of pesticides that have been applied in the management of the property. The United States knows of no use of the registered pesticide in a manner inconsistent with its labeling, and believes that all applications were made in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA – 7 U.S.C. Sec. 136, et seq.), its implementing regulations, and according to the labeling provided with such substances. Furthermore, that in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA – 42 U.S.C. Sec. 9601, et seq.), the use of such substances is not a “release” (as defined in CERCLA, 42 U.S.C. Sec. 9601 (22)), but instead the use of a consumer product in consumer use (42 U.S.C. Sec. 9601 (9)), and the application of a pesticide product registered under FIFRA for which recovery for response costs is not allowed (42 U.S.C. Sec. 9607 (i)).

**D. NOTICE OF SUBSURFACE STRUCTURES SUSCEPTIBLE TO FLOODING**

The Grantee is hereby notified that there are subsurface structures that may be susceptible to flooding. The Government maintained the use of sump pumps in subsurface tunnels to prevent damage to those areas. Grantee, for itself and its successors and assigns, and every successor-in-interest to the Property, or any part thereof, covenant and agree to indemnify, protect, defend, save and hold harmless the Government, and its employees, officers, representatives, attorneys and agents, from and against any and all debts, duties, obligations, liabilities, suits, claims, demands, causes of action, damages, losses, cost and expenses (including without limitation, attorneys' fees and expenses and court costs) in any way relating to, connected with, and/or arising from water damage of any kind.

**E. INDOOR AIR EXPOSURE PATHWAY EVALUATION FOR BUILDINGS 6 AND 9**

The following clauses shall be incorporated into any transfer of such portions of the property as an institutional control established to protect human health and the environment:

- 1) In the event Grantee, its successor(s) or assign(s), desires to use the Property for any use that would involve indoor occupancy of any structure, then Grantee, its successor(s) or assign(s), shall perform indoor air exposure pathway evaluation for building 6 and 9 as prescribed by the Missouri Department of Natural Resources and shall further comply with all laws, rules, regulations and ordinances pertaining thereto, including but not limited to zoning requirements and the requirements of all applicable regulatory authorities.
- 2) In the event Grantee, its successor(s) or assign(s), desires to conduct or permit any use inconsistent with this restriction, prior to the completion of all necessary remedial action that may contribute to adverse indoor air quality, then Grantee, its successor(s) or assign(s), at its sole cost and expense shall be required to obtain written permission of the applicable federal, state and/or local regulatory authorities for such other uses and shall further comply with all laws, rules, regulations and ordinances pertaining thereto, including but not limited to zoning requirements and the requirements of all applicable regulatory authorities.
- 3) Upon written request by Grantee, its successor(s) or assign(s), and without any payment of funds by Grantor, Grantor, by and through the General Services Administration, agrees that upon completion of any additional remedial action performed by Grantee, its successor(s) or assign(s), under this paragraph, to cooperate with Grantee, its successor(s) or assign(s), in any application, permit, order, or effort to obtain approval from appropriate regulators for the removal or revision of this restriction, subject to any necessary restrictions related to indoor air quality monitoring to be recorded in the records of the Recorder of Deeds, Office of County Clerk for Jackson County, Missouri.

**VI. LAND USE RESTRICTIONS**

**A. Groundwater Use Restrictions**

Grantee covenants and agrees for itself, its successors and assigns, and every successor-in-interest to the Property, or part thereof, that it shall not construct or permit to be constructed any well, and shall not extract, utilize, consume or permit to be extracted, any water from the aquifer below the surfaces of the ground within the boundary of the Property for the purpose of human consumption, or other use, unless such groundwater has been tested and found to meet applicable standards for human consumption, or such other use, and such owner or occupant shall first have obtained written approval of GSA and the appropriate agencies of the State of Missouri, including, but not limited to, MDNR. The costs associated with obtaining use of such water, including, but not limited to, the costs of permits, studies,

analysis, or remediation, shall be the sole responsibility of the Grantee, its successors and assigns, or any successor-in-interest to the Property, without cost whatsoever to the Grantor.

**B. Non-Residential Use Restrictions**

Grantee covenants and agrees for itself, its successors and assigns, and every successor-in-interest to the Property, or part thereof, that use of the Property shall be limited to nonresidential industrial uses except for any office or similar use incidental to industrial use if such incidental use is permitted by applicable regulatory authorities without requiring further environmental remediation beyond that required for industrial use. Prohibited residential uses include, but are not limited to, any child care, pre-school, playground, and any form of housing. In the event the Grantee, or its successors or assigns, or any successor-in-interest to the Property, or part thereof, desire to use the Property for any use other than industrial use, then Grantee, or its successors or assigns, or any successor-in-interest to the Property, or part thereof, shall perform all additional Response Action, or other corrective action, required by Federal, state and local Environmental Laws or applicable regulatory authorities for such other uses, and shall further comply with all other Federal, state and local Laws, rules, regulations, and ordinances pertaining thereto, including but not limited to zoning requirements and the requirements of all applicable regulatory authorities. All costs associated with any such Response Action, or other corrective action necessary for other than industrial use shall be the sole responsibility of the Grantee, its successors and assignees, or any successor-in-interest to the Property, without cost whatsoever to the Grantor.

**C. Ground Disturbance Restriction**

Grantee covenants and agrees for itself, its successors and assigns, and every successor-in-interest to the Property, or part thereof, that use of the Property shall be limited by restricting the ability to disturb contaminated soil or conduct excavation activities involving such contaminated soil, without obtaining the prior approval of MDNR. All costs associated with any such disturbing activity including obtaining prior approval, shall be the sole responsibility of the Grantee, its successors and assignees, or any successor-in-interest to the Property, without cost to Grantor.

- D.** In the event Grantee, its successors or assigns, or any successors-in-interest of the Property, or part thereof, desire to seek the modification or removal of the specific restrictions and covenants specified above from the Property, or any portion thereof, then Grantee, its successors or assigns, or the successors-in-interest of the Property, or part thereof (hereinafter referred as the Record Title Owner”, whether one or more) shall perform or complete all environmental investigations, Response Action, or other corrective action, necessary in order to obtain consent to the modification or termination of such environmental land use restrictions from the applicable Federal and state environmental regulatory authorities. All costs associated with any such required environmental investigation, Response Action, or other corrective action, shall be the sole responsibility of the Record Title Owner, and shall be performed without any payment of funds by Grantor.
- E.** The Record Title Owner may be required to submit a work plan to the applicable Federal and State regulatory authorities to perform and complete any environmental investigations, Response Action, or other corrective action needed to seek the modification or removal of the specific restrictions and covenants specified above, or any portion thereof. Upon approval of any such work plan, and any condition imposed therein, the Record Title Owner will complete all environmental investigation, Response Action, or other corrective action, as may be required, if any, in accordance with applicable Environmental Laws.
- F.** The Record Title Owner may be required by the applicable Federal and State regulatory authorities to post a completion bond or such other financial assurances in a form reasonably acceptable to the applicable Federal and State regulatory authorities that the Record Title Owner will complete any necessary environmental investigation, Response Action, or other corrective action on the Property, or part thereof. Upon completion of such necessary environmental investigation, Response Action, or other corrective action, the completion bond and other financial assurances, if applicable, may be released pursuant to the rules and regulations of the applicable regulatory authority.
- G.** Upon completion of any required environmental investigation, Response Action, or other corrective action, the Record Title Owner may be required to submit a close-out report and certification of completion to the applicable Federal and State regulatory authorities.
- H.** If the Record Title Owner: (1) is required to comply with the procedures set forth in paragraphs (A) through (G) above, and obtains from the applicable Federal and State regulatory authorities a written certification or other evidence in a form acceptable for filing with the county clerk where the Property is located, certifying that all required environmental investigation, Response Action, or other corrective action, for the Property, or any portions thereof, have been completed; or (2) is not required to comply with the procedures set forth in paragraphs (A) through (G) above, and obtains a written certification from the applicable Federal and State regulatory authorities or other evidence in a form acceptable for filing with the county clerk where the Property is located certifying that no environmental investigation, Response Action, or other corrective action, is necessary for the Property, or any portions thereof, in order to release the use restriction, then the Record Title Owner may record the applicable written certification in the office of the county clerk where the Property is located, and a copy of the same will be sent to the GSA.

- I. Upon the approval and completion of all environmental remediation or corrective action called for above, and upon the recording of the final environmental certification or evidence in a form suitable for filing with the county clerk where the Property is located, as referenced above, the specific restrictions and covenants shall thereafter be modified or removed, as applicable, from the title record of the Property, or the designated part thereof.

## **VII. MISCELLANEOUS NOTICES, TERMS, CONDITIONS, AGREEMENTS, AND COVENANTS**

Except as otherwise provided by 42 U.S.C. 9620(h)(3), Grantee covenants for itself, its heirs, assigns and every successor in interest to the Property herein described or any part thereof that it shall abide by each of the following covenants, each of which will be covenants running with the land. In addition, the United States of America shall be deemed a beneficiary of each of the following covenants without regard to whether it remains the owner of any land or interest therein in the locality of the Property hereby conveyed and shall have a right to enforce each of the covenants herein in any court of competent jurisdiction; provided, however, the United States of America shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following covenants herein agreed.

**A.** Except as listed on the Notice of Hazardous Substance Activity (**Attachment A**) attached hereto, Grantee has inspected the herein above described and conveyed property and has satisfied him/her/itself that the property is free of any hazardous substance(s) or petroleum products or their derivatives, and Grantee, its heirs, successors and assigns, will indemnify, protect, defend, save and hold harmless Grantor, and Grantor's employees, officers, representatives, attorneys and agents, from and against any and all debts, duties, obligations, liabilities, suits, claims, demands, causes of action, damages, losses, cost and expenses (including without limitation, costs associated with any investigation, monitoring, sampling, testing or removal of hazardous substance(s), attorneys' fees and expenses and court costs) in any way relating to, connected with, and/or arising out of the discovery of any hazardous substance(s) or petroleum product(s) or their derivatives which may have contaminated the hereinabove and conveyed property after the date of this Deed.

**B.** As a material part of the Consideration for this deed, Grantor and Grantee agree that Grantee is taking the Property "AS IS" with any and all latent and patent defects and that there is no warranty by Grantor that the Property has a particular financial value or is fit for a particular purpose. Grantee acknowledges and stipulates that Grantee is not relying on any representation, statement, or other assertion with respect to the Property condition but is relying on Grantee's examination of the Property. Grantee takes the Property with the express understanding and stipulation that there are no express or implied warranties.

**C. FAA Clause** Grantee covenants for itself, its heirs, successors and assigns and every successor in interest to the property herein described, or any part thereof, that any construction or alteration is prohibited unless a determination of no hazard to air navigation is issued by the FAA in accordance with Title 14, Code of Federal Regulations, Part 77, entitled "Objects Affecting Navigable Airspace," or under the authority of the Federal Aviation Act of 1958, as amended.

**D. DOCUMENT BOX** At such time as the building is demolished, if any document box is found, which should be located behind the cornerstone, it shall remain the property of the Government and shall be delivered, unopened to the National Archives and Records Service, Washington, DC.

IN WITNESS WHEREOF, the United States of America has caused these presents to be executed this 13 day of September, 2011.

UNITED STATES OF AMERICA  
Acting by and through the  
Administrator of General Services

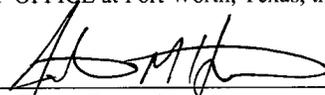
By:  \_\_\_\_\_

JOHN A. ROBINSON  
Branch Chief  
Real Property Utilization & Disposal Division  
Greater Southwest Region  
General Services Administration

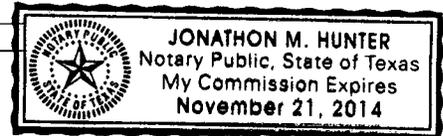
THE STATE OF TEXAS            X  
COUNTY OF TARRANT        X

BEFORE ME, a Notary Public in and for the State of Texas, on this day personally appeared JOHN A. ROBINSON , known to me to be the person whose name is subscribed to the foregoing quitclaim deed, and known to me to be the Branch Chief, Real Property Utilization & Disposal Division, Greater Southwest Region, General Services Administration, Fort Worth, Texas, and acknowledged to me that the same was the act and deed of the United States of America and of the Administrator of General Services and that he executed the same as the voluntary act of the United States of America and of the Administrator of General Services for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE at Fort Worth, Texas, this 13 day of September, 2011.

  
\_\_\_\_\_  
Notary Public State of Texas

Notary's Name: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_



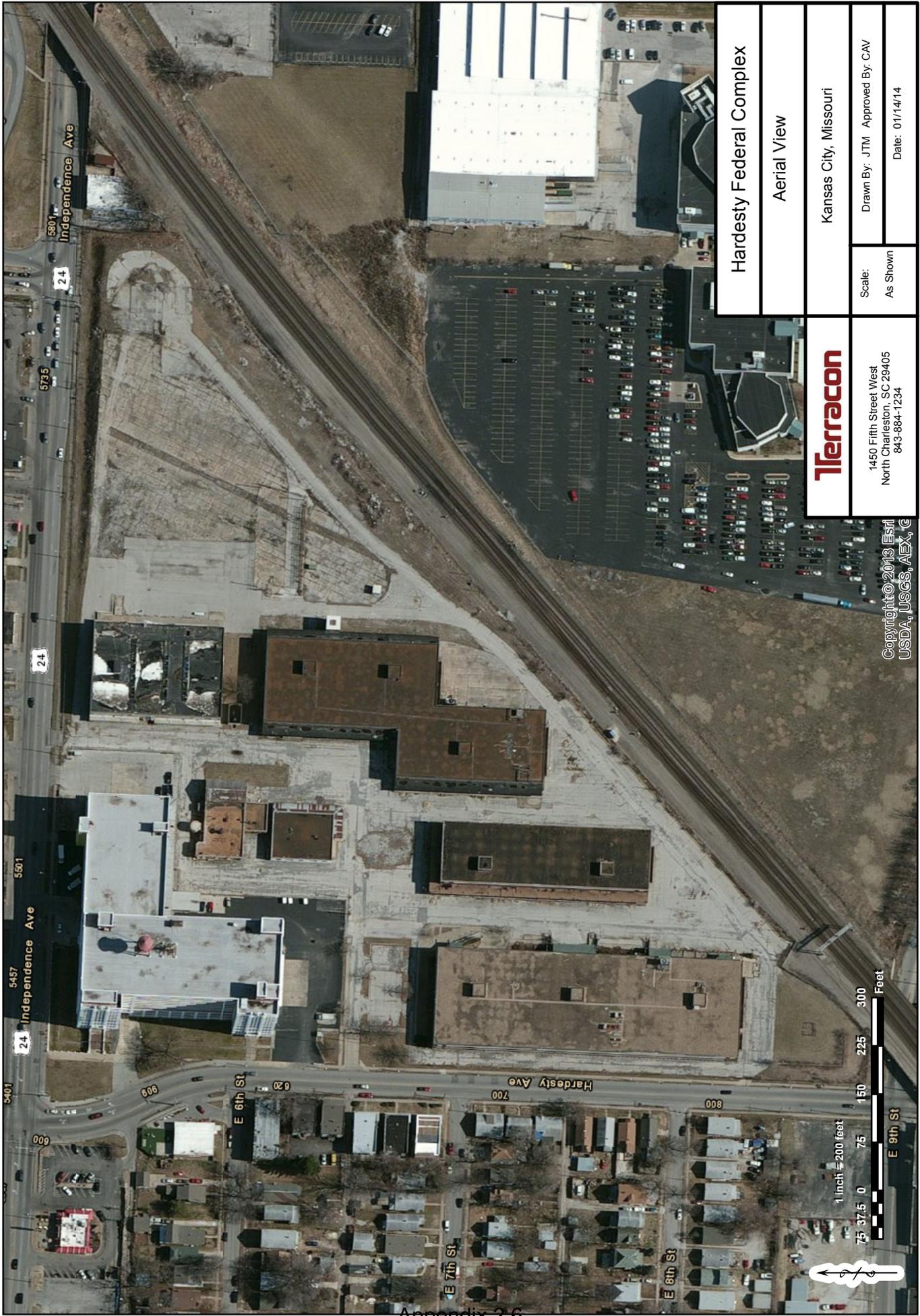
## ATTACHMENT A

### NOTICE OF HAZARDOUS SUBSTANCE ACTIVITY

**Former Federal Complex  
607 Hardesty Avenue  
Kansas City, Missouri**

Based upon environmental records held by the General Services Administration, the following information is provided on hazardous substances that were known to have been released, disposed of, or stored for one year or more on the Property.

1. **Trichloroethylene.** During World War II, the U.S. Army operated the property as a Quartermaster Depot. As part of the operations on-site, the Army utilized Building 6 researching clothing treatment processes which would protect soldiers from the effects of chemical warfare agents. Process chemicals were stored in above ground storage tanks (ASTs) exterior to Building 6 and piped into the building. It is believed the trichloroethylene (TCE) discovered in the soil and groundwater immediately adjacent to Building 6 originated from those research activities. The dates of such releases are unknown, but are expected to have occurred between 1940 and 1945. However, the quantities involved are unknown. Investigations of the nature and extent of the groundwater contamination have been completed; additional investigation concerning the soil contamination is yet needed to be completed, in conjunction with MDNR. *A remediation plan has been submitted to and approved by the Missouri Department of Natural Resources (MDNR).*
2. **Petroleum Products,** such as diesel fuel, fuel oil, and gasoline, were stored in underground storage tanks (USTs) have been used throughout the history of the former Federal Complex. Fuel oil was used in Building 3 (Boiler House) to fire the boilers. Diesel fuel and gasoline were used for refueling vehicles used on-site from fuel pumps associated with the former Building 4 (Garage, which was demolished several years ago). Eventually, the USTs developed leaks and/or spills occurred; the dates and quantities of such occurrences are unknown. As of this time, the USTs have been removed; however, the petroleum contamination yet exists in sub-surface soils and groundwater. Investigations of the nature and extent of the contamination have been completed. *A remediation plan has been submitted to and approved by MDNR.*
3. **Lead.** Operation of firing ranges results in contamination by lead, which is found in the bullets' projectile as well as the primer charge. A firing range, located in the basement of Building 9, was operated on-site, although the dates it was in operation are unknown. Environmental investigations have revealed the interior of the firing range is contaminated with lead dust. Because of the source of the contamination (weapons firing), the quantity of the lead released cannot be determined. *A remediation plan has been submitted to and approved by the MDNR.*
4. **Polychlorinated Biphenyls (PCBs).** Due to the age of the property, various electrical transformers and breakers located on-site, as well as insulation surrounding high-voltage wiring, was found to contain PCBs. In several instances, the PCB-laden oil had leaked from the electrical equipment. The dates of such leakage and the exact quantities are unknown. In 2003, GSA undertook a project to identify all electrical equipment which showed signs of leakage. This project included all buildings currently existent on-site, except Building 13 (i.e., Buildings 3, 6, 7, 9, 10, and 11). Building 13 was not included because it is currently operated and maintained by Kansas City Power and Light. When leakage was identified, the material was tested to determine if it contained PCBs above the U.S. Environmental Protection Agency's action limit of 50 parts per million (ppm). Any leakage found exceeding 50 ppm was remediated; this was completed by 8 January 2004. Reports of these activities were submitted to and approved by MDNR. Currently, there are no known quantities of PCBs exceeding 50 ppm on-site.



Hardesty Federal Complex

Aerial View

Kansas City, Missouri

Scale: Drawn By: JTM Approved By: CAV  
As Shown Date: 01/14/14

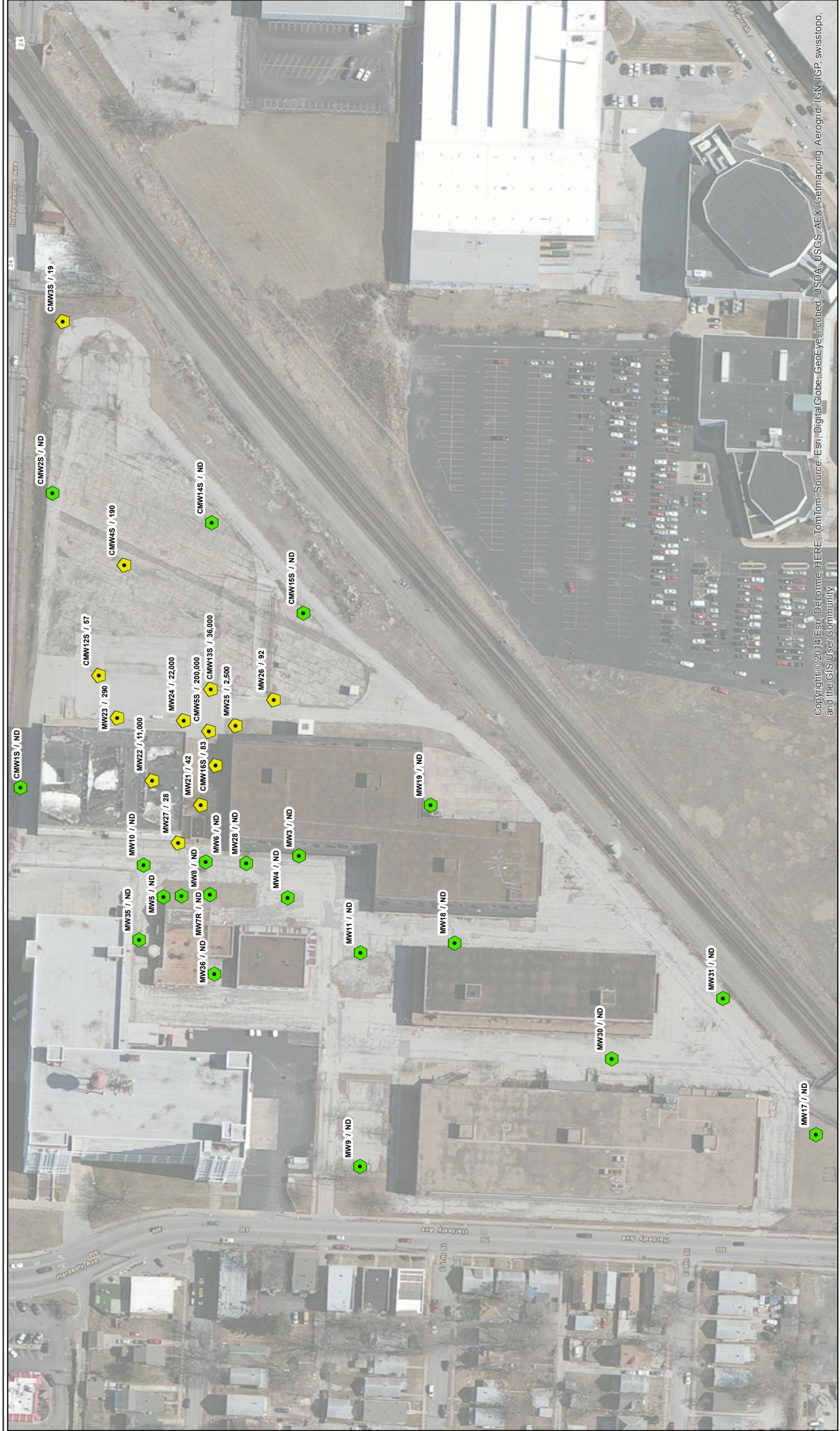
**Terracon**

1450 Fifth Street West  
North Charleston, SC 29405  
843-884-1234

Copyright © 2013 Esri  
USDA, USGS, AEX, G

Appendix 2.6





Copyright: © 2014 Esri, DeLorme, HERE, TomTom, Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Project No.	EN137050
Scale:	As Shown
File Path:	
Date:	3/31/14
Drawn By:	JTM
Checked By:	CAV
Approved By:	

**Legend**

- Well Location with Trichloroethene detection - values in ug/l ppb
- Well Location with MCL exceedances of Trichloroethene - values in ug/l ppb

1 inch = 125 feet

0 62.5 125 250 Feet

**Terracon**  
 1450 Fifth Street West  
 N Charleston, SC 29405  
 Phone: 843.884.1234 Fax: 843.884.9234

EXHIBIT NO.	1
Onsite Groundwater Round Two Shallow Wells	
Hardesty Federal Complex Kansas City	
Jackson County	Missouri

Appendix 3.1



Copyright © 2014 Esri, DeLorme, HERE, TomTom, Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Project No.	EN137050
Scale:	As Shown
File Path:	
Date:	3/31/14
PM:	
Drawn By:	JTM
Checked By:	CAV
Approved By:	

**Legend**

-  Well Location with Trichloroethene detection - values in ug/l ppb
-  Well Location with MCL exceedances of Trichloroethene - values in ug/l ppb

1 inch = 200 feet

0 100 200 400 Feet

**Terracon**

1450 Fifth Street West  
N Charleston, SC 29405  
Phone: 843.884.1234 Fax: 843.884.9234

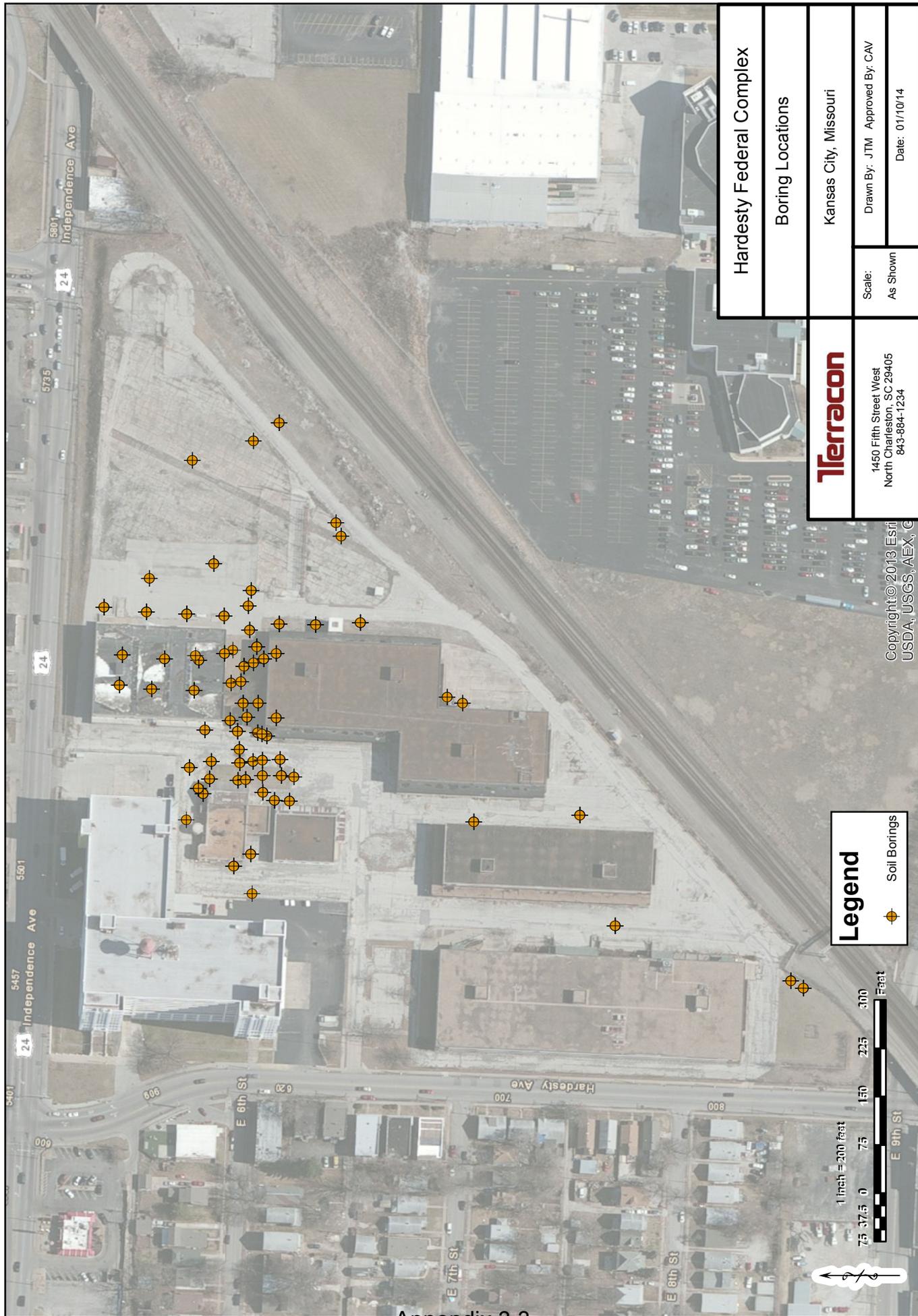
**Offsite Groundwater Round Two Shallow Wells**

**Hardesty Federal Complex**  
Kansas City

Jackson County Missouri

EXHIBIT NO. **2**

Appendix 3.2



<b>Terracon</b>		<b>Hardesty Federal Complex</b>	
1450 Fifth Street West North Charleston, SC 29405 843-884-1234		Boring Locations	
Scale: As Shown		Kansas City, Missouri	
Drawn By: JTM Approved By: CAV		Date: 01/10/14	

**Legend**

◆ Soil Borings

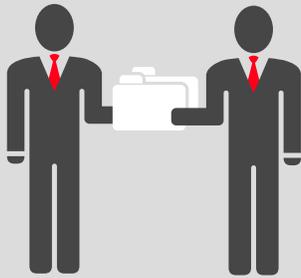
Copyright © 2013 Esri  
 USDA, USGS, AEX, G

Appendix 3.3



# CERCLA Environmental Investigation and Cleanup Process

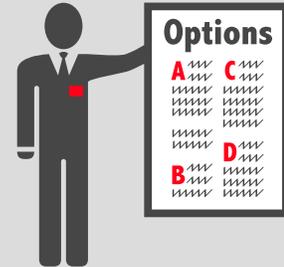
A First Look



A Closer Look



What are our options?



1

Preliminary Assessment (PA)/Site Inspection (SI)

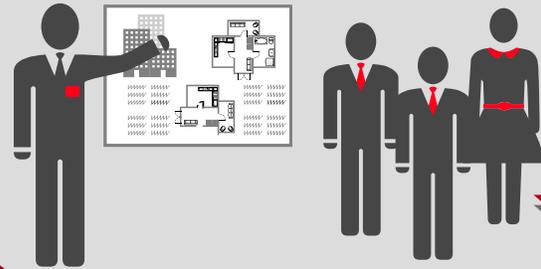
2

Feasibility Study (FS) and Remedial Investigation (RI)

Document agreed-upon cleanup strategy



Choose best options & get public input



4

Record of Decision (ROD)

3

Proposed Plan

Specifics of cleanup plan



Cleanup of physical site



5

Remedial Design (RD)

6

Remedial Action (RA)

Monitoring, reporting and new use of property

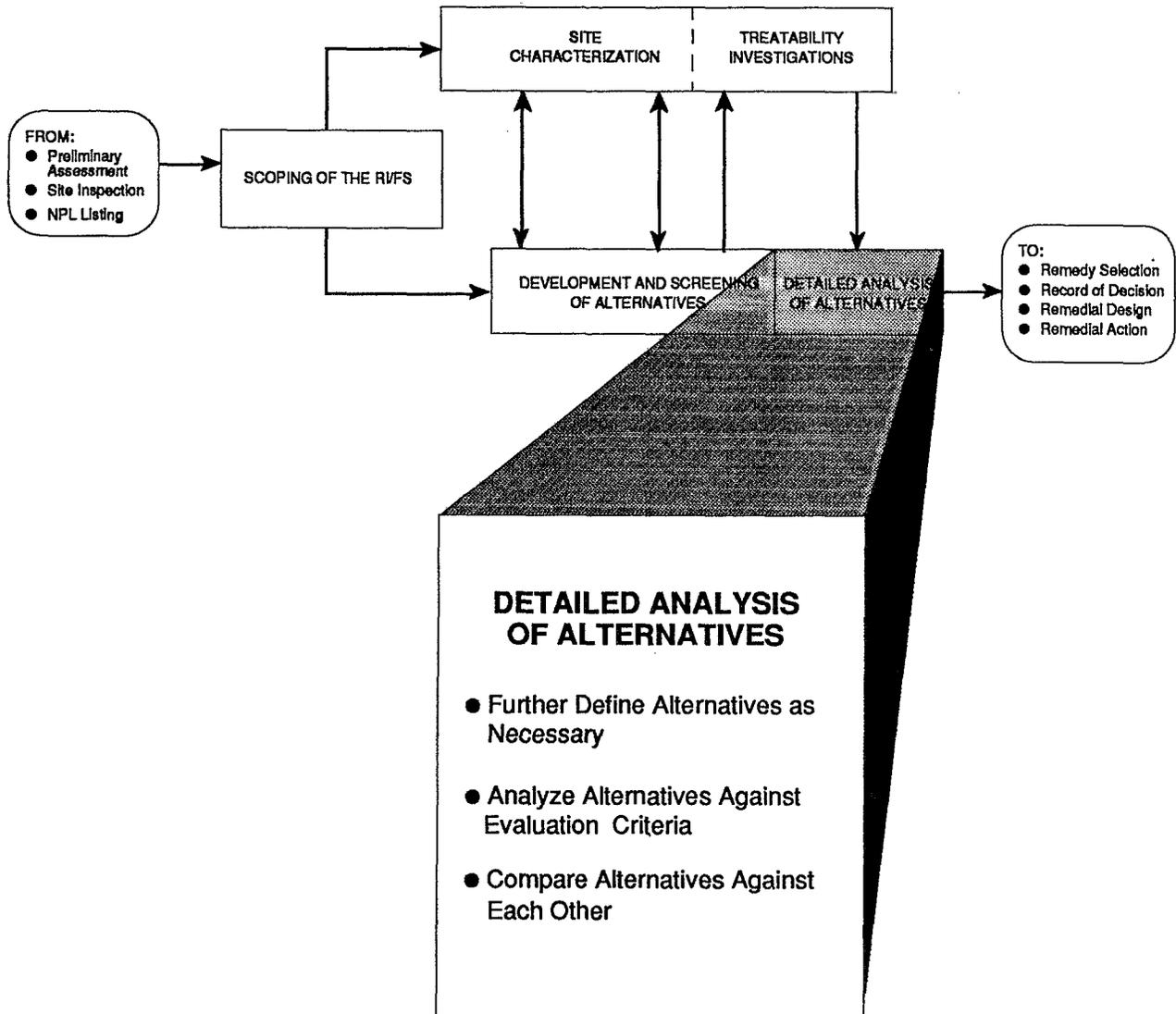


7

Long-Term Maintenance and Site Reuse

# CHAPTER 6

## DETAILED ANALYSIS OF ALTERNATIVES



---

## **Chapter 6**

### **Detailed Analysis of Alternatives**

#### **6.1 Introduction**

##### **6.1.1 Purpose of the Detailed Analysis of Alternatives**

The detailed analysis of alternatives consists of the analysis and presentation of the relevant information needed to allow decisionmakers to select a site remedy, not the decisionmaking process itself. During the detailed analysis, each alternative is assessed against the evaluation criteria described in this chapter. The results of this assessment are arrayed to compare the alternatives and identify the key tradeoffs among them. This approach to analyzing alternatives is designed to provide decisionmakers with sufficient information to adequately compare the alternatives, select an appropriate remedy for a site, and demonstrate satisfaction of the CERCLA remedy selection requirements in the ROD.

The specific statutory requirements for remedial actions that must be addressed in the ROD and supported by the FS report are listed below. Remedial actions must:

- ! Be protective of human health and the environment
- ! Attain ARARs (or provide grounds for invoking a waiver)
- ! Be cost-effective
- ! Utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable
- ! Satisfy the preference for treatment that reduces toxicity, mobility, or volume as a principal element or provide an explanation in the ROD as to why it does not

In addition, CERCLA places an emphasis on evaluating long-term effectiveness and related considerations for each of the alternative remedial actions (§121(b)(1)(A)). These statutory considerations include:

- A) the long-term uncertainties associated with land disposal;
- B) the goals, objectives, and requirements of the Solid Waste Disposal Act;
- C) the persistence, toxicity, and mobility of hazardous substances and their constituents, and their propensity to bioaccumulate;
- D) short- and long-term potential for adverse health effects from human exposure;
- E) long-term maintenance costs;
- F) the potential for future remedial action costs if the alternative remedial action in question were to fail; and
- G) the potential threat to human health and the environment associated with excavation, transportation, and redisposal, or containment.

Nine evaluation criteria have been developed to address the CERCLA requirements and considerations listed above, and to address the additional technical and policy considerations that have proven to be important for selecting among remedial alternatives. These evaluation criteria serve as the basis for conducting the detailed analyses during the FS and for subsequently selecting an appropriate remedial action. The evaluation criteria with the associated statutory considerations are:

- ! Overall protection of human health and the environment
- ! Compliance with ARARs (B)
- ! Long-term effectiveness and permanence (A,B,C,D,F,G)
- ! Reduction of toxicity, mobility, or volume (B,C)
- ! Short-term effectiveness (D,G)
- ! Implementability

- ! Cost (E,F)
- ! State acceptance (relates to Section 121(f))
- ! Community acceptance (relates to Sections 113 and 117)

### 6.1.2 The Context of Detailed Analysis

The detailed analysis of alternatives follows the development and screening of alternatives and precedes the actual selection of a remedy. As discussed in Chapter 4, the phases of the FS may overlap, with one beginning before another is completed, or they may vary in the level of detail based on the complexity or scope of the problem. The extent to which alternatives are analyzed during the detailed analysis is influenced by the available data, the number and types of alternatives being analyzed, and the degree to which alternatives were previously analyzed during their development and screening.

The evaluations conducted during the detailed analysis phase build on previous evaluations conducted during the development and screening of alternatives. This phase also incorporates any treatability study data and additional site characterization information that may have been collected during the RI.

The results of the detailed analysis provide the basis for identifying a preferred alternative and preparing the proposed plan. Upon completion of the detailed analysis, the FS report, along with the proposed plan (and the RI report if not previously released), is submitted for public review and comment. The results of the detailed analysis supports the final selection of a remedial action and the foundation for the Record of Decision.

### 6.1.3 Overview of the Detailed Analysis

A detailed analysis of alternatives consists of the following components:

- ! Further definition of each alternative, if necessary, with respect to the volumes or areas of contaminated media to be addressed, the technologies to be used, and any performance requirements associated with those technologies
- ! An assessment and a summary profile of each alternative against the evaluation criteria
- ! A comparative analysis among the alternatives to assess the relative performance of each alternative with respect to each evaluation criterion

Figure 6-1 illustrates the steps in the detailed analysis process.

## 6.2 Detailed Analysis of Alternatives

### 6.2.1 Alternative Definition

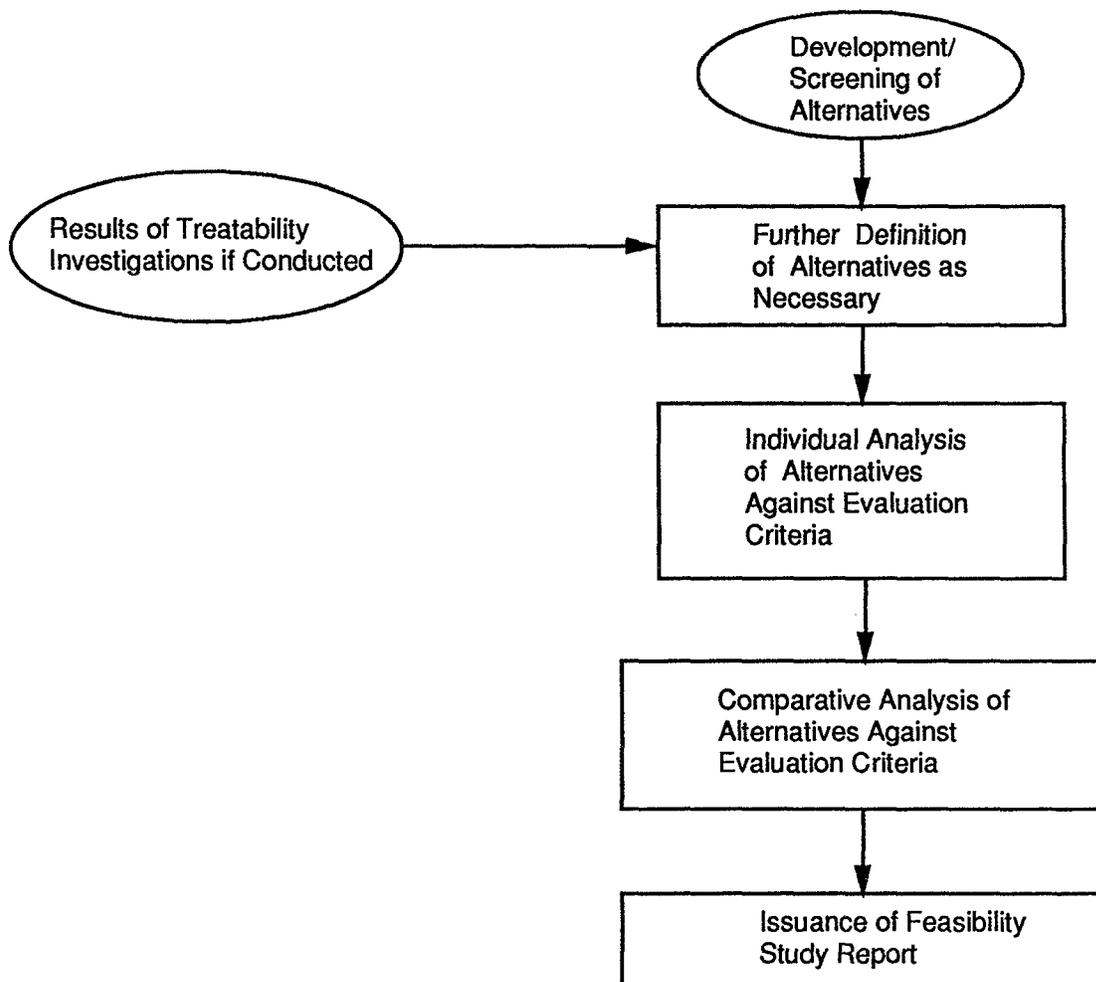
Alternatives are defined during the development and screening phase (see Chapter 4) to match contaminated media with appropriate process options.<sup>1</sup> However, the alternatives selected as the most promising may need to be better defined during the detailed analysis. Each alternative should be reviewed to determine if an additional definition is required to apply the evaluation criteria consistently and to develop order-of-magnitude cost estimates (i.e., having a desired accuracy of +50 percent to -30 percent). The information developed to define alternatives at this stage in the RI/FS process may consist of preliminary design calculations, process flow diagrams, sizing of key process components, preliminary site layouts, and a discussion of limitations, assumptions, and uncertainties concerning each alternative. The following examples illustrate situations in which additional alternative definition is appropriate:

- ! The assumed sizing of the process option must be revised on the basis of results of treatability data (e.g., a taller air stripping tower with more packing is required to attain the treatment target).
- ! A different process option is to be used to represent the technology type on the basis of the results of treatability data (e.g., activated carbon rather than air stripping is required).
- ! The estimated volume of contaminated media has been refined on the basis of additional site characterization data.

As described in Chapter 4, alternatives can be developed and screened on a medium-specific or sitewide basis at the lead agency's discretion. Although it is acceptable to continue the evaluation of alternatives on a medium-specific basis during the detailed analysis, it is encouraged that alternatives be configured to present the decision-maker with a range of discrete options each of which addresses the entire site or operable unit being addressed by the FS.<sup>2</sup> Therefore, if separate alternatives have been developed for different areas or media of the site, it is recommended that they be combined during the detailed analysis phase to present comprehensive

<sup>1</sup> This matching is done by identifying specific remedial action objectives (e.g., a risk-based cleanup target such as  $1 \times 10^{-6}$  and sizing process options to attain the objective (e.g., 10 groundwater extraction wells extracting 50 gpm each, activated carbon treatment for 500 gpm).

<sup>2</sup> This approach will better facilitate and simplify the nine criteria evaluation and preparation of a rationale for remedy selection in the Record of Decision.



**Figure 6-1. Detailed analysis of alternatives.**

options addressing all potential threats posed by the site or that area being addressed by the operable unit. This can be accomplished either at the beginning of the detailed analysis or following the individual analysis when the alternatives are summarized and a comparative analysis is performed.

### 6.2.2 Overview of Evaluation Criteria

The detailed analysis provides the means by which facts are assembled and evaluated to develop the rationale for a remedy selection. Therefore, it is necessary to understand the requirements of the remedy selection process to ensure that the FS analysis provides the sufficient quantity and quality of information to simplify the transition between the FS report and the actual selection of a remedy. The analytical process described here has been developed on the basis of statutory requirements of CERCLA Section 121 (see Section 6.1.1); earlier program initiatives promulgated in the November 20, 1985, National Contingency Plan; and site-specific

experience gained in the Superfund program. The nine evaluation criteria listed in Section 6.1.1 encompass statutory requirements and technical, cost, and institutional considerations the program has determined appropriate for a thorough evaluation.

Assessments against two of the criteria relate directly to statutory findings that must ultimately be made in the ROD. Therefore, these are categorized as threshold criteria in that each alternative must meet them.<sup>3</sup> These two criteria are briefly described below:

- ! Overall Protection of Human Health and the Environment (described in Section 6.2.3.1) – The assessment against this criterion describes how the alternative, as a whole, achieves and maintains protection of human health and the environment.

<sup>3</sup> The ultimate determination and declaration that these finding can be made of the selected remedy is contained in the ROD.

---

! Compliance with ARARs (described in Section 6.2.3.2) – The assessment against this criterion describes how the alternative complies with ARARs, or if a waiver is required and how it is justified. The assessment also addresses other information from advisories, criteria, and guidance that the lead and support agencies have agreed is “to be considered.”

The five criteria listed below are grouped together because they represent the primary criteria upon which the analysis is based.

! Long-term Effectiveness and Permanence (described in Section 6.2.3.3) – The assessment of alternatives against this criterion evaluates the long-term effectiveness of alternatives in maintaining protection of human health and the environment after response objectives have been met.

! Reduction of Toxicity, Mobility, and Volume Through Treatment (described in Section 6.2.3.4) – The assessment against this criterion evaluates the anticipated performance of the specific treatment technologies an alternative may employ.

! Short-term Effectiveness (described in Section 6.2.3.5) – The assessment against this criterion examines the effectiveness of alternatives in protecting human health and the environment during the construction and implementation of a remedy until response objectives have been met.

! Implementability (described in Section 6.2.3.6) – This assessment evaluates the technical and administrative feasibility of alternatives and the availability of required goods and services.

! Cost (described in Section 6.2.3.7) – This assessment evaluates the capital and operation and maintenance (O&M) costs of each alternative.

The level of detail required to analyze each alternative against these evaluation criteria will depend on the type and complexity of the site, the type of technologies and alternatives being considered, and other project-specific considerations. The analysis should be conducted in sufficient detail so that decisionmakers; understand the significant aspects of each alternative and any uncertainties associated with the evaluation (e.g., a cost estimate developed on the basis of a volume of media that could not be defined precisely).

The final two criteria, state or support agency acceptance and community acceptance, will be evaluated following comment on the RI/FS report and the proposed plan and

will be addressed once a final decision is being made and the ROD is being prepared. The criteria are as follows:

! State (Support Agency) Acceptance (described in Section 6.2.3.8) – This assessment reflects the state's (or support agency's) apparent preferences among or concerns about alternatives.

! Community Acceptance (described in Section 6.2.3.9) – This assessment reflects the community's apparent preferences among or concerns about alternatives.

Each of the nine evaluation criteria has been further divided into specific factors to allow a thorough analysis of the alternatives. These factors are shown in Figure 6-2 and discussed in the following sections.

### **6.2.3 Individual Analysis of Alternatives**

#### **6.2.3.1 Overall Protection of Human Health and the Environment**

This evaluation criterion provides a final check to assess whether each alternative provides adequate protection of human health and the environment. The overall assessment of protection draws on the assessments conducted under other evaluation criteria, especially long-term effectiveness and permanence, short-term effectiveness, and compliance with ARARs.

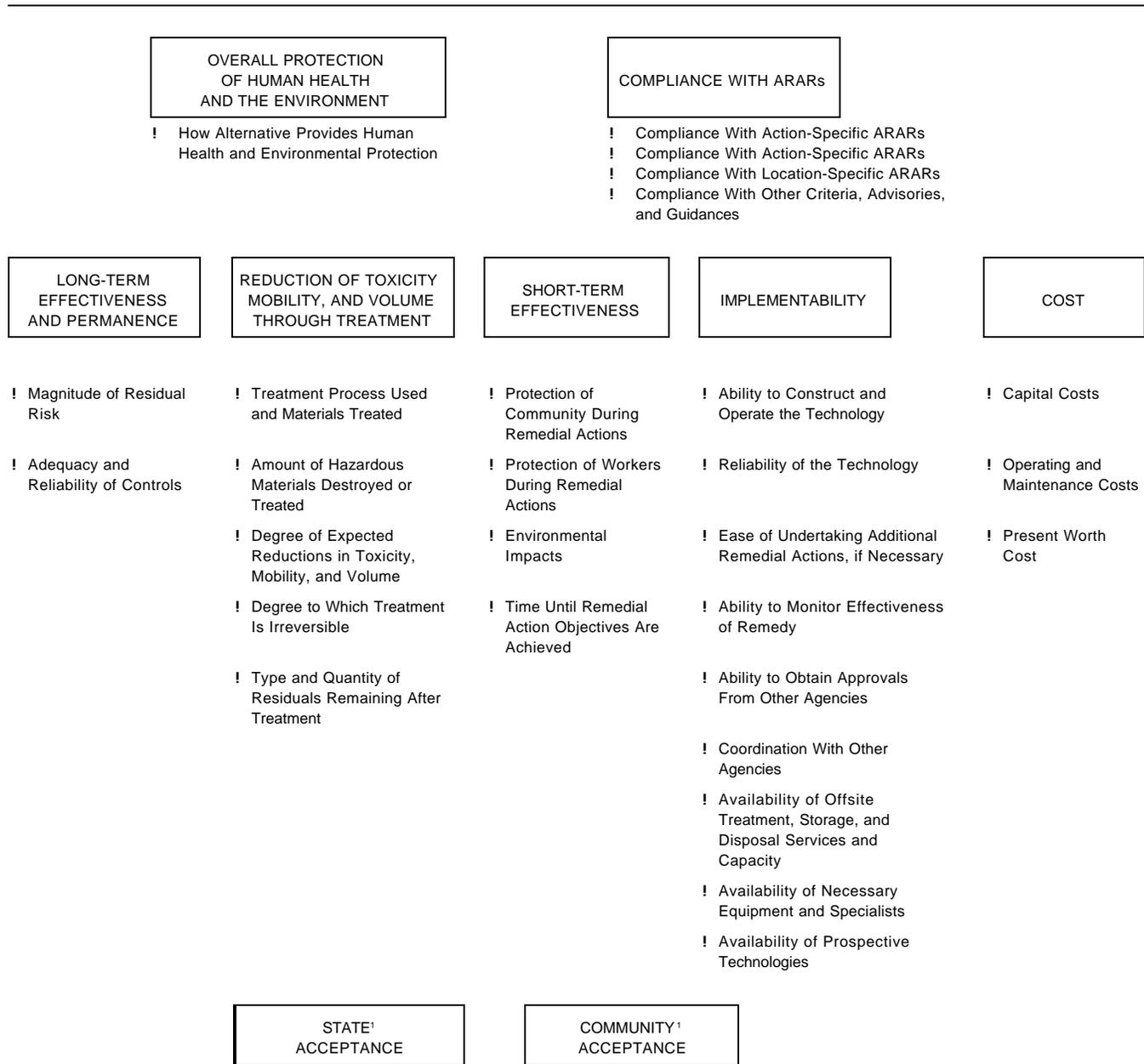
Evaluation of the overall protectiveness of an alternative during the RI/FS should focus on whether a specific alternative achieves adequate protection and should describe how site risks posed through each pathway being addressed by the FS are eliminated, reduced, or controlled through treatment, engineering, or institutional controls. This evaluation also allows for consideration of whether an alternative poses any unacceptable short-term or cross-media impacts.

#### **6.2.3.2 . Compliance with ARARs**

This evaluation criterion is used to determine whether each alternative will meet all of its Federal and State ARARs (as defined in CERCLA Section 121) that have been identified in previous stages of the RI/FS process. The detailed analysis should summarize which requirements are applicable or relevant and appropriate to an alternative<sup>4</sup> and describe how the alternative meets these requirements. When an ARAR is not met, the basis for justifying one of the six waivers allowed under CERCLA (see Section 1.2.1.1) should be discussed.

---

<sup>4</sup>This effort will require input from the support agency.



<sup>1</sup> These criteria are assessed following comment on the RI/FS report and the proposed plan.

**Figure 6-2. Criteria for detailed analysis of alternatives.**

The following should be addressed for each alternative during the detailed analysis of ARARs:<sup>5</sup>

- ! Compliance with chemical-specific ARARs (e.g., maximum contaminant levels) – this factor addresses whether the ARARs can be met, and if not, whether a waiver is appropriate.
- ! Compliance with location-specific ARARs (e.g., preservation of historic sites) – As with other ARAR-related factors, this involves a

<sup>5</sup> Other available information that is not an ARAR (e.g., advisories, criteria, and guidance) may be considered in the analysis if it helps to ensure protectiveness or is otherwise appropriate for use in a specific alternative. These TBC materials should be included in the detailed analysis if the lead and support agencies agree that their inclusion is appropriate.

---

consideration of whether the ARARs can be met or whether a waiver is appropriate.

- ! Compliance with action-specific ARARs (e.g., RCRA minimum technology standards) – It must be determined whether ARARs can be met or will be waived.

The actual determination of which requirements are applicable or relevant and appropriate is made by the lead agency in consultation with the support agency. A summary of these ARARs and whether they will be attained by a specific alternative should be presented in an appendix to the RI/RF report. A suggested format for this summary is provided in Appendix E of this guidance. More detailed guidance on determining whether requirements are applicable or relevant and appropriate is provided in the “CERCLA Compliance with Other Laws Manual” (U.S. EPA, Draft, May 1988)

### 6.2.3.3 Long-Term Effectiveness and Permanence

The evaluation of alternatives under this criterion addresses the results of a remedial action in terms of this risk remaining at the site after response objectives have been met. The primary focus of this evaluation is the extent and effectiveness of the controls that may be required to manage the risk posed by treatment residuals and/or untreated wastes. The following components of the criterion should be addressed for each alternative:

- ! Magnitude or residual risk – This factor assesses the residual risk remaining from untreated waste or treatment residuals at the conclusion of remedial activities, (e.g., after source/soil containment and/or treatment are complete, or after groundwater plume management activities are concluded). The potential for this risk may be measured by numerical standards such as cancer risk levels or the volume or concentration of contaminants in waste, media, or treatment residuals remaining on the site. The characteristics of the residuals should be considered to the degree that they remain hazardous, taking into account their volume, toxicity, mobility, and propensity to bioaccumulate.
- ! Adequacy and reliability of controls – This factor assesses the adequacy and suitability of controls, if any, that are used to manage treatment residuals or untreated wastes that remain at the site. It may include an assessment of containment systems and institutional controls to determine if they are sufficient to ensure that any exposure to human and environmental receptors is within protective levels. This factor also addresses the long-term

reliability of management controls for Providing continued protection from residuals. It includes the assessment of the potential need to replace technical components of the alternative, such as a cap, a slurry wall, or a treatment system; and the potential exposure pathway and the risks posed should the remedial action need replacement.

Table 6-1 lists appropriate questions that may need to be addressed during the analysis of long-term effectiveness.

### 6.2.3.4 Reduction of Toxicity, Mobility, or Volume Through Treatment

This evaluation criterion addresses the statutory preference for selecting remedial actions that employ treatment technologies that permanently and significantly reduce toxicity, mobility, or volume of the hazardous substances as their principal element. This preference is satisfied when treatment is used to reduce the principal threats at a site through destruction of toxic contaminants, reduction of the total mass of toxic contaminants, irreversible reduction in contaminant mobility, or reduction of total volume of contaminated media.

This evaluation would focus on the following specific factors for a particular remedial alternative:

- ! The treatment processes the remedy will employ, and the materials they will treat
- ! The amount of hazardous materials that will be destroyed or treated, including how the principal threat(s) will be addressed
- ! The degree of expected reduction in toxicity, mobility, or volume measured as a percentage of reduction (or order of magnitude)
- ! The degree to which the treatment will be irreversible
- ! The type and quantity of treatment residuals that will remain following treatment
- ! Whether the alternative would satisfy the statutory preference for treatment as a principal element<sup>6</sup>

In evaluating this criterion, an assessment should be made as to whether treatment is used to reduce principal threats, including the extent to which toxicity, mobility, or volume are reduced either alone or in

---

<sup>6</sup> It may be that alternatives for limited actions (e.g., provision of an alternative water supply) will not address principal threats within their narrow scope.

**Table 6-1. Long-Term Effectiveness and Permanence**

Analysis Factor	Specific Factor Considerations
Magnitude of residual risks	<ul style="list-style-type: none"> <li>! What is the magnitude of the remaining risks?</li> <li>! What remaining sources of risk can be identified? How much is due to treatment residuals, and how much is due to untreated residual contamination?</li> <li>! Will a 5-year review be required?</li> </ul>
Adequacy and reliability of controls	<ul style="list-style-type: none"> <li>! What is the likelihood that the technologies will meet required process efficiencies or performance specifications?</li> <li>! What type and degree of long-term management is required?</li> <li>! What are the requirements for long-term monitoring?</li> <li>! What operation and maintenance functions must be performed?</li> <li>! What difficulties and uncertainties may be associated with long-term operation and maintenance?</li> <li>! What is the potential need for replacement of technical components?</li> <li>! What is the magnitude of the threats or risks should the remedial action need replacement?</li> <li>! What is the degree of confidence that controls can adequately handle potential problems?</li> <li>! What are the uncertainties associated with land disposal of residuals and untreated wastes?</li> </ul>

combination. Table 6-2 lists typical questions that may need to be addressed during the analysis of toxicity, mobility, or volume reduction.

#### 6.2.3.5 Short-term Effectiveness

This evaluation criterion addresses the effects of the alternative during the construction and implementation phase until remedial response objectives are met (e.g., a cleanup target has been met). Under this criterion, alternatives should be evaluated with respect to their effects on human health and the environment during implementation of the remedial action. The following factors should be addressed as appropriate for each alternative:

- ! Protection of the community during remedial actions – This aspect of short-term effectiveness addresses any risk that results from implementation of the proposed remedial action, such as dust from excavation, transportation of hazardous materials, or air-quality impacts from a stripping tower operation that may affect human health.
- ! Protection of workers during remedial actions – This factor assesses threats that may be posed to workers and the effectiveness and reliability of protective measures that would be taken.
- ! Environmental impacts – This factor addresses the potential adverse environmental impacts that may result from the construction and implementation of an alternative and evaluates the reliability of the available mitigation measures in preventing or reducing the potential impacts.
- ! Time until remedial response objectives are achieved

- This factor includes an estimate of time required to achieve protection for either the entire site or individual elements associated with specific site areas or threats.

Table 6-3 lists appropriate questions that may need to be addressed during the analysis of short-term effectiveness.

#### 6.2.3.6 Implementability

The implementability criterion addresses the technical and administrative feasibility of implementing an alternative and the availability of various services and materials required during its implementation. This criterion involves analysis of the following factors:

- ! Technical feasibility
  - Construction and operation – This relates to the technical difficulties and unknowns associated with a technology. This was initially identified for specific technologies during the development and screening of alternatives and is addressed again in the detailed analysis for the alternative as a whole.
  - Reliability of technology – This focuses on the likelihood that technical problems associated with implementation will lead to schedule delays.
  - Ease of undertaking additional remedial action – This includes a discussion of what, if any, future remedial actions may need to be undertaken and how difficult it would be to implement such additional actions. This is particularly applicable for an FS addressing an interim action at a site where additional operable units may be analyzed at a later time.

**Table 6-2. Reduction of Toxicity, Mobility, or Volume Through Treatment**

Analysis Factor	Specific Factor Considerations
Treatment process and remedy	! Does the treatment process employed address the principal threats? ! Are there any special requirements for the treatment process?
Amount of hazardous material destroyed or treated.	! What portion (mass, volume) of contaminated material is destroyed? ! What portion (mass, volume) of contaminated material is treated?
Reduction in toxicity, mobility, or volume	! To what extent is the total mass of toxic contaminants reduced? ! To what extent is the mobility of toxic contaminants reduced? ! To what extent is the volume of toxic contaminants reduced?
Irreversibility of the treatment	! To what extent are the effects of treatment irreversible?
Type and quantity of treatment residual	! What residuals remain? ! What are their quantities and characteristics? ! What risks do treatment residuals pose?
Statutory preference for treatment as a principal element	! Are principal threats within the scope of the action? ! Is treatment used to reduce inherent hazards posed by principal threats at the site?

**Table 6-3. Short-Term Effectiveness**

Analysis Factor	Basis for Evaluation During Detailed Analysis
Protection of community during remedial actions	! What are the risks to the community during remedial actions that must be addressed? ! How will the risks to the community be addressed and mitigated? ! What risks remain to the community that cannot be readily controlled?
Protection of workers during remedial actions	! What are the risks to the workers that must be addressed? ! What risks remain to the workers that cannot be readily controlled? ! How will the risks to the workers be addressed and mitigated?
Environmental impacts	! What environmental impacts are expected with the construction and implementation of the alternative? ! What are the available mitigation measures to be used and what is their reliability to minimize potential impacts? ! What are the impacts that cannot be avoided should the alternative be implemented?
Time until remedial response objectives are achieved	! How long until protection against the threats being addressed by the specific action is achieved? ! How long until any remaining site threats will be addressed? ! How long until remedial response objectives are achieved?

- Monitoring considerations – This addresses the ability to monitor the effectiveness of the remedy and includes an evaluation of the risks of exposure should monitoring be insufficient to detect a system failure.

**! Administrative feasibility**

- Activities needed to coordinate with other offices and agencies (e.g., obtaining permits for offsite activities or rights-of-way for construction)

**! Availability of services and materials**

- Availability of adequate offsite treatment, storage capacity, and disposal services

- Availability of necessary equipment and specialists, and provisions to ensure any necessary additional resources

- Availability of services and materials, plus the potential for obtaining competitive bids, which may be particularly important for innovative technologies

- Availability of prospective technologies

Table 6-4 lists typical questions that may need to be addressed during the analysis of implementability.

**6.2.3.7 Cost**

A comprehensive discussion of costing procedures for CERCLA site is contained in the *Remedial Action*

**Table 6-4. Implementability**

Analysis Factor	Specific Factor Considerations
<i>Technical Feasibility</i>	
Ability to construct and operate technology	! What difficulties may be associated with construction? ! What uncertainties are related to construction?
Reliability of technology	! What is the likelihood that technical problems will lead to schedule delays?
Ease of undertaking additional remedial action, if necessary	! What likely future remedial actions may be anticipated? ! How difficult would it be to implement the additional remedial actions, if required?
Monitoring considerations	! Do migration or exposure pathways exist that cannot be monitored adequately? ! What risks of exposure exist should monitoring be insufficient to detect failure?
<i>Administrative Feasibility</i>	
Coordination with other agencies	! What steps are required to coordinate with other agencies? ! What steps are required to set up long-term or future coordination among agencies? ! Can permits for offsite activities be obtained if required?
<i>Availability of Services and Materials</i>	
Availability of treatment, storage capacity, and disposal services	! Are adequate treatment, storage capacity, and disposal services available? ! How much additional capacity is necessary? ! Does the lack of capacity prevent implementation? ! What additional provisions are required to ensure the needed additional capacity?
Availability of necessary equipment and specialists	! Are the necessary equipment and specialists available? ! What additional equipment and specialists are required? ! Does the lack of equipment and specialists prevent implementation? ! What additional provisions are required to ensure the needed equipment and specialists?
Availability of prospective technologies	! Are technologies under consideration generally available and sufficiently demonstrated for the specific application? ! Will technologies require further development before they can be applied full-scale to the type of waste at the site? ! When should the technology be available for full-scale use? ! Will more than one vendor be available to provide a competitive bid?

*Costing Procedures Manual* (U.S. EPA, September 1985). The application of cost estimates to the detailed analysis is discussed in the following paragraphs.

**Capital Costs.** Capital costs consist of direct (construction) and indirect (nonconstruction and overhead) costs. Direct costs include expenditures for the equipment, labor, and materials necessary to install remedial actions. Indirect costs include expenditures for engineering, financial, and other services that are not part of actual installation activities but are required to complete the installation of remedial alternatives. (Sales taxes normally do not apply to Superfund actions.) Costs that must be incurred in the future as part of the remedial action alternative should be identified and noted for the year in which they will occur. The distribution of costs over time will be a critical factor in making tradeoffs between capital-intensive technologies (including alternative treatment and destruction technologies) and less capital-intensive technologies (such as pump and treatment systems).

Direct capital costs may include the following:

- ! Construction costs – Costs of materials, labor and equipment required to install a remedial action
- ! Equipment costs – Costs of remedial action and service equipment necessary to enact the remedy (these materials remain until the site remedy is complete)
- ! Land and site-development costs – Expenses associated with the purchase of land and the site preparation costs of existing property
- ! Buildings and services costs – Costs of process and nonprocess buildings, utility connections, purchased services, and disposal costs
- ! Relocation expenses – Costs of temporary or permanent accommodations for affected nearby

---

residents. (Since cost estimates for relocations can be complicated, FEMA authorities and EPA Headquarters should be consulted in estimating these costs.)

- ! Disposal costs – Costs of transporting and disposing of waste material such as drums and contaminated soils

Indirect capital costs may include:

- ! Engineering expenses – Costs of administration, design, construction supervision, drafting, and treatability testing
- ! License or permit costs – Administrative and technical costs necessary to obtain licenses and permits for installation and operation of offsite activities
- ! Startup and shakedown costs – Costs incurred to ensure system is operational and functional
- ! Contingency allowances – Funds to cover costs resulting from unforeseen circumstances, such as adverse weather conditions, strikes, or contaminant not detected during site characterization

*Annual O&M Costs.* Annual O&M costs are post-construction costs necessary to ensure the continued effectiveness of a remedial action. The following annual O&M cost components should be considered:

- ! Operating labor costs – Wages, salaries, training, overhead, and fringe benefits associated with the labor needed for post-construction operations
- ! Maintenance materials and labor costs – Costs for labor, parts, and other resources required for routine maintenance of facilities and equipment
- ! Auxiliary materials and energy – Costs of such items as chemicals and electricity for treatment plant operations, water and sewer services, and fuel
- ! Disposal of residues – Costs to treat or dispose of residuals such as sludges from treatment processes or spent activated carbon
- ! Purchased services – Sampling costs, laboratory fees, and professional fees for which the need can be predicted
- ! Administrative costs – Costs associated with the administration of remedial O&M not included under other categories
- ! Insurance, taxes, and licensing costs – Costs of such items as liability and sudden accidental

insurance; real estate taxes on purchased land or rights-of-way; licensing fees for certain technologies; and permit renewal and reporting costs

- ! Maintenance reserve and contingency funds – Annual payments into escrow funds to cover costs of anticipated replacement or rebuilding of equipment and any large unanticipated O&M costs
- ! Rehabilitation costs – Cost for maintaining equipment or structures that wear out over time
- ! Costs of periodic site reviews – Costs for site reviews that are conducted at least every 5 years if wastes above health-based levels remain at the site

The costs of potential future remedial actions should be addressed, and if appropriate, should be included when there is a reasonable expectation that a major component of the alternative will fail and require replacement to prevent significant exposure to contaminants. Analyses described under Section 6.2.3.3, “Long-term Effectiveness and Permanence,” should be used to determine which alternatives may result in future costs. It is not expected that a detailed statistical analysis will be required to identify probable future costs. Rather, qualitative engineering judgment should be used and the rationale documented in the FS report.

*Accuracy of Cost Estimates.* Site characterization and treatability investigation information should permit the user to refine cost estimates for remedial action alternatives. It is important to consider the accuracy of costs developed for alternatives in the FS. Typically, these “study estimate” costs made during the FS are expected to provide an accuracy of +50 percent to -30 percent and are prepared using data available from the RI. It should be indicated when it is not realistic to achieve this level of accuracy.

*Present Worth Analysis.* A present worth analysis is used to evaluate expenditures that occur over different time periods by discounting all future costs to a common base year, usually the current year. This allows the cost of remedial action alternatives to be compared on the basis of a single figure representing the amount of money that, if invested in the base year and disbursed as needed, would be sufficient to cover all costs associated with the remedial action over its planned life.

In conducting the present worth analysis, assumptions must be made regarding the discount rate and the period of performance. The Superfund program recommends that a discount rate of 5 percent before taxes and after inflation be assumed. Estimates of costs in each of the planning years are

---

made in constant dollars, representing the general purchasing power at the time of construction. In general, the period of performance for costing purposes should not exceed 30 years for the purpose of the detailed analysis.

*Cost Sensitivity Analysis.* After the present worth of each remedial action alternative is calculated individual costs may be evaluated through sensitivity analysis if there is sufficient uncertainty concerning specific assumptions. A sensitivity analysis assesses the effect that variations in specific assumptions associated with the design, implementation, operation, discount rate, and effective life of an alternative can have on the estimated cost of the alternative. These assumptions depend on the accuracy of the data developed during the site characterization and treatability investigation and on predictions of the future behavior of the technology. Therefore, these assumptions are subject to varying degrees of uncertainty from site to site. The potential effect on the cost of an alternative because of these uncertainties can be observed by varying the assumptions and noting the effects on estimated costs. Sensitivity analyses can also be used to optimize the design of a remedial action alternative, particularly when design parameters are interdependent (e.g., treatment plant capacity for contaminated ground water and the length of the period of performance).

Use of sensitivity analyses should be considered for the factors that can significantly change overall costs of an alternative with only small changes in their values, especially if the factors have a high degree of uncertainty associated with them. Other factors chosen for analysis may include those factors for which the expected (or estimated) value is highly uncertain. The results of such an analysis can be used to identify worst-case scenarios and to revise estimates of contingency or reserve funds.

The following factors are potential candidates for consideration in conducting a sensitivity analysis:

- ! The effective life of a remedial action
- ! The O&M costs
- ! The duration of cleanup
- ! The volume, of contaminated material, given the uncertainty about site conditions
- ! Other design parameters (e.g., the size of the treatment system)
- ! The discount rate (5 percent should be used to compare alternative costs, however, a range of 3 to 10 percent can be used to investigate uncertainties)

The results of a sensitivity analysis, should be discussed during the comparison of alternatives. Areas

of uncertainty that may have a significant effect on the cost of an alternative should be highlighted, and a rationale should be presented for selection of the most probable value of the parameter.

### **6.2.3.8 State (Support Agency) Acceptance**

This assessment evaluates the technical and administrative issues and concerns the state (or support agency in the case of State-lead sites) may have regarding each of the alternatives. As discussed earlier, this criterion will be addressed in the ROD once comments on the RI/FS report and proposed plan have been received.

### **6.2.3.9 Community Acceptance**

This assessment evaluates the issues and concerns the public may have regarding each of the alternatives. As with state acceptance, this criterion will be addressed in the ROD once comments on the RI/FS report and proposed plan have been received.

## **6.2.4 Presentation of Individual Analysis**

The analysis of individual alternatives with respect to the specified criteria should be presented in the FS report as a narrative discussion accompanied by a summary table. This information will be used to compare the alternatives and support a subsequent analysis of the alternatives made by the decision-maker in the remedy selection process. The narrative discussion should, for each alternative, provide (1) a description of the alternative and (2) a discussion of the individual criteria assessment.

The alternative description should provide data on technology components (use of innovative technologies should be identified), quantities of hazardous materials handled, time required for implementation, process sizing, implementation requirements, and assumptions. These descriptions, by clearly articulating the various waste management strategies for each alternative, will also serve as the basis for documenting the rationale of the applicability or relevance and appropriateness of potential ARARs for each alternative should be identified and integrated into these discussions.

The narrative discussion of the analysis should, for each alternative, present the assessment of the alternative against each of the criteria.<sup>7</sup> This discussion should focus on how, and to what extent, the various factors within each of the criteria are

---

<sup>7</sup> As noted previously, State and community acceptance will be addressed in the ROD once comments have been received on the RI/FS report and proposed plan.

---

addressed.<sup>8</sup> The uncertainties associated with specific alternatives should be included when changes in assumptions or unknown conditions could affect the analysis (e.g., the time to attain groundwater cleanup targets may be twice as long as estimated if assumptions made about aquifer characteristics for a specific ground-water extraction alternative are incorrect.) An example of an individual analysis is presented in Appendix F.

The FS also should include a summary table highlighting the assessment of each alternative with respect to each of the nine criteria. Appendix F provides an example of such a summary table.

### **6.2.5 Comparative Analysis of Alternatives**

Once the alternatives have been described and individually assessed against the criteria, a comparative analysis should be conducted to evaluate the relative performance of each alternative in relation to each specific evaluation criterion. This is in contrast to the preceding analysis in which each alternative was analyzed independently without a consideration of other alternatives. The purpose of this comparative analysis is to identify the advantages and disadvantages of each alternative relative to one another so that the key tradeoffs the decisionmaker must balance can be identified.

Overall protection of human health and the environment and compliance with ARARs will generally serve as threshold determinations in that they must be met by any alternative in order for it to be eligible for selection. The next five criteria (long-term effectiveness and permanence; reduction of toxicity, mobility, and volume through treatment; short-term effectiveness; implementability; and cost) will generally require the most discussion because the major tradeoffs among alternatives will most frequently relate to one or more of these five.

State and community acceptance will be addressed in the ROD once formal comments on the RI/FS report and the proposed plan have been received and a final remedy selection decision is being made.

### **6.2.6 Presentation of Comparative Analysis**

The comparative analysis should include a narrative discussion describing the strengths and weaknesses of the alternatives relative to one another with respect to each criterion, and how reasonable variations of key

uncertainties could change the expectations of their relative performance. An effective way of organizing this section is, under each individual criterion, to discuss the alternative(s) that performs the best overall in that category, with other alternatives discussed in the relative order in which they perform. If innovative technologies are being considered, their potential advantages in cost or performance and the degree of uncertainty in their expected performance (as compared with more demonstrated technologies) should also be discussed. Appendix F provides an example of a comparative analysis.

The presentation of differences among alternatives can be measured either qualitatively or quantitatively, as appropriate, and should identify substantive differences (e.g., greater short-term effectiveness concerns, greater cost, etc.). Quantitative information that was used to assess the alternatives (e.g., specific cost estimates, time until response objectives would be obtained, and levels of residual contamination) should be included in these discussions.

## **6.3 Post-RI/FS Selection of the Preferred Alternative**

Following completion of the RI/FS, the results of the detailed analyses, when combined with the risk management judgments made by the decision-maker, become the rationale for selecting a preferred alternative and preparing the proposed plan. Therefore, the results of the detailed analysis, or more specifically the comparative analysis, should serve to highlight the relative advantages and disadvantages of each alternative so that the key tradeoffs can be identified. It will be these key tradeoffs coupled with risk management decisions that will serve as the basis for the rationale and provide a transition between the RI/FS report and the development of a proposed plan (and ultimately a ROD). Specific guidance for preparing proposed plans and RODs is provided in the draft guidance on preparing Superfund decision documents.

## **6.4 Community Relations During Detailed Analysis**

Site-specific community relations activities should be identified in the community relations plan prepared previously. While appropriate modifications of activities may be made to the community relations plan as the project progresses, the plan should generally be implemented as written to ensure that the community is informed of the alternatives being evaluated and is provided a reasonable opportunity to provide input to the decision-making process.

Often, a fact sheet is prepared that summarizes the feasible alternatives being evaluated. As appropriate, small group consultations or public meetings may be

---

<sup>8</sup> The factors presented in Tables 6-1 through 6-4 have been included to illustrate typical concerns that may need to be addressed during the detailed analysis. It will not be necessary or appropriate in all situations to address every factor in these tables for each alternative being evaluated. Under some circumstances, it may be useful to address other factors not presented in these tables to ensure a better understanding of how an alternative performs with respect to a particular criterion.

held to discuss community concerns and explain alternatives under consideration. Public officials should be briefed and press releases prepared describing the alternatives. Other activities identified in the community relations plan should be implemented.

The objective of community relations during the detailed analysis is to assist the community in understanding the alternatives and the specific considerations the lead agency must take into account in selecting an alternative. In this way, the community is prepared to provide meaningful input during the upcoming public comment period.

## 6.5 Reporting and Communication During Detailed Analysis

Once the draft RI/FS report is prepared, the lead agency obtains the support agency's review and concurrence, the public's review and comment, and local agency and PRP input, if appropriate. The RI/FS report also provides a basis for remedy selection by EPA (or concurrence on State and Federal facility remedy) and documents the development and analysis of alternatives. A suggested FS report format is given in Table 6-5.

**Table 6-5. Suggested FS Report Format**

### Executive Summary

1. Introduction
  - 1.1 Purpose and Organization Report
  - 1.2 Background Information (Summarized from RI Report)
    - 1.2.1 Site Description
    - 1.2.2 Site History
    - 1.2.3 Nature and Extent of Contamination
    - 1.2.4 Contaminant Fate and Transport
    - 1.2.5 Baseline Risk Assessment
2. Identification and Screening of Technologies
  - 2.1 Introduction
  - 2.2 Remedial Action Objectives –  
Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.) For each medium, the following should be discussed:
    - S Contaminants of interest
    - S Allowable exposure based on risk assessment (including ARARs)
    - S Development of remediation goals
  - 2.3 General Response Actions –  
For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
  - 2.4 Identification and Screening of Technology Types and Process Options – For each medium of interest, describes:
    - 2.4.1 Identification and Screening of Technologies
    - 2.4.2 Evaluation of Technologies and Selection of Representative Technologies
3. Development and Screening of Alternatives
  - 3.1 Development of Alternatives –  
Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the site as a whole.
  - 3.2 Screening of Alternatives (if conducted)
    - 3.2.1 Introduction
    - 3.2.2 Alternative 1
      - 3.2.2.1 Description
      - 3.2.3.2 Evaluation
    - 3.2.3 Alternative 2
      - 3.2.3.1 Description
      - 3.2.3.2 Evaluation
    - 3.2.4 Alternative 3
4. Detailed Analysis of Alternatives
  - 4.1 Introduction
  - 4.2 Individual Analysis of Alternatives
    - 4.2.1 Alternative 1
      - 4.2.1.1 Description
      - 4.2.1.2 Assessment
    - 4.2.2 Alternative 2
      - 4.2.2.1 Description
      - 4.2.2.2 Assessment
    - 4.2.3 Alternative 3
  - 4.3 Comparative Analysis

Bibliography

Appendices

## **Tentative Schedule for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Cleanup Actions at the Former Hardesty Federal Complex**

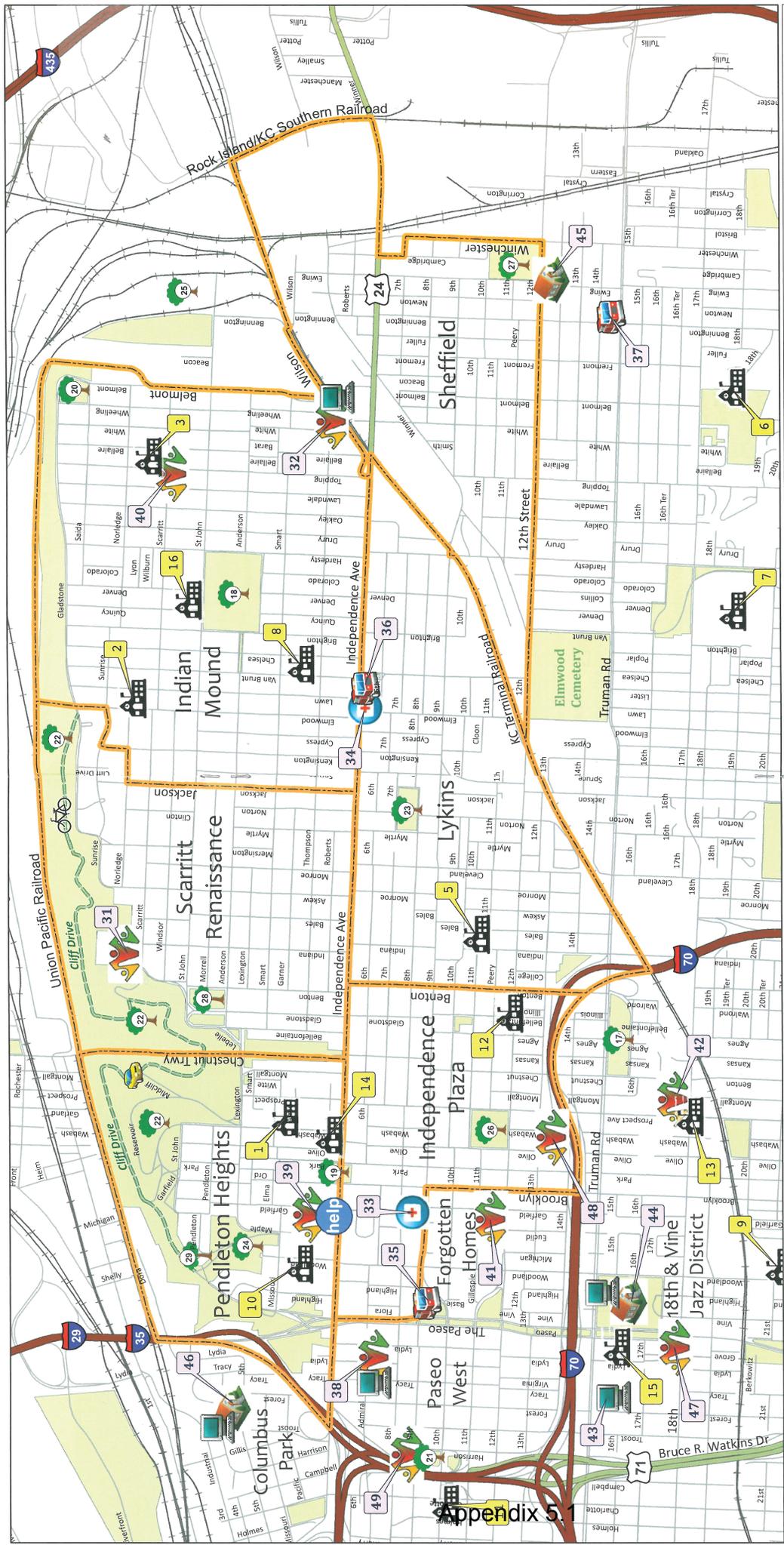
Below is a tentative schedule for milestones in the cleanup process at the former Hardesty Federal Complex. Many activities will occur between milestones.

- Preliminary Assessment and Site Inspection (PA/SI): Complete 2002
- Remedial Investigation (RI): November 2014
- Feasibility Study (FS): April 2015
- Proposed Plan: June 2015
- Record of Decision (ROD): October 2015
- Remedial Design (RD): April 2016
- Remedial Action (RA): October 2016
- Interim Remedial Action Report: April 2017
- Operating Properly and Successfully: October 2017
- Long Term Operations and Monitoring (LTO&M): Quarterly to annually in accordance with approved plans
- Remedial Action Completion Report: October 2025

For more information about the cleanup process, visit <http://www.epa.gov/superfund/cleanup/>.

For information en Espanol, visit <http://www.epa.gov/superfund/spanish/index.htm>.





## Historic Northeast Kansas City Resource Guide Map

November 2011

0.25 0 0.25 Miles

Map prepared by: The L/M/KC

### Schools

1. Garfield Elementary School
2. Gladstone Elementary School
3. James Elementary School
4. J. A. Rodgers Elementary School
5. Whittier Elementary School
6. Trailwoods Elementary School
7. East High School
8. Northeast High School
9. Lincoln College Prep Academy
10. Della Lamb Charter Elem. School (K-1)
11. Della Lamb (2-5)
12. Della Lamb (6)

### Parks

17. Benton Plaza Park
18. Budd Park
19. Independence Plaza
20. Indian Mound Park
21. Margaret Kemp Park
22. Kessler Park
23. Lykins Square
24. Maple Park

### Other Resources

31. Kansas City Museum
32. KC Public Library - Northeast Branch
33. Samuel U. Rodgers Health Center
34. Neighborhood Family Care Clinic
35. Fire Station No. 10
36. Fire Station No. 23

### Community Center

### Community Resource

### Clinic/Health Care

### Fire Station

### Computer/Web Access

### Neighborhood Boundaries

### 25. Northeast Athletic Fields

14. Scuola Vita Nuova Charter School
15. Urban Comm. Leadership Acad.
16. Holy Cross Catholic School
25. Northeast Athletic Fields
26. Prospect Plaza Park
27. Sheffield Park
28. The Concourse
29. Traber Garden
30. Winner Park

### 37. Fire Station No. 27

38. Hope Faith Ministries
39. Don Bosco & HELP Centers
40. Mattie Rhodes Center - Northeast
41. Somall Foundation
42. Vietnamese American Community
43. KCMo School Dist. Parent Resource Center
44. Gregg Klize Community Center
45. Whatsoever Community Center
46. Garrison Community Center
47. Full Employment Council - Employment Office
48. City Union Mission - Shelter
49. reStart, Inc. - Shelter



H6: RACE OF HOUSEHOLDER -  
2010 Census Summary File 1

NOTE: For information on confidentiality protection, nonsampling error, and definitions, see <http://www.census.gov/prod/cen2010/doc/sf1.pdf>.

	Block Group 2, Census Tract 6, Kansas City city (part), Blue township, Jackson County, Missouri	Block Group 3, Census Tract 6, Kansas City city (part), Blue township, Jackson County, Missouri	Block Group 2, Census Tract 7 (part), Kansas City city (part), Kaw township, Jackson County, Missouri	Block Group 3, Census Tract 7 (part), Kansas City city (part), Kaw township, Jackson County, Missouri	Block Group 1 (part), Census Tract 19 (part), Kansas City city (part), Blue township, Jackson	Block Group 2 (part), Census Tract 19 (part), Kansas City city (part), Blue township, Jackson	Block Group 1, Census Tract 20, Kansas City city (part), Blue township, Jackson County, Missouri	Block Group 2, Census Tract 20, Kansas City city (part), Blue township, Jackson County, Missouri
Total:	477	291	249	310	0	112	325	418
Householder who is White alone	278	169	149	154	0	59	176	221
Householder who is Black or African American	40	15	25	26	0	34	27	25
Householder who is American Indian or Alaska Native	7	1	2	2	0	0	3	4
Householder who is Asian alone	18	14	18	43	0	1	22	13
Householder who is Native Hawaiian or Other Pacific Islander alone	2	0	0	0	0	0	0	0
Householder who is Some Other Race	116	79	45	73	0	15	76	137
Householder who is Two or More Races	16	13	10	12	0	3	21	18

Source: U.S. Census Bureau, 2010

P18: HOUSEHOLD TYPE - Universe:  
2010 Census Summary File 1

NOTE: For information on confidentiality protection, nonsampling error, and definitions, see <http://www.census.gov/prod/cen2010/doc/sf1.pdf>.

	Block Group 2, Census Tract 6, Kansas City city (part), Blue township, Jackson County,	Block Group 3, Census Tract 6, Kansas City city (part), Blue township, Jackson County,	Block Group 2, Census Tract 7 (part), Kansas City city (part), Kaw township, Jackson	Block Group 3, Census Tract 7 (part), Kansas City city (part), Kaw township, Jackson	Block Group 1 (part), Census Tract 19 (part), Kansas City city (part), Blue township,	Block Group 2 (part), Census Tract 19 (part), Kansas City city (part), Blue township,	Block Group 1, Census Tract 20, Kansas City city (part), Blue township, Jackson County,	Block Group 2, Census Tract 20, Kansas City city (part), Blue township, Jackson County,
Total:	477	291	249	310	0	112	325	418
Family households:	310	203	178	215	0	57	228	297
Husband-wife family	186	132	104	120	0	30	116	169
Other family:	124	71	74	95	0	27	112	128
Male householder, no wife present	40	21	21	42	0	6	41	58
Female householder, no husband	84	50	53	53	0	21	71	70
Nonfamily households:	167	88	71	95	0	55	97	121
Householder living alone	131	58	55	69	0	47	80	92
Householder not living alone	36	30	16	26	0	8	17	29

NOTE: A household that has at least one

member of the household related to the householder by birth, marriage, or adoption is a "Family household." Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. Responses of "same-sex spouse" were edited during processing to "unmarried partner."

"Nonfamily households" consist of people living alone and households which do not have any members related to the householder by birth, marriage, or adoption.

Source: U.S. Census Bureau, 2010

P12: SEX BY AGE - Universe: Total  
 2010 Census Summary File 1  
 NOTE: For information on confidentiality  
 protection, nonsampling error, and  
 definitions, see  
<http://www.census.gov/prod/cen2010/doc/sf1.pdf>.

	Block Group 2, Census Tract 6, Kansas City city (part), Blue township, Jackson County,	Block Group 3, Census Tract 6, Kansas City city (part), Blue township, Jackson County,	Block Group 2, Census Tract 7 (part), Kansas City city (part), Kaw township, Jackson	Block Group 3, Census Tract 7 (part), Kansas City city (part), Kaw township, Jackson	Block Group 1 (part), Census Tract 19 (part), Kansas City city (part), Blue township,	Block Group 2 (part), Census Tract 19 (part), Kansas City city (part), Blue township,	Block Group 1, Census Tract 20, Kansas City city (part), Blue township, Jackson County,	Block Group 2, Census Tract 20, Kansas City city (part), Blue township, Jackson County,
Total:	1,450	962	809	999	0	274	979	1,357
Male:	786	475	427	505	0	140	489	683
Under 5 years	90	56	50	48	0	9	42	90
5 to 9 years	69	35	47	40	0	9	52	62
10 to 14 years	64	27	37	48	0	7	28	47
15 to 17 years	30	16	21	15	0	3	18	30
18 and 19 years	19	20	12	16	0	6	18	19
20 years	13	8	3	10	0	4	6	6
21 years	6	11	9	4	0	2	4	10
22 to 24 years	37	30	15	34	0	5	26	38
25 to 29 years	64	31	28	36	0	15	37	61
30 to 34 years	66	29	31	40	0	14	42	53
35 to 39 years	67	38	37	33	0	8	47	52
40 to 44 years	48	38	28	35	0	12	39	44
45 to 49 years	61	33	22	30	0	10	43	51
50 to 54 years	53	28	25	25	0	10	34	31
55 to 59 years	42	27	21	25	0	10	16	27
60 and 61 years	10	11	6	13	0	3	7	14
62 to 64 years	9	6	9	17	0	1	4	11
65 and 66 years	7	3	2	4	0	3	3	9
67 to 69 years	11	4	7	11	0	2	5	5
70 to 74 years	5	9	5	12	0	1	5	6

75 to 79 years	8	3	4	3	0	2	5	10
80 to 84 years	5	6	5	4	0	3	2	3
85 years and over	2	6	3	2	0	1	6	4
Female:	664	487	382	494	0	134	490	674
Under 5 years	67	59	44	45	0	11	46	94
5 to 9 years	52	43	27	49	0	11	46	58
10 to 14 years	45	39	32	33	0	12	31	52
15 to 17 years	27	27	27	24	0	3	17	34
18 and 19 years	27	14	7	11	0	2	19	19
20 years	5	11	4	3	0	3	19	11
21 years	11	9	3	12	0	4	3	9
22 to 24 years	37	18	15	20	0	4	24	44
25 to 29 years	50	30	24	40	0	12	36	50
30 to 34 years	57	30	24	39	0	12	31	54
35 to 39 years	43	29	39	35	0	5	25	42
40 to 44 years	36	29	17	43	0	14	39	35
45 to 49 years	56	22	24	23	0	8	40	39
50 to 54 years	41	37	23	34	0	7	30	33
55 to 59 years	33	23	24	20	0	6	19	28
60 and 61 years	11	5	3	7	0	7	9	20
62 to 64 years	11	9	7	11	0	3	14	12
65 and 66 years	6	4	9	7	0	2	4	8
67 to 69 years	7	11	6	9	0	1	4	6
70 to 74 years	8	8	7	9	0	0	11	8
75 to 79 years	12	18	8	5	0	1	10	9
80 to 84 years	9	6	2	9	0	2	6	4
85 years and over	13	6	6	6	0	4	7	5

Source: U.S. Census Bureau, 2010

DP05: ACS DEMOGRAPHIC AND HOUSING ESTIMATES  
2007-2011 American Community Survey 5-

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

SEX AND AGE	Census Tract 6, Jackson		Census Tract 7, Jackson		Census Tract 19, Jackson		Census Tract 20, Jackson	
	Estimate	Percent	Estimate	Percent	Estimate	Percent	Estimate	Percent
Total population	4,651	4.651	4,269	4.269	3,783	3.783	2,280	2.280
Male	2,226	47.9%	2,234	52.3%	1,945	51.4%	1,292	56.7%
Female	2,425	52.1%	2,035	47.7%	1,838	48.6%	988	43.3%
Under 5 years	587	12.6%	425	10.0%	311	8.2%	269	11.8%
5 to 9 years	497	10.7%	487	11.4%	610	16.1%	231	10.1%
10 to 14 years	333	7.2%	295	6.9%	271	7.2%	274	12.0%
15 to 19 years	228	4.9%	398	9.3%	182	4.8%	76	3.3%
20 to 24 years	318	6.8%	193	4.5%	275	7.3%	94	4.1%
25 to 34 years	881	18.9%	736	17.2%	672	17.8%	395	17.3%
35 to 44 years	621	13.4%	459	10.8%	550	14.5%	332	14.6%

45 to 54 years	521	11.2%	582	13.6%	320	8.5%	299	13.1%
55 to 59 years	174	3.7%	179	4.2%	224	5.9%	78	3.4%
60 to 64 years	129	2.8%	134	3.1%	132	3.5%	119	5.2%
65 to 74 years	151	3.2%	220	5.2%	135	3.6%	64	2.8%
75 to 84 years	144	3.1%	86	2.0%	75	2.0%	28	1.2%
85 years and over	67	1.4%	75	1.8%	26	0.7%	21	0.9%
Median age (years)	30.0	(X)	29.6	(X)	27.5	(X)	31.0	(X)
18 years and over	3,091	66.5%	2,836	66.4%	2,439	64.5%	1,474	64.6%
21 years and over	2,927	62.9%	2,651	62.1%	2,306	61.0%	1,405	61.6%
62 years and over	446	9.6%	495	11.6%	296	7.8%	183	8.0%
65 years and over	362	7.8%	381	8.9%	236	6.2%	113	5.0%
18 years and over	3,091	3.091	2,836	2.836	2,439	2.439	1,474	1.474
Male	1,451	46.9%	1,344	47.4%	1,199	49.2%	752	51.0%
Female	1,640	53.1%	1,492	52.6%	1,240	50.8%	722	49.0%
65 years and over	362	362	381	381	236	236	113	113
Male	102	28.2%	181	47.5%	134	56.8%	50	44.2%
Female	260	71.8%	200	52.5%	102	43.2%	63	55.8%
RACE								
Total population	4,651	4,651	4,269	4,269	3,783	3,783	2,280	2,280
One race	4,353	93.6%	4,150	97.2%	3,646	96.4%	1,866	81.8%
Two or more races	298	6.4%	119	2.8%	137	3.6%	414	18.2%
One race	4,353	93.6%	4,150	97.2%	3,646	96.4%	1,866	81.8%
White	3,455	74.3%	2,346	55.0%	1,589	42.0%	944	41.4%
Black or African American	63	1.4%	823	19.3%	955	25.2%	80	3.5%
American Indian and Alaska Native	74	1.6%	12	0.3%	0	0.0%	0	0.0%
Cherokee tribal grouping	13	0.3%	0	0.0%	0	0.0%	0	0.0%
Chippewa tribal grouping	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Navajo tribal grouping	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Sioux tribal grouping	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Asian	143	3.1%	359	8.4%	427	11.3%	59	2.6%
Asian Indian	0	0.0%	0	0.0%	30	0.8%	0	0.0%
Chinese	0	0.0%	0	0.0%	12	0.3%	0	0.0%
Filipino	0	0.0%	0	0.0%	0	0.0%	25	1.1%
Japanese	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Korean	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Vietnamese	143	3.1%	359	8.4%	385	10.2%	14	0.6%	14	0.6%
Other Asian	0	0.0%	0	0.0%	0	0.0%	20	0.9%	20	0.9%
Native Hawaiian and Other Pacific	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Native Hawaiian	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Guamanian or Chamorro	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Samoan	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Other Pacific Islander	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Some other race	618	13.3%	610	14.3%	675	17.8%	783	34.3%	783	34.3%
Two or more races	298	6.4%	119	2.8%	137	3.6%	414	18.2%	414	18.2%
White and Black or African American	83	1.8%	13	0.3%	30	0.8%	121	5.3%	121	5.3%
White and American Indian and Alaska	142	3.1%	61	1.4%	10	0.3%	137	6.0%	137	6.0%
White and Asian	18	0.4%	0	0.0%	0	0.0%	31	1.4%	31	1.4%
Black or African American and	0	0.0%	10	0.2%	12	0.3%	0	0.0%	0	0.0%
Race alone or in combination with one or										
Total population	4,651	4.651	4,269	4.269	3,783	3.783	2,280	2.280	2,280	2.280
White	3,753	80.7%	2,455	57.5%	1,629	43.1%	1,292	56.7%	1,292	56.7%
Black or African American	146	3.1%	846	19.8%	1,007	26.6%	267	11.7%	267	11.7%
American Indian and Alaska Native	242	5.2%	83	1.9%	22	0.6%	137	6.0%	137	6.0%
Asian	161	3.5%	359	8.4%	502	13.3%	90	3.9%	90	3.9%
Native Hawaiian and Other Pacific	0	0.0%	0	0.0%	75	2.0%	0	0.0%	0	0.0%
Some other race	673	14.5%	645	15.1%	685	18.1%	908	39.8%	908	39.8%
HISPANIC OR LATINO AND RACE										
Total population	4,651	4.651	4,269	4.269	3,783	3.783	2,280	2.280	2,280	2.280
Hispanic or Latino (of any race)	2,491	53.6%	1,823	42.7%	1,294	34.2%	1,286	56.4%	1,286	56.4%
Mexican	2,298	49.4%	1,722	40.3%	987	26.1%	1,125	49.3%	1,125	49.3%
Puerto Rican	0	0.0%	0	0.0%	0	0.0%	93	4.1%	93	4.1%
Cuban	0	0.0%	24	0.6%	10	0.3%	8	0.4%	8	0.4%
Other Hispanic or Latino	193	4.1%	77	1.8%	297	7.9%	60	2.6%	60	2.6%
Not Hispanic or Latino	2,160	46.4%	2,446	57.3%	2,489	65.8%	994	43.6%	994	43.6%
White alone	1,813	39.0%	1,272	29.8%	980	25.9%	699	30.7%	699	30.7%
Black or African American alone	47	1.0%	745	17.5%	955	25.2%	80	3.5%	80	3.5%
American Indian and Alaska Native	13	0.3%	12	0.3%	0	0.0%	0	0.0%	0	0.0%
Asian alone	143	3.1%	359	8.4%	427	11.3%	59	2.6%	59	2.6%
Native Hawaiian and Other Pacific	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Some other race alone	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Two or more races	144	3.1%	58	1.4%	127	3.4%	156	6.8%	156	6.8%
Two races including Some other race	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Two races excluding Some other	144	3.1%	58	1.4%	127	3.4%	156	6.8%
Total housing units	1,767	(X)	1,597	(X)	1,442	(X)	956	(X)

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

The ACS questions on Hispanic origin and

race were revised in 2008 to make them consistent with the Census 2010 question wording. Any changes in estimates for 2008 and beyond may be due to demographic changes, as well as factors including questionnaire changes, differences in ACS population controls, and methodological differences in the population estimates, and therefore should be used with caution. For a summary of questionnaire changes see [http://www.census.gov/acs/www/methodology/questionnaire\\_changes/](http://www.census.gov/acs/www/methodology/questionnaire_changes/). For more information about changes in the estimates see <http://www.census.gov/population/www/socdemo/hispanic/reports.html>.

For more information on understanding race and Hispanic origin data, please see the Census 2010 Brief entitled, Overview of Race and Hispanic Origin: 2010, issued March 2011. (pdf format)

While the 2007-2011 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population,

housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and

DP02: SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES  
2007-2011 American Community Survey 5-

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Subject	Census Tract 6, Jackson		Census Tract 7, Jackson		Census Tract 19, Jackson		Census Tract 20, Jackson	
	Estimate	Percent	Estimate	Percent	Estimate	Percent	Estimate	Percent
<b>HOUSEHOLDS BY TYPE</b>								
Total households	1,507	1,507	1,317	1,317	1,216	1,216	692	692
Family households (families)	1,002	66.5%	841	63.9%	775	63.7%	497	71.8%
With own children under 18 years	432	28.7%	513	39.0%	505	41.5%	287	41.5%
Married-couple family	514	34.1%	463	35.2%	436	35.9%	281	40.6%
With own children under 18 years	234	15.5%	238	18.1%	286	23.5%	165	23.8%
Male householder, no wife present,	95	6.3%	43	3.3%	83	6.8%	94	13.6%
With own children under 18 years	53	3.5%	43	3.3%	43	3.5%	55	7.9%
Female householder, no husband	393	26.1%	335	25.4%	256	21.1%	122	17.6%
With own children under 18 years	145	9.6%	232	17.6%	176	14.5%	67	9.7%
Nonfamily households	505	33.5%	476	36.1%	441	36.3%	195	28.2%
Householder living alone	425	28.2%	405	30.8%	388	31.9%	189	27.3%

65 years and over	101	6.7%	84	6.4%	91	7.5%	18	2.6%
Households with one or more people	557	37.0%	612	46.5%	564	46.4%	302	43.6%
Households with one or more people 65	266	17.7%	209	15.9%	206	16.9%	100	14.5%
Average household size	3.09	(X)	3.15	(X)	3.11	(X)	3.25	(X)
Average family size	3.81	(X)	4.06	(X)	4.03	(X)	3.93	(X)
<b>RELATIONSHIP</b>								
Population in households	4,650	4,650	4,146	4,146	3,783	3,783	2,250	2,250
Householder	1,507	32.4%	1,317	31.8%	1,216	32.1%	692	30.8%
Spouse	526	11.3%	464	11.2%	459	12.1%	280	12.4%
Child	1,796	38.6%	1,771	42.7%	1,341	35.4%	937	41.6%
Other relatives	491	10.6%	337	8.1%	548	14.5%	240	10.7%
Nonrelatives	330	7.1%	257	6.2%	219	5.8%	101	4.5%
Unmarried partner	114	2.5%	146	3.5%	72	1.9%	23	1.0%
<b>MARITAL STATUS</b>								
Males 15 years and over	1,530	1,530	1,486	1,486	1,305	1,305	767	767
Never married	630	41.2%	724	48.7%	547	41.9%	268	34.9%
Now married, except separated	708	46.3%	633	42.6%	552	42.3%	305	39.8%
Separated	27	1.8%	10	0.7%	44	3.4%	69	9.0%
Widowed	10	0.7%	17	1.1%	26	2.0%	13	1.7%
Divorced	155	10.1%	102	6.9%	136	10.4%	112	14.6%
Females 15 years and over	1,704	1,704	1,576	1,576	1,286	1,286	739	739
Never married	468	27.5%	557	35.3%	375	29.2%	245	33.2%
Now married, except separated	655	38.4%	650	41.2%	549	42.7%	284	38.4%
Separated	100	5.9%	67	4.3%	38	3.0%	30	4.1%
Widowed	227	13.3%	136	8.6%	110	8.6%	64	8.7%
Divorced	254	14.9%	166	10.5%	214	16.6%	116	15.7%
<b>SCHOOL ENROLLMENT</b>								
Population 3 years and over enrolled in	1,201	1,201	1,308	1,308	1,276	1,276	644	644
Nursery school, preschool	44	3.7%	75	5.7%	79	6.2%	34	5.3%
Kindergarten	238	19.8%	46	3.5%	168	13.2%	55	8.5%
Elementary school (grades 1-8)	600	50.0%	674	51.5%	679	53.2%	465	72.2%
High school (grades 9-12)	141	11.7%	272	20.8%	208	16.3%	60	9.3%
College or graduate school	178	14.8%	241	18.4%	142	11.1%	30	4.7%

<b>EDUCATIONAL ATTAINMENT</b>										
Population 25 years and over	2,688		2,688	2,471	2,471	2,134	2,134	2,134	1,336	1,336
Less than 9th grade	464		17.3%	387	15.7%	546	25.6%	290	21.7%	21.7%
9th to 12th grade, no diploma	663		24.7%	497	20.1%	485	22.7%	408	30.5%	30.5%
High school graduate (includes	856		31.8%	910	36.8%	617	28.9%	463	34.7%	34.7%
Some college, no degree	402		15.0%	428	17.3%	271	12.7%	130	9.7%	9.7%
Associate's degree	224		8.3%	25	1.0%	121	5.7%	0	0.0%	0.0%
Bachelor's degree	62		2.3%	199	8.1%	55	2.6%	20	1.5%	1.5%
Graduate or professional degree	17		0.6%	25	1.0%	39	1.8%	25	1.9%	1.9%
Percent high school graduate or higher	(X)		58.1%	(X)	64.2%	(X)	51.7%	(X)	47.8%	47.8%
Percent bachelor's degree or higher	(X)		2.9%	(X)	9.1%	(X)	4.4%	(X)	3.4%	3.4%
<b>RESIDENCE 1 YEAR AGO</b>										
Population 1 year and over	4,560		4,560	4,159	4,159	3,745	3,745	2,241	2,241	2,241
Same house	3,739		82.0%	3,498	84.1%	2,660	71.0%	1,839	82.1%	82.1%
Different house in the U.S.	812		17.8%	616	14.8%	1,022	27.3%	392	17.5%	17.5%
Same county	404		8.9%	361	8.7%	939	25.1%	327	14.6%	14.6%
Different county	408		8.9%	255	6.1%	83	2.2%	65	2.9%	2.9%
Same state	337		7.4%	91	2.2%	0	0.0%	13	0.6%	0.6%
Different state	71		1.6%	164	3.9%	83	2.2%	52	2.3%	2.3%
Abroad	9		0.2%	45	1.1%	63	1.7%	10	0.4%	0.4%
<b>PLACE OF BIRTH</b>										
Total population	4,651		4,651	4,269	4,269	3,783	3,783	2,280	2,280	2,280
Native	3,251		69.9%	2,962	69.4%	2,297	60.7%	1,592	69.8%	69.8%
Born in United States	3,229		69.4%	2,877	67.4%	2,289	60.5%	1,561	68.5%	68.5%
State of residence	2,510		54.0%	2,133	50.0%	1,741	46.0%	1,056	46.3%	46.3%
Different state	719		15.5%	744	17.4%	548	14.5%	505	22.1%	22.1%
Born in Puerto Rico, U.S. Island areas,	22		0.5%	85	2.0%	8	0.2%	31	1.4%	1.4%
Foreign born	1,400		30.1%	1,307	30.6%	1,486	39.3%	688	30.2%	30.2%
<b>U.S. CITIZENSHIP STATUS</b>										
Foreign-born population	1,400		1,400	1,307	1,307	1,486	1,486	688	688	688
Naturalized U.S. citizen	307		21.9%	228	17.4%	234	15.7%	102	14.8%	14.8%
Not a U.S. citizen	1,093		78.1%	1,079	82.6%	1,252	84.3%	586	85.2%	85.2%
<b>YEAR OF ENTRY</b>										
Population born outside the United	1,422		1,422	1,392	1,392	1,494	1,494	719	719	719

Native	22		22	85	8	8	31	31
Entered 2000 or later	10	45.5%	16	18.8%	0	0	0	0.0%
Entered before 2000	12	54.5%	69	81.2%	8	8	31	100.0%
Foreign born	1,400	1,400	1,307	1,307	1,486	1,486	688	688
Entered 2000 or later	534	38.1%	642	49.1%	776	52.2%	260	37.8%
Entered before 2000	866	61.9%	665	50.9%	710	47.8%	428	62.2%
<b>WORLD REGION OF BIRTH OF</b>								
Foreign-born population, excluding	1,400	1,400	1,307	1,307	1,486	1,486	688	688
Europe	0	0.0%	0	0.0%	35	2.4%	0	0.0%
Asia	133	9.5%	317	24.3%	364	24.5%	68	9.9%
Africa	0	0.0%	0	0.0%	349	23.5%	0	0.0%
Oceania	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Latin America	1,257	89.8%	990	75.7%	738	49.7%	620	90.1%
Northern America	10	0.7%	0	0.0%	0	0.0%	0	0.0%
<b>LANGUAGE SPOKEN AT HOME</b>								
Population 5 years and over	4,064	4,064	3,844	3,844	3,472	3,472	2,011	2,011
English only	2,214	54.5%	2,094	54.5%	1,457	42.0%	1,061	52.8%
Language other than English	1,850	45.5%	1,750	45.5%	2,015	58.0%	950	47.2%
Speak English less than "very well"	1,236	30.4%	1,225	31.9%	1,305	37.6%	592	29.4%
Spanish	1,704	41.9%	1,342	34.9%	1,092	31.5%	873	43.4%
Speak English less than "very well"	1,129	27.8%	852	22.2%	751	21.6%	547	27.2%
Other Indo-European languages	13	0.3%	50	1.3%	87	2.5%	18	0.9%
Speak English less than "very well"	0	0.0%	50	1.3%	23	0.7%	10	0.5%
Asian and Pacific Islander languages	133	3.3%	334	8.7%	428	12.3%	59	2.9%
Speak English less than "very well"	107	2.6%	299	7.8%	196	5.6%	35	1.7%
Other languages	0	0.0%	24	0.6%	408	11.8%	0	0.0%
Speak English less than "very well"	0	0.0%	24	0.6%	335	9.6%	0	0.0%

Data are based on a sample and are

subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2007-2011 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population,

housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and

DP03: SELECTED ECONOMIC CHARACTERISTICS  
2007-2011 American Community Survey 5-

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Subject	Census Tract 6, Jackson		Census Tract 7, Jackson		Census Tract 19, Jackson		Census Tract 20, Jackson	
	Estimate	Percent	Estimate	Percent	Estimate	Percent	Estimate	Percent
<b>EMPLOYMENT STATUS</b>								
Population 16 years and over	3,175	3.175	3,001	3.001	2,514	2.514	1,498	1.498
In labor force	1,957	61.6%	1,882	62.7%	1,465	58.3%	1,033	69.0%
Civilian labor force	1,957	61.6%	1,882	62.7%	1,465	58.3%	1,033	69.0%
Employed	1,640	51.7%	1,603	53.4%	1,223	48.6%	938	62.6%
Unemployed	317	10.0%	279	9.3%	242	9.6%	95	6.3%
Armed Forces	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Not in labor force	1,218	38.4%	1,119	37.3%	1,049	41.7%	465	31.0%
Civilian labor force	1,957	1.957	1,882	1.882	1,465	1.465	1,033	1.033
Percent Unemployed	(X)	16.2%	(X)	14.8%	(X)	16.5%	(X)	9.2%

Females 16 years and over	1,665	1,665	1,566	1,566	1,286	1,286	1,286	735	735
In labor force	820	49.2%	819	819	595	595	46.3%	409	55.6%
Civilian labor force	820	49.2%	819	819	595	595	46.3%	409	55.6%
Employed	717	43.1%	750	750	524	524	40.7%	348	47.3%
Own children under 6 years	673	673	475	475	405	405	405	258	258
All parents in family in labor force	303	45.0%	315	315	230	230	56.8%	107	41.5%
Own children 6 to 17 years	739	739	879	879	890	890	890	502	502
All parents in family in labor force	297	40.2%	615	615	638	638	71.7%	315	62.7%
COMMUTING TO WORK									
Workers 16 years and over	1,640	1,640	1,548	1,548	1,107	1,107	1,107	925	925
Car, truck, or van -- drove alone	1,201	73.2%	960	960	805	805	72.7%	691	74.7%
Car, truck, or van -- carpooled	334	20.4%	429	429	230	230	20.8%	118	12.8%
Public transportation (excluding taxicab)	84	5.1%	97	97	61	61	5.5%	40	4.3%
Walked	12	0.7%	6	6	11	11	1.0%	9	1.0%
Other means	9	0.5%	19	19	0	0	0.0%	10	1.1%
Worked at home	0	0.0%	37	37	0	0	0.0%	57	6.2%
Mean travel time to work (minutes)	21.8	(X)	21.7	21.7	21.6	21.6	(X)	22.3	(X)
OCCUPATION									
Civilian employed population 16 years	1,640	1,640	1,603	1,603	1,223	1,223	1,223	938	938
Management, business, science, and	157	9.6%	157	157	103	103	8.4%	34	3.6%
Service occupations	491	29.9%	498	498	322	322	26.3%	182	19.4%
Sales and office occupations	293	17.9%	351	351	100	100	8.2%	201	21.4%
Natural resources, construction, and	204	12.4%	258	258	121	121	9.9%	189	20.1%
Production, transportation, and material	495	30.2%	339	339	577	577	47.2%	332	35.4%
INDUSTRY									
Civilian employed population 16 years	1,640	1,640	1,603	1,603	1,223	1,223	1,223	938	938
Agriculture, forestry, fishing and hunting,	26	1.6%	0	0	13	13	1.1%	0	0.0%
Construction	189	11.5%	246	246	74	74	6.1%	169	18.0%
Manufacturing	291	17.7%	143	143	448	448	36.6%	195	20.8%
Wholesale trade	74	4.5%	12	12	23	23	1.9%	81	8.6%
Retail trade	181	11.0%	61	61	108	108	8.8%	107	11.4%
Transportation and warehousing, and	18	1.1%	186	186	19	19	1.6%	59	6.3%
Information	65	4.0%	0	0	0	0	0.0%	11	1.2%
Finance and insurance, and real estate	14	0.9%	69	69	37	37	3.0%	40	4.3%

Professional, scientific, and	192	11.7%	255	15.9%	249	20.4%	56	6.0%
Educational services, and health care	199	12.1%	237	14.8%	89	7.3%	67	7.1%
Arts, entertainment, and recreation, and	275	16.8%	243	15.2%	86	7.0%	91	9.7%
Other services, except public	91	5.5%	119	7.4%	68	5.6%	15	1.6%
Public administration	25	1.5%	32	2.0%	9	0.7%	47	5.0%
<b>CLASS OF WORKER</b>								
Civilian employed population 16 years	1,640	1,640	1,603	1,603	1,223	1,223	938	938
Private wage and salary workers	1,472	89.8%	1,280	79.9%	1,131	92.5%	734	78.3%
Government workers	66	4.0%	214	13.3%	39	3.2%	110	11.7%
Self-employed in own not incorporated	102	6.2%	109	6.8%	53	4.3%	66	7.0%
Unpaid family workers	0	0.0%	0	0.0%	0	0.0%	28	3.0%
<b>INCOME AND BENEFITS (IN 2011)</b>								
Total households	1,507	1,507	1,317	1,317	1,216	1,216	692	692
Less than \$10,000	226	15.0%	145	11.0%	333	27.4%	80	11.6%
\$10,000 to \$14,999	194	12.9%	71	5.4%	105	8.6%	93	13.4%
\$15,000 to \$24,999	325	21.6%	251	19.1%	184	15.1%	113	16.3%
\$25,000 to \$34,999	278	18.4%	294	22.3%	235	19.3%	142	20.5%
\$35,000 to \$49,999	282	18.7%	231	17.5%	183	15.0%	103	14.9%
\$50,000 to \$74,999	101	6.7%	174	13.2%	106	8.7%	107	15.5%
\$75,000 to \$99,999	67	4.4%	116	8.8%	37	3.0%	50	7.2%
\$100,000 to \$149,999	22	1.5%	35	2.7%	29	2.4%	0	0.0%
\$150,000 to \$199,999	12	0.8%	0	0.0%	4	0.3%	4	0.6%
\$200,000 or more	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Median household income (dollars)	25,417	(X)	31,609	(X)	24,375	(X)	28,313	(X)
Mean household income (dollars)	30,892	(X)	36,841	(X)	29,230	(X)	33,124	(X)
<b>With earnings</b>								
Mean earnings (dollars)	1,222	81.1%	1,028	78.1%	894	73.5%	620	89.6%
With Social Security	29,651	(X)	36,837	(X)	32,177	(X)	32,029	(X)
Mean Social Security income (dollars)	12,036	(X)	16,394	(X)	10,555	(X)	13,558	(X)
With retirement income	199	13.2%	186	14.1%	95	7.8%	56	8.1%
Mean retirement income (dollars)	13,621	(X)	18,065	(X)	8,491	(X)	12,709	(X)
<b>With Supplemental Security Income</b>								
Mean Supplemental Security Income	170	11.3%	125	9.5%	203	16.7%	80	11.6%
With cash public assistance income	77	5.1%	89	6.8%	216	17.8%	22	3.2%
Mean cash public assistance income	1,794	(X)	5,131	(X)	1,693	(X)	5,755	(X)
With Food Stamp/SNAP benefits in the	414	27.5%	294	22.3%	476	39.1%	168	24.3%

Families	1,002	1,002	841	841	775	775	497	497	497
Less than \$10,000	153	15.3%	48	5.7%	111	14.3%	36	7.2%	7.2%
\$10,000 to \$14,999	102	10.2%	62	7.4%	85	11.0%	84	16.9%	16.9%
\$15,000 to \$24,999	218	21.8%	196	23.3%	100	12.9%	53	10.7%	10.7%
\$25,000 to \$34,999	198	19.8%	180	21.4%	151	19.5%	141	28.4%	28.4%
\$35,000 to \$49,999	178	17.8%	152	18.1%	163	21.0%	70	14.1%	14.1%
\$50,000 to \$74,999	75	7.5%	76	9.0%	123	15.9%	81	16.3%	16.3%
\$75,000 to \$99,999	53	5.3%	92	10.9%	9	1.2%	28	5.6%	5.6%
\$100,000 to \$149,999	13	1.3%	35	4.2%	29	3.7%	0	0.0%	0.0%
\$150,000 to \$199,999	12	1.2%	0	0.0%	4	0.5%	4	0.8%	0.8%
\$200,000 or more	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.0%
Median family income (dollars)	27,558	(X)	32,627	(X)	31,042	(X)	29,327	(X)	(X)
Mean family income (dollars)	32,225	(X)	38,412	(X)	36,096	(X)	34,479	(X)	(X)
Per capita income (dollars)	10,623	(X)	12,204	(X)	10,110	(X)	10,952	(X)	(X)
Nonfamily households	505	505	476	476	441	441	195	195	195
Median nonfamily income (dollars)	18,862	(X)	25,511	(X)	9,396	(X)	17,371	(X)	(X)
Mean nonfamily income (dollars)	25,110	(X)	28,189	(X)	14,401	(X)	26,767	(X)	(X)
Median earnings for workers (dollars)	15,470	(X)	18,097	(X)	17,933	(X)	19,016	(X)	(X)
Median earnings for male full-time, year-	31,032	(X)	27,500	(X)	24,875	(X)	26,092	(X)	(X)
Median earnings for female full-time,	19,442	(X)	26,006	(X)	23,750	(X)	28,063	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>									
Civilian noninstitutionalized population	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
With public coverage	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Civilian noninstitutionalized population	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
No health insurance coverage	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Civilian noninstitutionalized population	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
In labor force:	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Employed:	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
With health insurance coverage	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
With private health insurance	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)



subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

There were changes in the edit between 2009 and 2010 regarding Supplemental Security Income (SSI) and Social Security. The changes in the edit loosened restrictions on disability requirements for receipt of SSI resulting in an increase in the total number of SSI recipients in the American Community Survey. The changes also loosened restrictions on possible reported monthly amounts in Social Security income resulting in higher Social Security aggregate amounts. These results more closely match administrative counts compiled by the Social Security Administration.

Workers include members of the Armed

Forces and civilians who were at work last week.

Industry codes are 4-digit codes and are based on the North American Industry Classification System 2007. The Industry categories adhere to the guidelines issued in Clarification Memorandum No. 2, "NAICS Alternate Aggregation Structure for Use By U.S. Statistical Agencies," issued by the Office of Management and Budget.

Census occupation codes are 4-digit codes and are based on the Standard Occupational Classification (SOC). The Census occupation codes for 2010 and later years are based on the 2010 revision of the SOC. To allow for the creation of 2007-2011 and 2009-2011 tables, occupation data in the multiyear files (2007-2011 and 2009-2011) were recoded to 2011 Census occupation codes. We recommend using caution when comparing data coded using 2011 Census occupation codes prior to 2010. For more information on the Census occupation code changes, please visit our website at <http://www.census.gov/hhes/www/oiindex/>.

While the 2007-2011 American Community

Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

**Former Hardesty Federal Complex  
607 Hardesty Ave.  
Kansas City, Missouri  
EJSCREEN Summary**

**About EJSCREEN:**

EJSCREEN is an environmental justice screening and mapping tool that provides EPA with a nationally consistent approach to characterizing potential areas of EJ concern that may warrant further consideration, analysis, or outreach. The tool offers a variety of powerful data and mapping capabilities that enable users to access environmental and demographic information, at high geographic resolution, across the entire country. EJSCREEN provides color-coded maps and standard data reports. These maps and reports show how a selected location compares to the rest of the nation, EPA region, or State. The tool combines environmental and demographic indicators to create EJ indexes. An EJ index can highlight geographic areas that may warrant a closer look.

**Hardesty Complex Review:**

For the purposes of considering EJ at the Hardesty site we have conducted a screen for the area within a half-mile radius. The 12 primary EJ indexes were considered, along with additional environmental and demographic data, and the results indicate that the surrounding community does have the potential for EJ concerns.

**Review of Environmental Indicators:**

As indicated in the table below, the EJSCREEN percentiles for a half-mile radius around the facility exceed the national threshold for 11 of the 12 indicators. EPA considers geographic areas with one or more indicator at or above the 80<sup>th</sup> percentile nationally to be priority areas in regard to their potential for EJ concerns.

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
<b>Primary EJ Indexes</b>			
Particulate Matter	94	95	84
Ozone	94	95	82
NATA Diesel PM	94	95	86
NATA Air Toxics Cancer Risk	93	95	81
NATA Respiratory Hazard Index	93	95	81
NATA Neurological Hazard Index	93	94	81
Traffic Proximity	88	90	75
Lead Paint Indicator	97	97	94
Proximity to NPL sites	97	98	91
Proximity to RMP sites	97	97	92
Proximity to TSDFs	97	97	91
Proximity to Major Direct Water Dischargers	99	99	97

**Environmental Indicators considered in EJSCREEN:**

- 1. Particulate matter (PM<sub>2.5</sub>)** levels in air, ug/m<sup>3</sup> annual avg. 2008 (Source: EPA ORD)

2. **Ozone** summer seasonal avg. of daily max. 8-hour concentration in air, ppb, 2008 (Source: EPA ORD)
3. **Diesel particulate matter** level in air, micrograms per cubic meter (ug/m3) (Source: EPA 2005 NATA)
4. **Air toxics lifetime inhalation cancer risk** (Source: EPA 2005 NATA)
5. **Air toxics neurological hazard index** (ratio of exposure concentration to reference concentration) (Source: EPA 2005 NATA)
6. **Air toxics respiratory effects hazard index** (ratio of exposure concentration to reference concentration) (Source: EPA 2005 NATA)
7. **Count of vehicles** (average annual daily traffic) at major roads within 500 meters, divided by distance (Source: AADT from Dept of Transportation National Transportation Atlas Database, 2011)
8. Percent of housing units built before 1960, as **indicator of potential lead paint** (Source: Calculated based on Census ACS 2006-2010)
9. **Count of Risk Management Plan (RMP)** (potential chemical accident management plan) facilities within 5km (or nearest one beyond 5km), each divided by km distance (Source: Facility location information from EPA RMP database, 2012)
10. **Count of National Priorities List (NPL) (Superfund) facilities within 5km** (or nearest one beyond 5km), each divided by km distance (Source: Facility location information from EPA CERCLIS database, 2012)
11. **Count of Treatment, Storage and Disposal Facilities (TSDF) (hazardous waste management) within 5km** (or nearest one beyond 5km), each divided by km distance (Source: Facility location information from EPA RCRAinfo database, 2012)
12. **Count of National Pollution Discharge Elimination System (NPDES) major direct discharger facilities within 5km** (or nearest one beyond 5km), each divided by km distance (Source: Facility location information from PCS/ICIS database, 2012)

Surrounding Facilities:

EPA’s enforcement and compliance database, OTIS, identified that there are 53 records for facilities located zip code 64124.

Demographic Review:

The facility is located in very close proximity to nearby residences. EJSCREEN indicates that 5,311 individuals live within a half-mile radius of the facility. The population within a half-mile radius of the complex contains both high minority and high low-income populations when compared with the state average. The surrounding population is also characterized by a very high percentage of linguistically isolated individuals.

Selected Variables	Raw Data	State Avg.	State %ile	EPA Region Avg.	EPA Region %ile	USA Avg.	USA %ile
<b>Primary Demographic Index</b>	66%	26%	94	24%	96	34%	88
Minority Population	68%	19%	92	17%	95	35%	80
Low Income Population	65%	34%	92	32%	93	32%	91
Linguistically Isolated Population	31%	1%	99	2%	99	5%	96
Population With Less Than High School Education	49%	14%	99	12%	99	15%	97
Population Under 5 years of age	10%	7%	84	7%	82	7%	82
Population over 64 years of age	8%	14%	21	14%	22	13%	29

Census data shows that in addition to English and Spanish, there are a number of other languages spoken by individuals who have identified their English comprehension as “less than very well”. Please refer to the table below which identifies language proficiency for Census Tract 19.

Language	Total Speakers	Speak English “very well”	Speak English less than “very well”
Spanish or Spanish Creole	1457	341	751
German	37	37	0
Gujarati	30	22	8
Other Indo-European Languages	20	5	15
Chinese	12	0	12
Vietnamese	416	232	184
Arabic	123	43	80
African Languages	285	30	255

NEWS ([HTTP://WWW.KANSASCITY.COM/NEWS/](http://www.kansascity.com/news/))

> GOVERNMENT & POLITICS ([HTTP://WWW.KANSASCITY.COM/NEWS/GOVERNMENT-POLITICS/](http://www.kansascity.com/news/government-politics/))

## Officials announce initiatives to renew Kansas City's Northeast neighborhoods

BY LYNN HORSLEY - THE KANSAS CITY STAR

07/28/2014 2:05 PM | Updated: 07/28/2014 10:59 PM



A group of Healing House volunteers, Ronda Thomas (from left), Lisa Jo Reed, Kari Stanberry and Tammy Lucas cleaned up in front of the former Thacher School on June 28 in Kansas City's historic Northeast area. City officials on Monday announced a menu of programs to bolster the historic Northeast and boost housing conditions and business development. FILE PHOTO BY T. ROB BROWN/SPECIAL TO THE STAR

Kansas City's historic Northeast neighborhoods are more than 100 years old, and many blocks have seen better days.

So city officials announced several initiatives Monday to capitalize on the area's character and charm while promoting housing improvements, business development and blight removal.

"We are starting our renewal here," Councilman Scott Wagner said just before a backhoe tore into the roof of a graffiti-covered building known for drug use and gang-related activity at Seventh Street and Jackson Avenue.

The building is the first of what Wagner hopes eventually will be 100 decrepit buildings torn down in Old Northeast, as the city pledges to target the area for dangerous building demolitions. But that is just one element of the new “Invest Northeast” initiative that brought together city officials, community groups and representatives of seven Northeast neighborhoods that make up a coalition called Northeast Alliance Together, or NEAT.

Wagner said the city is using a \$150,000 grant and \$250,000 freed up from refinancing the Century Towers development at 635 Woodland and is leveraging other funds.

The money will be reinvested in Old Northeast in a variety of ways:

**Property tax abatement** — freezing property taxes for homeowners and business owners who complete a remodel of \$5,000 or more.

**Minor home repair** targeted at low- or moderate-income families from Benton to Van Brunt boulevards and from Garner Avenue to Eighth Street, for roofing, windows, exterior paint, furnaces or ductwork.

**Business training scholarships** to help Northeast residents and existing business owners attend business-related classes at the University of Missouri-Kansas City.

**Micro-loans** for business owners or aspiring entrepreneurs, through St. Louis-based Justine Petersen.

The neighborhoods also have collaborated on a website, HNEKC.com (<http://www.hnekc.com/>), and new wayfinding signs to further promote the area and its improvements.

*To reach Lynn Horsley, call 816-226-2058 (tel:816-226-2058) or send email to [lhorsley@kcstar.com](mailto:lhorsley@kcstar.com) (mailto:lhorsley@kcstar.com).*



boxes, microwave, toys, misc. #P-13 Freda Marshall: Mattress, bags, boxes, chairs, chest of drawers, dresser, fan, ironing board, lamp, sofa, table, plastic tree, misc. #P-20 Marie Brown: Chairs, pictures, toys, bags, boxes, misc. #Q-05 Ambrea Burns: Box springs, frame, headboard, mattress, boxes, chair, lamp, sofa, toys, misc.

Avoid Thursday and Friday delays. Place your Classified ads early in the week.  
**Call 816-234-4000**  
 to place your ad!

TO PLACE AN AD  
 Call 816-234-4000

When you have something to sell use Star Classified Advertising. There isn't a faster or easier way to have your sales message reach over a million adults in the metro area... every day.

Call  
**816-234-4000**

Use Star Classified Ads

**Public Notice of Intent to Seek a CERCLA Sec. 120(h)(3)(A) Covenant Deferral**

Pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Sec. 9620(h)(3)(C), the public is informed of the intent of the U.S. General Services Administration (GSA) to seek, from the Governor of Missouri, permission to defer the covenant called for by CERCLA 42 U.S.C. Sec. 9620(h)(3)(A)(ii)(I), for the proposed sale and transfer of the former Federal Complex located at 607 Hardesty Avenue, Kansas City, Missouri 64124-3032 (GSA Control Number 7-G-MO-637).

CERCLA, 42 U.S.C. Sec. 9620(h)(3)(A)(ii)(I), requires the following covenant be provided by the United States to any grantee of Federal property:

"... all remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property has been taken before the date of such transfer."

This requirement means that property must normally have any releases of hazardous substances on such property cleaned up prior to transfer. However, due to the "early transfer" provisions of CERCLA, 42 U.S.C. Sec. 9620(h)(3)(C), this covenant can—with the permission of the Governor of the affected State—be deferred, and ultimately provided by the United States after the transfer, at such time that the cleanup is actually completed (whether the cleanup is completed by the United States or the grantee).

GSA has determined that the former Federal Complex at 607 Hardesty Avenue, which consists of about 17.47 acres, is excess to the needs of the United States. As a result, GSA has decided to sell and transfer this parcel either by negotiated sale or public sale. However, prior to making this parcel available for sale, GSA has decided to submit a "Covenant Deferral Request" (CDR) to the Governor, so as to allow the expeditious conveyance and reuse by the public of this parcel. Although there are a few locations on the Federal Complex where hazardous substances require remedial action (and are undergoing same via an ongoing Federal cleanup program being conducted by GSA), it is GSA's opinion that the property is safe to be transferred and utilized post-transfer, while remedial actions continue on the property. If the covenant called for by CERCLA is deferred until after transfer, CERCLA still requires all necessary cleanup actions be completed in accordance with applicable Federal and State laws and regulations, and to that end, GSA is committed to insuring that cleanup does in fact occur.

In accordance with CERCLA, 42 U.S.C. Sec. 9620(h)(3)(C)(i)(III):

"... the Federal agency requesting deferral has provided notice, by publication in a newspaper of general circulation in the vicinity of the property, of the proposed transfer and of the opportunity for the public to submit, within a period of not less than 30 days after the date of the notice, written comments on the suitability of the property for transfer."

Accordingly, the intention of this notice is to notify the public of this proposed transfer of the Federal Complex at 607 Hardesty Avenue, and to seek any written comment on the suitability of this proposal. To this end, supporting documents that explain the current environmental status of the Federal Complex are available at the GSA Regional Office, Contact: Joan Wissbaum 816-823-2543. Should there be any questions concerning this pending CDR, please contact John Robinson, Project Manager, at 817-978-4245, and submit any written comments to Joan Wissbaum, General Services Administration 6PT, 1500 E. Bannister Road, Kansas City, MO 64131.

of Kansas City, 2:00 p.m., commencing at 2:00 p.m., Wednesday, August 4, 2004, at 26th Floor Council Chambers, City Hall, 414 E. 12th St., Kansas City, Missouri, regarding the proposed minor corrections to the legal descriptions for the redevelopment project area and project areas 1, 2 and 3. The TIF revenues will be used for public improvements including street, traffic, landscaping and other improvements. The intent of the Plan remains unchanged other than those changes specifically mentioned herein.

The Redevelopment Area is described as an area generally bounded by NE 82nd Street on the north, Gladstone/Kansas City limit on the south, Missouri State Highway 1 on the east and N. Agnes Avenue on the west, in Kansas City, Clay County, Missouri. The changes as proposed, may be reviewed by any interested party on or after Wednesday, July 27, 2004 between the hours of 9:00 a.m. and 5:00 p.m. at the offices of the Tax Increment Financing Commission, 10 Petticoat Lane, Suite 250, Kansas City, Missouri.

According to Section 99.830.3 all interested parties will be given an opportunity to be heard at the public hearing.

Gary Carter  
 TIF Director  
 Tax Increment Financing Commission of Kansas City, Missouri  
 10 Petticoat Lane, Suite 250  
 Kansas City, Missouri 64106

As a classified advertiser in the Star, you can increase the readership of your ad by using STARS to highlight your listing(s). STARS may be used in any ad and are available in all type sizes from 10 point to 72 point. When placing your next ad, ask our Ad-visor to include STARS for added dominance.

TO PLACE AN AD  
 Call 816-234-4000

Spanish, small blk/wht, named "Lacey" Last seen Northwood/Hwy 9, Riverside, 816-741-8033

DOG--Lucy, white Lhasa Apso, LOST, no collar, has allergies, requires weekly shots, REWARD. 816-363-4170

Dog--Pomeranian, M, 5lbs, red/brn. No collar. Lost 162nd & Nall 913-897-4474

TRAILER tailgate black metal tubular, lost Sun on East bound I-70 between Sterling & Grain Valley. 573-374-5095

**Found** FOUND ADS may be placed FREE up to 3 days and 4 lines!

BIRD--Parakeet, vicinity Lee's Summit/Chipman Rd area. Identify. Call Jewells 816-246-7246

Cat-Blk & brn tabby. W. Plaza area. 816-728-5119

CAT Found all white, green eyed, short haired Male Shawnee-Lenexa ●●● 913-962-4748 ●●●

COCKATEEL--Found Friday, 7/23, Shawnee, KS area. 913-631-1180, 913-631-7157

DOG-- 7/24 @ I-635 & Metropolitan 816-746-6537

Dog--Doberman, F Found at 95th & Westridge. 816-767-8240

DOG--found Alaskan Husky. Barry Rd & I-29. Call 816-709-8614

DOG--Found: male Basset Hound, New Mark area, 816-734-8677

DOG-- German Shepherd mix, F, all tan, white paws, found 79th & Ward Pkwy. 913-209-4452

DOG--lrg honey/tan male, found nr VA hospital on Van Brunt. 1-816-633-7317

DOG--M, med, mix, merle, aussie, blk/tan face, found 7/25, 39th St & Genesse St. 816-756-1140

Dog--Mixed pup, big square head. Rust. F, black collar. Found 79th & Quivera 913-895-4066

DOG--Schnauzer, male, collar 89/Wornhall. 816-361-5055, 816-501-4583

DOG Shrtlr German Shep/Rott mix. New mom/no pups. vic. Crown Center Fri 7/16 816-274-4892

DOG--Small, male, black & white, terrier, near UMKC, 7/22. 816-506-1443

DOG yellow Lab, vic. The Children's Fountain, N.K.C. 816-305-8986

Puppy, little, red harness, found on 56th Pl off of Brighton. 816-453-5932

**Personal Services** 139

Quest Personals Chat 913-652-3333 \*816-303-3000 Browse ads FREE!

**Personals** 140

ST JUDE, THANKS. FAVOR RECEIVED.

Son looking for father. Last seen in 1984 at Munoz Liquor on State Ave. If you have any info regarding Steve West please call 706-965-3176.

LOOKING for eye witnesses accident 6/11/04 at 11am US 71 Hwy (Bruce R. Watkins Pkwy) & 59 St, KCMO between Overnite Transportation tractor trailer & 1986 black Jeep Wrangler. Call 816-221-0080. Jim or Julie

**Tickets** 142

NOTICE Airline Tickets MAY NOT be transferrable.

We recommend you

004

85% of all bids on  
 Appendix 6.1  
**Seamless Vinyl Siding**



# On Line Auction opens May 5, 2011

**Former Federal Complex  
607 Hardesty, Kansas City, Missouri**



***A Kansas City  
Real Estate Opportunity  
Brokers Welcome***

<https://propertydisposal.gsa.gov>

Property is approximately 18 acres of land improved with seven office and warehouse buildings totaling over 570,000 gross square feet. Former Army Quartermaster Depot and Government Offices. Close to I-435 and I-29, at 607 Hardesty, Kansas City, MO 641124.



U.S. General Services Administration  
Laura McGinnis  
816-823-5355

[laura.mcginnis@gsa.gov](mailto:laura.mcginnis@gsa.gov)  
<https://propertydisposal.gsa.gov>  
<http://www.realestatesales.gov>

**GSA**

# On Line Auction Closing Date July 12, 2011

## Hardesty Federal Complex 607 Hardesty, Kansas City, Missouri

*A Kansas City  
Real Estate Opportunity  
Brokers Welcome*

Place your bid at:

[www.realestatesales.gov](http://www.realestatesales.gov)

and view other information at:

<https://propertydisposal.gsa.gov>

Property is approximately 18 acres of land improved with seven office and warehouse buildings totaling over 570,000 gross square feet. Former Army Quartermaster Depot and Government Offices. Close to I-435 and I-29, at 607 Hardesty, Kansas City, MO 64124.



U.S. General Services Administration  
Laura McGinnis  
816-823-5355  
[laura.mcginis@gsa.gov](mailto:laura.mcginis@gsa.gov)

GSA



[Home](#) | [All Categories](#) | [Real Estate](#) | [My Preferences](#) | [My Summary](#) | [My Favorites](#) | [My Messages](#)

All Categories

[Advanced Search](#)

All Categories >

**Warning:** In order to view the most up-to-date information, please click the refresh button on your browser.

#### Item Information

### Hardesty Federal Complex

**Sale-Lot Number:** FTWOR711009001

**City, State:** Kansas City, MO

**Current Bid:** 500,000 USD

**Bidders:** 7

**Close Time:** 08/02 01:07 PM CT (Closed)

**Time Remaining:**

**IFB #:** GSA-R-1644

**Case #:** 7-G-MO-0637

|  |

**BID DEPOSIT REQUIRED: \$25,000.00**

**Four Business Hour Bidding Rules Apply!**

**Only the IFB with an issue date of 7/12/11 is valid. All prior IFB's are void and should be discarded.**

The former Federal Complex facility consists of seven buildings of approximately 572,556 square feet and sits on approximately 18 acres. This property was originally used as an Army Quartermaster Depot during World War II and most recently housed FAA, FEMA, GSA, and other Federal agencies for multiple purposes including warehousing and administrative uses.

**This is a rare opportunity to acquire Federal surplus real property with CERCLA 120 (h)(3)(C) assurance.**

THE CONDITION OF THE PROPERTY IS NOT WARRANTED.

#### Additional Documents

[Invitation for Bids 7.12.2011](#)

[Detailed Property Information](#)

[More Sales!](#)

#### SPECIAL INSPECTION INFORMATION

Inspection by Appointment Only

**For property details and inquiries/questions regarding property inspection:**

607 Hardesty Avenue  
Kansas City, MO 64124

Contact: Laura McGinnis  
Phone: 816-823-5355

Fax: 817-978-2063  
[laura.mcginis@gsa.gov](mailto:laura.mcginis@gsa.gov)

**For inquiries/questions regarding payment, contact the following sales office:**

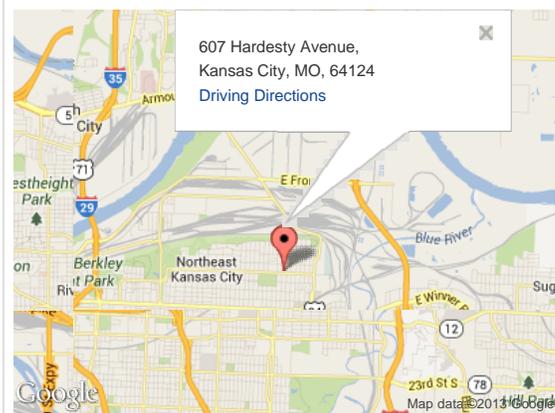
Greater Southwest Region  
819 Taylor Street

#### Item Photos



#### Item Location

**NOTE:** Maps are not updated frequently and are likely to miss new addresses or show incorrect addresses. Please visit <http://maps.google.com> or <http://www.mapquest.com> for accurate property location and directions.



Room 8A10  
Fort Worth , TX 76102  
Phone: 817-978-2331  
Fax: 817-978-2063



(\*) Possible Extension. See Bidding Rules.

- About GSA Auctions
- Federal Acquisition Service
- Terms & Conditions
- Help
- GSA Fleet Vehicle Sales
- Protecting Your Privacy
- FAQ
- GSA Surplus Sales
- Accessibility Policy
- Sales Abbreviations
- Real Property Disposal
- System Status
- RSS
- Public Buildings Service
- Browser Support
- Credit Card Form
- Contact Us
- Copyright © 2001 U.S. General Services Administration



# ONE STOP

is all it takes to handle your insurance needs...  
life, home, auto, farm, business.

[shelterinsurance.com](http://shelterinsurance.com)



Call  
Sam Davis  
913-649-3399  
for a free quote.



We're your shield. We're your shelter.



# northeastnews.net



The online voice of Historic Northeast Kansas City

## [GSA closes auction on Hardesty Federal Complex](#)

Posted August 10, 2011 at 5:00 am

*By Leslie Collins  
Northeast News  
August 10, 2011*

For 11 years the former Hardesty Federal Complex has sat vacant, but soon that may change.

The U.S. General Services Administration (GSA) Internet auction for the complex is now closed and the highest bid totaled approximately \$500,000.

That bid belongs to a residential redeveloper who's looking to become involved in commercial redevelopment.

City of Kansas City Council member Scott Wagner said the developer has redeveloped areas across the U.S.

"The high bidder is now having to do their due diligence," Wagner said.

Within the next two weeks, the developer will need to submit a business plan and decide whether or not to purchase the complex. This phase also allows the high bidder to learn more about the environmental issues associated with the property.

Located at 601 Hardesty and spanning approximately 18 acres, the complex was originally built during WWII and used as an Army Quartermaster Depot. Building 6 of the Hardesty Federal Complex served as a clothing treatment/renovation plant as part of the Chemical Warfare Service Project. There, employees treated Army uniforms with "Impregnate I" to protect the uniforms from chemicals like mustard gas.

Since then, the buildings have housed a number of agencies ranging from the Commerce Department to the Environmental Protection Agency, among others.

Environmental issues are still associated with the property, including asbestos, Wagner said.

Wagner recently toured the site and said in addition to the age related deterioration, the site has become victim to vandals who stripped the buildings of copper and iron.

"The removal (of copper and iron) has been extensive," he said. "It's certainly not a turnkey property. It's one that has to be worked on and you really have to have a plan to work on it.

Time has not been kind to it.”

Asked what he’d like to see the site used for, Wagner said an office or business park that would also attract green businesses.

If the bidders fall through, Wagner said the city will develop a re-use plan and try to make it work.

Asked why it’s important to renovate the complex and find a new use, Wagner said, “I think it’s important because its endemic of Northeast in general the fact that that space has just been left.

“If we want to talk about redevelopment and bringing more jobs and dealing with the issues that Northeast has to deal with, then this is one very public way to have an impact on job development, on economic development.

“It’s high time that people actually started to pay some attention to the Northeast area and to me, this is a great place to start.”

## **Popular stories**

### **[First-year elementary teacher says she scored dream job](#)**

Posted December 18, 2013, 12:00 am

### **[New elm at James Elementary](#)**

Posted May 7, 2013, 11:00 pm

### **[MR340 kicks off at Kaw Point, more than 500 paddlers compete](#)**

Posted July 23, 2013, 2:46 pm

### **[Wagner fights to preserve KC historic buildings](#)**

Posted May 7, 2013, 11:00 pm

### **[Extreme sports athletes bring positive message to NEHS](#)**

Posted September 12, 2013, 1:41 pm

**Public Information Session**  
**June 20 from 4 to 8 p.m. at North-East Library**

Residents are invited to participate in a public information session about current and future environmental testing related to the former Hardesty Federal Complex, located at 607 Hardesty Ave.

Over the past several years, the U.S. General Services Administration (GSA) has conducted environmental testing and studies of the complex and surrounding area in an effort to monitor and put in place plans to ensure the health and environment of all who live and work in the community.

The complex, which served as the U.S. Army Kansas City Quartermaster Depot, stored military supplies and treated protective military clothing during World War II and in the years following the war. Over time, some of the materials used in support of Depot operations leaked into the ground.

As a result, GSA is working in close coordination with the Missouri Department of Natural Resources (MDNR) and the Kansas City Health Department. Additional testing will be conducted in the areas surrounding the complex.

We encourage you to attend the public information session to learn more about the facility and past, present and future testing. If you have any questions, please leave a message at (816) 926-6903 or email [r6environment@gsa.gov](mailto:r6environment@gsa.gov).

**Who:** Missouri Department of Natural Resources  
U.S. General Services Administration  
Kansas City Health Department  
Terracon, Consulting Engineers and Scientists  
Hardesty Renaissance Economic Development Corporation

**What:** Public Information Session Re: Environmental Testing Hardesty Federal Complex

**When:** Thursday, June 20; 4 to 8 p.m.

**Where:** Kansas City Public Library North-East Branch  
6000 Wilson Road  
Kansas City, MO 64123

**Información Pública Sesión**  
**20 de junio de 4 a 8 pm en la Biblioteca del Nordeste**

Los residentes están invitados a participar en una sesión de información pública sobre las pruebas ambientales actuales y futuros en relación con el antiguo Complejo Federal Hardesty, ubicado en 607 Hardesty Ave.

En los últimos años, la Administración de Servicios Generales de EE.UU. (GSA) ha llevado a cabo las pruebas y los estudios sobre el complejo ámbito del medio ambiente y los alrededores, en un esfuerzo para controlar y poner en marcha los planes para asegurar la salud y el medio ambiente de todos los que viven y trabajan en la comunidad.

El complejo, que sirvió de los EE.UU. Ejército de Kansas City intendente Depot, suministros militares almacenados y ropa militar protectora tratada durante la Segunda Guerra Mundial y en los años posteriores a la guerra. Con el tiempo, algunos de los materiales utilizados en apoyo de las operaciones Depot se filtró en la tierra.

Como resultado, GSA está trabajando en estrecha coordinación con el Departamento de Recursos Naturales de Missouri (MDNR) y el Departamento de Salud de la Ciudad de Kansas. Las pruebas adicionales se llevará a cabo en las áreas que rodean el complejo.

Le animamos a asistir a la sesión de información pública para obtener más información sobre la instalación y las pruebas de pasado, presente y futuro. Si usted tiene alguna pregunta, por favor deje un mensaje en el 816-926-6903 o por correo electrónico [r6environment@gsa.gov](mailto:r6environment@gsa.gov).

**Quién:** Departamento de Recursos Naturales de Missouri  
EE.UU. Administración de Servicios Generales  
Departamento de Salud de Kansas City  
Terracon, Consultorías Ingenieros y Científicos  
Hardesty Renaissance Economic Development Corporation

**Qué:** Sesión de Información Pública Re: Pruebas ambientales Hardesty Complejo Federal

**Cuando:** Jueves, 20 de junio, de 4 a 8 p.m

**Dónde:** Kansas City Public Library Poder Noreste  
6000 Wilson Road  
Kansas City, MO 64123



## [almanac](#)

Posted June 18, 2013 at 11:00 pm

### • Wednesday, June 19 •

#### **Vacant Properties Information Series**

Greater Kansas City LISC will host “Code Enforcement: Making vacant properties work for the city and its neighborhoods” from 1 p.m. to 3:30 p.m. at 600 Broadway (Rivergate Plaza Building/MARC) in the Lewis and Clark room. The educational forum is part of LISC’s “Vacant Properties Informational Series” of symposiums highlighting the issues and solutions surrounding vacant properties in urban core communities. Guest speaker is Doug Leeper, a national expert on code enforcement and developer of a training called PACE (Pro-Active Code Enforcement).

### • Thursday, June 20 •

#### **La Chalupa Farmer’s Market**

Mattie Rhodes’ La Chalupa’s Farmer’s Market, 148 N. Topping, is open for the season and will be held every Thursday from 3 p.m. to 6 p.m. Enjoy fresh eggs, vegetables, fruit, baked goods and more. SNAP/EBT is accepted.

#### **GSA Public Information Session**

The U.S. General Services Administration will host a public information session from 4 p.m. to 8 p.m. at the North-East Public Library, 6000 Wilson Rd., to discuss soil and groundwater contamination in and around the former Hardesty Federal Complex. GSA and other experts will give an update on the contamination and future planned testing. Residents are encouraged to ask questions.

#### **VFW Rummage Sale**

VFW Auxiliary 9997 will have a rummage sale on June 20 and June 21 from 9 a.m. to 5 p.m. and on June 22 from 9 a.m. to noon at 6801 Wilson Rd., Kansas City, Mo.

### • Friday, June 21 •

#### **River Market Regional Exhibition Reception**

The 31st River Market Regional Exhibition opening reception will be held from 6 p.m. to 8:30 p.m. at the Kansas City Artists Coalition, 201 Wyandotte, Kansas City, Mo. This year’s exhibit includes 44 artists and 53 pieces of artwork. States represented include Iowa, Kansas, Missouri, Nebraska and Oklahoma. The exhibition will run through July 19. Gallery hours are 11 a.m. to 5 p.m. Wednesday through Saturday.

#### **Tour of Kansas City at the KC Museum**

The Kansas City Museum, 3218 Gladstone Blvd., is celebrating the centennial of the Longview Farm, the country home of Corinthian Hall’s founder Robert A. Long at a special event following the Tour of Kansas City cycling race. Race participants, family and friends can take a Hard Hat

Tour of Corinthian Hall from 6 p.m. to 7 p.m. and a concert will follow from 7 p.m. to 9 p.m.

### **Story Time and Craft**

Join North-East Public Library for its weekly story time and craft at 10:30 a.m. Parents and kids will enjoy stories geared toward toddlers and pre-schoolers. Get ready for songs, tongue twisters and dramatic play. This week's theme is "Fairies and Gnomes."

### **• Saturday, June 22 •**

#### **Free Concert at Budd Park**

Hope Community Church will host a free concert at Budd Park, located at St. John and Denver, from 10 a.m. to 6 p.m. In addition to free music, there will be free hotdogs and "powerteams" performing.

#### **Free Disaster Training for Residents**

The City of Kansas City Office of Emergency Management will host a free Community Emergency Response Training for individuals ages 18 and older who live or work in Kansas City. The hands-on training will take place from 8:30 a.m. to 5:30 p.m. the last three Saturdays of June – June 15, June 22 and June 29 – at the City's Emergency Operations Center, 635 Woodland Ave. Community Emergency Response Training is designed to help individuals prepare themselves and assist family members and neighbors in the immediate aftermath of a major emergency. Individuals must register to participate by contacting Jennifer Fales, training coordinator, at 816-513-8602 or [jennifer.fales@kcmo.org](mailto:jennifer.fales@kcmo.org).

#### **Urban Grown Farms & Gardens Tour**

Sixty urban farms and gardens across the Kansas City metro, including a handful in Historic Northeast, will be on display during the 2013 Urban Grown Farms & Gardens Tour, which will be held from 10 a.m. to 5 p.m. on Saturday, June 22, and Sunday, June 23. A number of sites will feature cooking demonstrations by local chefs, live music and activities for the entire family. The tour will also include an organized bike tour. To purchase your tickets, visit [www.urbangrowntour.eventbrite.com](http://www.urbangrowntour.eventbrite.com). For more information, visit [www.CultivateKC.org/UrbanGrownTour](http://www.CultivateKC.org/UrbanGrownTour).

#### **Kansas City Water Gardens Tour**

At least two gardens on the Kansas City Water Gardens Tour are in Historic Northeast. The annual tour, hosted by the Water Garden Society of Greater Kansas City, will be held June 22-23 from 9 a.m. to 5 p.m. For more information, call 816-861-3449.

### **• Sunday, June 23 •**

#### **Ice Cream Social**

Children's Memorial Lutheran Church will host an ice cream social from 2 p.m. to 6 p.m. at 5001 Independence Ave. There will also be a cakewalk and games for adults and kids. There is no cost to attend.

### **• Tuesday, June 25 •**

#### **Falun Dafa**

Join Northeast Public Library for a session of Falun Dafa at 5:15 p.m. Falun Dafa is a traditional self-cultivation practice to improve mind and body. The session will be held every Tuesday

evening.

• **Upcoming** •

**Horses in the Community Event**

The Horses in the Community Event will be held at 29th Street and Park Avenue from noon to 4 p.m. June 29. There will be horse ride demonstrations, face painting, child safety courses, like what to do during an emergency and calling 9-1-1. KCPD Mounted Patrol, the Kansas City Fire Department and Animal Control will also be in attendance. The event will also include raffles and free food. All are welcome to attend this free event.

**Literacy KC Volunteer Training**

Literacy Kansas City will host an orientation session for volunteers on July 11 and July 13 at 10 a.m. on the third floor of the American Red Cross Building, 211 W. Armour Blvd. Kansas City, Mo. For more information or to register, call (816) 333-9332 or email [hbox@literacykc.org](mailto:hbox@literacykc.org). You can also visit [www.literacykc.org](http://www.literacykc.org).

## Popular stories

**[First-year elementary teacher says she scored dream job](#)**

Posted December 18, 2013, 12:00 am

**[New elm at James Elementary](#)**

Posted May 7, 2013, 11:00 pm

**[MR340 kicks off at Kaw Point, more than 500 paddlers compete](#)**

Posted July 23, 2013, 2:46 pm

**[Wagner fights to preserve KC historic buildings](#)**

Posted May 7, 2013, 11:00 pm

**[Extreme sports athletes bring positive message to NEHS](#)**

Posted September 12, 2013, 1:41 pm

Northeast News is proudly powered by [Atomic News Tools](#) and [WordPress](#)



# ONE STOP

is all it takes to handle your insurance needs...  
life, home, auto, farm, business.

[shelterinsurance.com](http://shelterinsurance.com) We're your shield. We're your shelter.



Call  
Sam Davis  
913-649-3399  
for a free quote.



# northeastnews.net



The online voice of Historic Northeast Kansas City

## Hardesty Complex – from military hub to food hub

Posted June 18, 2013 at 11:00 pm

By **LESLIE COLLINS**

*Northeast News*

*June 19, 2013*

When Asian Americans for Equality (AAFE) saw the former Hardesty Federal Complex up for sale, they knew it could fit within their organization’s vision.

Where others saw dilapidation, they saw the potential for creating a food hub on the 18.3 acre site.

“The food hub concept is really about increasing the volume of locally grown, healthy produce that gets consumed in our communities,” said Jim Turner, chief financial officer of AAFE and project manager for the Hardesty Renaissance Economic Development Corporation, a subsidiary of AAFE.

AAFE purchased the site from the U.S. General Services Administration in September of 2011 and is in the process of completing a detailed market analysis study as well as developing a business and financial plan for operating a food hub.

Established in 1974 to promote equal employment opportunities, the New York City-based nonprofit organization now employs 80 full-time employees and owns and manages more than 700 affordable housing units. AAFE also manages two Community Development Financial Institutions (CDFIs) and offers a number of community-based programs. This is the first time AAFE has expanded outside of New York City.

Most of the former Hardesty Federal Complex was built during the Word War II era and served as the U.S. Army Kansas City Quartermaster Depot, with the earliest building dating to 1920.

As the U.S. entered WWII, the Army began chemically treating military uniforms to protect against enemy gas attacks, said Jason Klumb, regional administrator for the General Services Administration Heartland Region 6. Some of those solvents used to treat uniforms, like trichloroethylene (TCE), leaked into the soil and groundwater on part of the site, and GSA is dealing with the pollution 70 years later, Klumb said. Fuel from underground storage tanks also contaminated the ground.

GSA took ownership of the site in 1960, which housed a number of agencies including the

Commerce Department and Environmental Protection Agency. For the last 11 years, the site sat vacant and GSA is currently responsible for testing, monitoring and remediating the soil and groundwater contamination. GSA is also testing the surrounding neighborhood, which includes Hardesty on the west, Thompson Avenue on the north, South White Street to the east and Independence Avenue/Wilson Road on the south.

“The trichloroethylene is at very low levels; it’s heavier than water, so it sinks to the bottom of these underground pools, so there’s no health risk. But, there’s a desire to clean it up,” Klumb said. “With the advances in technology, we have more effective and cost-effective ways of doing that. It’s unfortunate that you have 70-year-old pollution. It’s fortunate that we continue to gain the knowledge and resources to clean it up.”

To discuss the pollution and future testing, GSA will host a public information session on Thursday, June 20, from 4 p.m. to 8 p.m. at the North-East Public Library, 6000 Wilson Rd.

“It’s an attempt to partner and ensure that we’re answering any questions that community members may have,” Klumb said.

Officials in attendance will include representatives from the Missouri Department of Natural Resources (MDNR), the city health department, Hardesty Renaissance Economic Development Corporation, GSA and the contractor conducting the testing.

“It will be a way to begin a two-way conversation,” said Angela Brees, regional public information officer for GSA Heartland Region 6.

Community members with questions may also leave a message at (816) 926-6903 or email [r6environment@gsa.gov](mailto:r6environment@gsa.gov).

As for the six buildings on site, AAFE will be responsible for remediating lead paint and asbestos. Vandals have also stripped the buildings of copper and iron, which will add to the cost of renovation.

To date, Hardesty Renaissance has been awarded grants totaling \$97,500 and applied in May for the city’s Brownfields revolving loan fund.

The role of the food hub is to partner with farmers and growers within a 150-mile radius and serve as a distribution and processing center, offering retail and wholesale options. Hardesty Renaissance also plans to offer marketing and logistics support to local urban farms and provide food related programs and education.

Benefits of a local food hub include keeping distribution costs lower, reducing one’s carbon footprint and maintaining higher levels of nutrients in the produce since it has less distance to travel to the consumer.

“From the federal government perspective, this is an ideal situation to take a former federal facility and turn it over for private development in a way that’s going to improve the neighborhood,” Klumb said

The food hub will create a number of long-term jobs and City Council member Scott Wagner envisions the center partnering with a variety of entities like local schools, hospitals and restaurants. Even the Kansas City Zoo has voiced interest in the concept, he said.

“Those institutions have to buy that food, the only question is from where,” Wagner said.

Buying local is the perfect answer, he said.

“If this is commercially successful, then you’ll end up with a revenue stream that enables you to feed mission driven things, such as access to healthy food for low income families,” Turner said.

Access to healthy food is vital, especially in south Kansas City, where the area is classified as a “food desert” where there’s little or no access to healthy, unprocessed food.

“Because of that (food desert) there’s greater instances of hypertension, diabetes and other health problems, primarily because the food that most people have access to is processed, and therefore leads to a great deal of these other health problems and issues...” Wagner said. “The result is you have a less healthy population which has its own costs down the road.”

Hardesty Renaissance is open to other options in addition to the food hub, Turner said. Earlier this year, Hardesty Renaissance commissioned the Kansas City Port Authority to conduct a study on feasible uses for the site and a group of University of Kansas (KU) student architects brainstormed feasible uses for the site as a class project. Their ideas included partnering with a local community college to offer an agriculture/culinary program, establishing residential housing on-site and creating a community center, among others.

“We talked about the food hub as the first project, but there’s so much more,” Wagner said. “There’s so much more and it becomes not the destination, but the jumping off point for something greater.”

## **Popular stories**

### **[First-year elementary teacher says she scored dream job](#)**

Posted December 18, 2013, 12:00 am

### **[New elm at James Elementary](#)**

Posted May 7, 2013, 11:00 pm

### **[MR340 kicks off at Kaw Point, more than 500 paddlers compete](#)**

Posted July 23, 2013, 2:46 pm

### **[Wagner fights to preserve KC historic buildings](#)**



Dear resident,

Residents and community members are invited to participate in interviews about current and future environmental testing and cleanup related to the former Hardesty Federal Complex, located at 607 Hardesty Ave.

The U.S. General Services Administration (GSA) is conducting 20- to 30-minute in-person and phone interviews Aug. 20-22 to gather public input that will help create a Community Involvement Plan for the Hardesty site. The plan will keep community members informed about environmental testing and results, and will give community members an opportunity to participate in decision-making throughout the cleanup process.

Your interview responses will be confidential and will not be used in a way that connects them to you as an individual. This is a great opportunity for residents and GSA employees to interact and to start an open, ongoing dialogue.

Please fill out the enclosed pre-paid postcard and mail it to GSA by Aug. 10. The card will let GSA know if you are willing to participate in the interviews and how you prefer to receive information in the future. You may also contact GSA at (816) 926-6903 or [r6environment@gsa.gov](mailto:r6environment@gsa.gov) by Aug. 10 to participate in the upcoming interviews.

### **Background**

Over the past several years, GSA has conducted environmental testing and studies of the former Hardesty Federal Complex and surrounding area. GSA has done this in an effort to monitor and put in place plans to ensure the health and environment of all who live and work in the community.

The complex, which served as the U.S. Army Kansas City Quartermaster Depot, stored military supplies and treated protective military clothing during World War II and in the years following the war. Over time, some of the materials used in support of depot operations were released into the environment.

As a result, GSA is working in close coordination with the Missouri Department of Natural Resources and the Missouri Department of Health and Senior Services. Additional testing will be conducted both on the complex itself and in the areas surrounding the complex in the coming weeks and months.

If you have any questions, please leave a message at (816) 926-6903 or email [r6environment@gsa.gov](mailto:r6environment@gsa.gov). For more information, visit <http://gsa.gov/portal/content/173655>.



Estimado residente:

Se invita a residentes y miembros de la comunidad a participar en entrevistas sobre la limpieza y los ensayos ambientales actuales y futuros relacionados con el Complejo Federal de Hardesty, ubicado en 607 Hardesty Ave.

Entre el 20 y el 22 de agosto, la Administración de Servicios Generales (GSA) de los Estados Unidos realizará entrevistas telefónicas y personales de 20 a 30 minutos de duración para reunir comentarios del público que ayudarán a crear un Plan de Participación Comunitaria para Hardesty. El plan mantendrá informados a los miembros de la comunidad sobre los ensayos ambientales y sus resultados, y les dará la oportunidad de participar en la toma de decisiones del proceso de limpieza.

Las respuestas de su entrevista serán confidenciales y se usarán de una manera que no las asociarán con usted como individuo. Esta es una gran oportunidad para que los residentes y empleados de la GSA interactúen y comiencen un diálogo abierto y continuo.

Llene la tarjeta postal prepagada que se encuentra adjunta y envíela por correo a la GSA antes del 10 de agosto. La tarjeta informará a la GSA si usted desea participar en las entrevistas y la manera en que prefiere recibir información en el futuro. También puede comunicarse con la GSA llamando al (816) 926-6903 o enviando un correo electrónico a [r6environment@gsa.gov](mailto:r6environment@gsa.gov) antes del 10 de agosto para participar en las futuras entrevistas.

### **Antecedentes**

En los últimos años, la GSA ha realizado ensayos y estudios ambientales del ex Complejo Federal de Hardesty y sus alrededores. Esto se ha hecho con objeto de controlar y poner en marcha planes para garantizar la salud y el medioambiente de todos los que viven y trabajan en la comunidad.

En el complejo, que sirvió de Depósito de Intendencia de Kansas City del Ejército de los Estados Unidos, se almacenaban suministros militares y vestimenta militar tratada de protección que se usó en la Segunda Guerra Mundial y en los años posteriores a la guerra. Con el tiempo, algunos de los materiales usados para respaldar las operaciones de depósito fueron liberados al medioambiente. Como consecuencia, la GSA está trabajando en estrecha coordinación con el Departamento de Recursos Naturales de Missouri y el Departamento de Salud y Servicios para Personas de la Tercera Edad de Missouri. En las próximas semanas y meses, se llevarán a cabo ensayos adicionales en el complejo y las áreas que lo rodean.

Si tiene alguna pregunta, llame al (816) 926-6903 o envíe un correo electrónico a [r6environment@gsa.gov](mailto:r6environment@gsa.gov) para dejar un mensaje. Para obtener más información, visite <http://gsa.gov/portal/content/173655>.

**Hardesty Community Involvement  
Response Postcard**  
Return to GSA no later than Aug. 10.

Name:

Address:

Phone:

Email:

I am interested in participating in GSA's  
community interviews Aug. 20-22: Yes or No

I would like more information about environ-  
mental testing and cleanup near the former  
Hardesty Federal Complex: Yes or No

I prefer to get information through these local  
sources: Newspaper Radio Website  
Social media TV Community group  
Other \_\_\_\_\_

List specific examples:

**Tarjeta postal de respuesta a la partici-  
pación comunitaria de Hardesty**  
Devolver a GSA antes del 10 de agosto

Nombre:

Dirección:

Teléfono:

Correo electrónico:

Me interesa participar en las entrevistas  
comunitarias de GSA el 20 y 22 de agosto:  
Sí o No

Desearía más información sobre la limpieza y  
los ensayos ambientales cerca del ex  
Complejo Federal de Hardesty: Sí o No

Prefiero obtener información a través de estas  
fuentes locales: Periódico Televisión Radio  
Redes sociales Grupo comunitario  
Sitio web Otro \_\_\_\_\_

Proporcione ejemplos específicos:

**Hardesty Community Involvement Plan**  
**Community Interview Questions**  
Summer 2013

Date of interview:

Name of interviewer:

Select one: In person Telephone Email

Opening statements and confidentiality statement:

- Interviewer introduces him/herself and his/her employment/affiliation with U.S. General Services Administration.
- GSA is the former owner of the complex at Hardesty and Independence avenues, and is also the group responsible for environmental testing and clean-up efforts on and near that site.
- The purpose of this interview is to gather public input that will help create a plan to keep community members informed about environmental testing near the former federal complex. The plan will also make sure community members are given opportunities to provide input throughout the cleanup process.
- Your responses are confidential and will not be used in a way that connects them to you as an individual.
- This is a great opportunity for residents and GSA employees to interact and start an ongoing dialogue about environmental activities near the Hardesty Complex.
  - I am going to take notes during our conversation to make sure I capture all of your thoughts and recommendations.

Name of person being interviewed:

If applicable, neighborhood or community group affiliation:

Address:

Phone number:

Email address:

1. How long have you lived in the community?
2. What do you know about the former Hardesty Federal Complex?
3. What is your overall opinion about the complex?
4. What, if any, concerns or issues do you have related to the property and/or its environmental testing?
5. How would you describe community concerns or issues, if any?

6. Where do you get most of your information about the complex and related environmental activities?
  - a. Friends, family or community contacts
  - b. Newspaper
  - c. Television
  - d. Internet
  - e. Other \_\_\_\_\_
  
7. Would you like more information about the environmental investigation and cleanup at the site and what is going on there and in its surrounding areas? If yes, how would you like to receive that information?
  - a. Mail
  - b. Email
  - c. Phone
  - d. Text message
  - e. Community meetings
  - f. Other \_\_\_\_\_
  
8. What types of environmental information related to the site would you be interested in?
  
9. How involved do you think the community wants to be in the clean up conversations and decision-making?
  
10. Do you see the General Services Administration as a trustworthy source of information? Why or why not?
  
11. How do you usually get information about important issues?
  
12. Which local newspapers, TV stations, radio stations, websites and social media outlets do you regularly follow?
  
13. Are you a member of any local civic clubs, service clubs or faith organizations that would be interested in receiving information about the environmental testing near the Hardesty Complex? If so, which ones?
  
14. Tell me about a success story for your community or something you or your fellow community members are proud of.
  
15. Where are the natural gathering points in your community?
  
16. When there are celebrations, where are they held and who do you celebrate with?
  
17. Who do community members turn to for support?

18. What other organizations have you heard are doing work in the community? Any community enhancement projects?
19. Do you know anyone else in the community who would be interested in receiving information about the Hardesty work? (Names and contact info.)
20. Who else would be interested in participating in these interviews? (Names and contact information.)
21. Do you have any final questions, comments or suggestions regarding the site, the environmental work or future communications?

#### Closing statements

- Thank you again for participating in GSA's community interviews.
- As I mentioned, your feedback will help GSA determine how best to engage and communicate with you in the coming months.
- An Administrative Record of official documents related to the testing, cleanup and communications will be available at this library within the next few weeks. The librarian will know where the hard and electronic copies are located.
- Feel free to take a look at the materials before you leave.
- Take copies of the fliers and card with our contact information.

## 1. How long have you lived or worked in Northeast Kansas City?

		Response Percent	Response Count
Less than 3 years		6.3%	1
3-5 years		12.5%	2
6-10 years		18.8%	3
11-15 years		18.8%	3
16-20 years		18.8%	3
<b>More than 20 years</b>		<b>25.0%</b>	<b>4</b>
<b>answered question</b>			<b>16</b>
<b>skipped question</b>			<b>0</b>

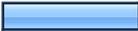
## 2. What do you know about the former Hardesty Federal Complex?

		Response Percent	Response Count
What I've heard from Jim Turner		18.8%	3
It has been purchased for redevelopment		6.3%	1
It is going to be a food hub		6.3%	1
It has environmental issues		12.5%	2
Was once used by the Army		50.0%	8
Used to have a firing range		6.3%	1
Nothing/not much/only what I've heard from GSA		37.5%	6
<b>Other (please specify)</b>		<b>56.3%</b>	<b>9</b>
		<b>answered question</b>	<b>16</b>
		<b>skipped question</b>	<b>0</b>

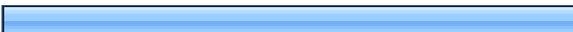
## 3. What is your overall opinion about the complex?

	Response Count
	15
<b>answered question</b>	<b>15</b>
<b>skipped question</b>	<b>1</b>

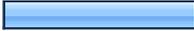
#### 4. What, if any, concerns or issues do you have related to the property and/or its environmental testing?

		Response Percent	Response Count
Human health		46.7%	7
Property value		20.0%	3
None/I'm not that concerned		20.0%	3
Redevelopment timing, future use, ability to redevelop		20.0%	3
<b>List other concerns and/or enter comments that expand on topics checked above</b>		<b>93.3%</b>	<b>14</b>
		<b>answered question</b>	<b>15</b>
		<b>skipped question</b>	<b>1</b>

#### 5. How would you describe community concerns or issues, if any?

		Response Percent	Response Count
Prostitution		13.3%	2
Homelessness		13.3%	2
Urban decay/blight		20.0%	3
Access to healthy food		6.7%	1
None/community is not engaged or concerned		33.3%	5
<b>Other (please specify)</b>		<b>86.7%</b>	<b>13</b>
		<b>answered question</b>	<b>15</b>
		<b>skipped question</b>	<b>1</b>

**6. Where do you get most of your information about the complex and related environmental activities?**

		Response Percent	Response Count
Friends, family or community contacts		35.7%	5
Television		7.1%	1
Newspaper		21.4%	3
Internet		28.6%	4
<b>Other (please specify)</b>		<b>64.3%</b>	<b>9</b>
<b>answered question</b>			<b>14</b>
<b>skipped question</b>			<b>2</b>

**7. Would you like more information about the environmental investigation and cleanup at the site and what is going on there and in its surrounding areas? (All said yes.) If yes, how would you like to receive that information?**

		Response Percent	Response Count
Mail		28.6%	4
Email		57.1%	8
Phone		7.1%	1
Text message		0.0%	0
<b>Community meetings</b>		<b>78.6%</b>	<b>11</b>
Newspaper		14.3%	2
Other (please specify)		42.9%	6
<b>answered question</b>			<b>14</b>
<b>skipped question</b>			<b>2</b>

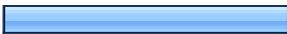
## 8. What types of environmental information related to the site would you be interested in?

		Response Percent	Response Count
Health and safety		21.4%	3
Redevelopment/future use		21.4%	3
Data/test results		28.6%	4
Summary/big picture		7.1%	1
Everything		28.6%	4
<b>Other (please specify)</b>		<b>64.3%</b>	<b>9</b>
<b>answered question</b>			<b>14</b>
<b>skipped question</b>			<b>2</b>

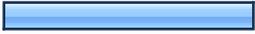
## 9. How involved do you think the community wants to be in the clean up conversations and decision-making?

		Response Percent	Response Count
Very involved		6.3%	1
Somewhat involved		6.3%	1
Not involved		25.0%	4
Depends on the individual or group		43.8%	7
<b>Other specific comments</b>		<b>93.8%</b>	<b>15</b>
<b>answered question</b>			<b>16</b>
<b>skipped question</b>			<b>0</b>

### 10. Do you see the General Services Administration as a trustworthy source of information?

		Response Percent	Response Count
Yes		57.1%	8
No		0.0%	0
Not sure		42.9%	6
Why or why not?			12
answered question			14
skipped question			2

### 11. How do you usually get information about important issues?

		Response Percent	Response Count
Television		62.5%	10
Radio		12.5%	2
Newspaper		37.5%	6
Friends and family		18.8%	3
Internet		37.5%	6
Community organizations or meetings		18.8%	3
Other (please specify)		25.0%	4
answered question			16
skipped question			0

**12. Which local newspapers, TV stations, radio stations, websites and social media outlets do you regularly follow?**

		Response Percent	Response Count
Channel 4		31.3%	5
Channel 5		0.0%	0
Channel 9		31.3%	5
Channel 19/PBS		18.8%	3
Channel 41		6.3%	1
Northeast News		43.8%	7
Kansas City Star		31.3%	5
<b>Other (please specify)</b>		<b>75.0%</b>	<b>12</b>
<b>answered question</b>			<b>16</b>
<b>skipped question</b>			<b>0</b>

**13. Are you a member of any local civic clubs, service clubs or faith organizations that would be interested in receiving information about the environmental testing near the Hardesty Complex? If so, which ones?**

	Response Count
	16
<b>answered question</b>	<b>16</b>
<b>skipped question</b>	<b>0</b>

**14. Tell me about a success story for your community or something you or your fellow community members are proud of.**

	Response Count
	16
answered question	16
skipped question	0

**15. Where are the natural gathering points in your community?**

		Response Percent	Response Count
<b>Northeast Library</b>		62.5%	10
KC Museum		12.5%	2
Parks		31.3%	5
Eleos Coffee		12.5%	2
We don't have any		6.3%	1
<b>Other (please specify)</b>		62.5%	10
		answered question	16
		skipped question	0

## 16. When there are celebrations, where are they held and who do you celebrate with?

		Response Percent	Response Count
We don't have places to celebrate/people do not come together to celebrate/use individual homes		43.8%	7
Parks		31.3%	5
List other places or add additional specific comments here		43.8%	7
		answered question	16
		skipped question	0

## 17. Who do community members turn to for support?

		Response Percent	Response Count
They don't turn to anyone/they turn to personal friends or leaders within community		18.8%	3
Don Bosco		6.3%	1
Churches		18.8%	3
Samuel Rodgers Health Center		12.5%	2
List other responses/specify churches named/list other comments here		75.0%	12
		answered question	16
		skipped question	0

**18. What other organizations have you heard are doing work in the community? Any community enhancement projects?**

		Response Percent	Response Count
None		20.0%	3
List specific responses		80.0%	12
answered question			15
skipped question			1

**19. Do you know anyone else in the community who would be interested in receiving information about the Hardesty work?**

		Response Percent	Response Count
No one		33.3%	4
I am willing to give GSA contact info to others		16.7%	2
List specific people/groups here		50.0%	6
answered question			12
skipped question			4

## 20. Who else would be interested in participating in these interviews?

		Response Percent	Response Count
No one		77.8%	7
I am willing to give GSA contact info to others		0.0%	0
List specific people/groups		22.2%	2
<b>answered question</b>			<b>9</b>
<b>skipped question</b>			<b>7</b>

## 21. Do you have any final questions, comments or suggestions regarding the site, the environmental work or future communications?

	Response Count
	12
<b>answered question</b>	<b>12</b>
<b>skipped question</b>	<b>4</b>

## 22. By which method was this interview conducted?

		Response Percent	Response Count
In person		50.0%	8
Telephone		37.5%	6
Email		12.5%	2
<b>answered question</b>			<b>16</b>
<b>skipped question</b>			<b>0</b>

**23. In which neighborhood do you live (or work)? (Found on Interview Scheduler Google spreadsheet.)**

		Response Percent	Response Count
Indian Mound		37.5%	6
Indian Mound		0.0%	0
Lykins		31.3%	5
Scarritt		12.5%	2
Sheffield		6.3%	1
Pendleton Heights		6.3%	1
Other (please specify)		6.3%	1
		<b>answered question</b>	<b>16</b>
		<b>skipped question</b>	<b>0</b>

## Q2. What do you know about the former Hardesty Federal Complex?

1	- in process of being examined - at least traces of the chemical - new it will be a big project and might take awhile before ready for redevelopment	Nov 14, 2013 1:25 PM
2	when GSA stopped using it another organization was supposed to take it over but ended up not able to follow thru on their plans	Sep 4, 2013 3:46 PM
3	- never seen any machinery or people there - never saw any testing - former army quartermasters - built for WWII - hardesty was director of FBI - trains loaded and offloaded there - supported korean and vietnam wars - used to be school 10 years ago - training center - 10 or 20 guys walking over to Waids - storage unit (parceled off) - used to have virtual tour online when we were trying to sell it	Sep 4, 2013 3:44 PM
4	had bodies of dead soldiers for cremation	Sep 4, 2013 3:42 PM
5	- used to be quartermaster depot, stored ammo, tunnel systems, 13-15 buildings, one building disconnected from fed complex that is now shell? storage, has office space, had treatment facility for uniforms, tanks	Sep 4, 2013 2:30 PM
6	- late 90s-early 2000s converted to storage	Aug 29, 2013 11:09 AM
7	- thought used to have books / federal filing buildings	Aug 29, 2013 8:12 AM
8	intend to do own research	Aug 29, 2013 8:02 AM
9	I wouldn't say I know a great deal about the complex itself. I have been inside a few times and have known a few people that have worked there, that was at least 10 years ago. I figured it was mostly used as a storage facility.	Aug 29, 2013 7:44 AM

### Q3. What is your overall opinion about the complex?

1	- need it to be contributing part of community again - comm is turning around and need this to be part of it - food hub will be huge draw	Nov 14, 2013 1:25 PM
2	Wants to see it back in use. Already enough blights. Use it to spruce neighborhood. Eyesore right now. Future use - garden with veggies or fruit	Nov 14, 2013 1:25 PM
3	- has a lot of potential because of size - nice that it has open areas and land - should be able to repurpose - would be nice if it could anchor that end of Indep Ave	Sep 4, 2013 3:46 PM
4	- don't like it, eyesore - brings down property value - if no constant security guard then would be problems on site and homeless - breathing fumes nearby	Sep 4, 2013 3:44 PM
5	interesting complex. anything the government had is awesome, but disappointing that someone dropped the ball. In neighborhood with children, should have been monitored better and cleaned up as soon as we knew. Should have informed public better. "It was silenced"	Sep 4, 2013 3:42 PM
6	- looks like it has been abandoned for years	Sep 4, 2013 3:36 PM
7	- before thought old warehouse space - have received some info from Jim - opinion now = i see people contaminating all the time; seems like we are trying to figure out and fix the situation	Sep 4, 2013 2:30 PM
8	- serious issue - should inform everyone - vapor is serious and can't/won't be detected	Aug 29, 2013 11:14 AM
9	- wish would tear down and put something useful there - blight	Aug 29, 2013 11:09 AM
10	great that org is willing to improve it. looks bad. eyesore. plans are great	Aug 29, 2013 10:48 AM
11	no basis to make opinion, except should have used more care in storage of hazardous materials	Aug 29, 2013 10:30 AM
12	- not sure. hate that it has come up	Aug 29, 2013 8:12 AM
13	didn't realize how bad contamination would be when it started; shrugged it off; now taking more responsibility for it and it's moving in correct direction instead of just sweeping under rug	Aug 29, 2013 8:02 AM
14	People upbeat to learn it's going to be a food hub	Aug 29, 2013 7:55 AM
15	I would say that when it was first constructed it probably was a sight to behold much like other buildings in the North-East area, example the old Montgomery Wards building on St. John which is now the Super Flea, however; as it stands right now it looks rather rundown.	Aug 29, 2013 7:44 AM

**Q4. What, if any, concerns or issues do you have related to the property and/or its environmental testing?**

1	- digging in the area - is that safe?	Nov 14, 2013 1:25 PM
2	Not contributing to community, not giving back. No concerns about testing at this time. Knows every kind of chemical can be cleaned up with right treatment.	Nov 14, 2013 1:25 PM
3	- env stuff is a big deal - can't make progress until it's taken care of - don't think people have a sense of the full scale of env issues - no one wants food from contaminated sources - can become a source of goodwill, pride and ownership in the community - LISC is working on the financing / feasibility side	Sep 4, 2013 3:46 PM
4	- health concerns - prop value - decay	Sep 4, 2013 3:44 PM
5	when did it happen and why wasn't anything done. concerned with results and how it affects health. want to know extent	Sep 4, 2013 3:42 PM
6	- i didn't know it had pollution	Sep 4, 2013 3:36 PM
7	- numbers are public - there are standards in place - not going on behind the scenes - concern is that it meets the standards before I would do business there - good that we would try to provide systems to treat basements if necessary	Sep 4, 2013 2:30 PM
8	- teach residents how to investigate for themselves. is it a smell??	Aug 29, 2013 11:14 AM
9	- blight - why wasn't contamination removed sooner? we knew the tanks were leaking a long time ago - health concerns - have there been reports of cancer clusters? - children exposure by playing on the site - property values	Aug 29, 2013 11:09 AM
10	glad that someone is keeping an eye on it	Aug 29, 2013 10:30 AM
11	- when water comes up in my drain when it rains hard does TCE come in? no b/c it's heavier than water and rain doesn't affect GW level - last time rained hard city told him to call homeowners insurance. but city gave him a powder to put in the basement (came in margarine tub?!) - property value? not sure if it even has leached that far	Aug 29, 2013 8:12 AM
12	drinking tap water and living in area next to complex/contamination; health concern? for family; don't necessarily believe there is no chance for ground water and drinking water systems to cross over; glad someone is doing something about it	Aug 29, 2013 8:02 AM
13	Not sure how I feel about pollution problem; more worried about electronic pollution than groundwater at this point	Aug 29, 2013 7:55 AM
14	I didn't really know that there were any environmental concerns about the building. I assumed that most of the complex was empty aside from a few businesses that were using some of the space within. I do vaguely remember some reports on some issues within the building that were found a few years ago.	Aug 29, 2013 7:44 AM

**Q5. How would you describe community concerns or issues, if any?**

1	- as new things come in are they the right choices / meeting our needs? - especially along indep ave. - right now zoned that almost anything can open - attracts right things to area	Nov 14, 2013 1:25 PM
2	Blights. Drainage needed at train bridge under Independence Ave - that area floods. RR bridge - supposed to take down old bridge, but didn't. Homeless need places to stay and healthy food.	Nov 14, 2013 1:25 PM
3	- concerns right after sale of property were "who are these new owners," and "what are they going to do with the property" - these were calmed by Jim's outreach efforts - regarding env concerns, not convinced people knew it was an issue until the sale of the property - future use of full site / wondering what will happen with it / industrial concerns	Sep 4, 2013 3:46 PM
4	- no one concerned with anything - renters mostly - no sense of community - only really know 2 neighbors - homeless - schools not accredited and i have to pay taxes anyway - "not really any hope" is often the consensus - kids not going to school, doing drugs instead	Sep 4, 2013 3:44 PM
5	- squatters in vacant homes -- don't know who to go to for help	Sep 4, 2013 3:42 PM
6	- don't want vacant property - would like to not be abandoned - something to benefit community - not something that would be negative	Sep 4, 2013 3:36 PM
7	- looks bad; many structures with broken windows - drugs - residential turnover / renters - past plans that would have improved the community were pulled and given to areas with more influence. Ex. was a plan to dead end some roads to decrease crime/quick exits, but that didn't happen	Aug 29, 2013 11:09 AM
8	community concerns generally revolve around crime and grime. A number of us are trying to be proactive, helping to create means of community involvement projects, and sense of community/belonging	Aug 29, 2013 10:30 AM
9	- nobody knows what's going on with complex. no one has information. - boring the holes for testing - got everyone talking - neighbor down the street seemed to know what Terracon was doing but not sure how she knew	Aug 29, 2013 8:12 AM
10	most ppl in neighborhood are not involved with anything that goes on around them (incl env). fact that they don't know doesn't mean wont "get hurt". due to own lack of involvement could get in bad position; they don't vote, get involved, ask questions or call police	Aug 29, 2013 8:02 AM
11	Haven't heard people talking about environmental issues	Aug 29, 2013 7:55 AM
12	sex offenders in one apt bldg nearby with girls coming in and out (4511 E. 9th St.); break-ins; crime	Aug 29, 2013 7:49 AM
13	To be honest I don't know that much of the community pays much mind to the complex itself, if you've lived in this area for any number of years the building itself blends into the background. You don't really see many people moving in or out. As for community concerns unrelated to Hardesty I'd say that keeping the area clean is a concern, also having more economic opportunities within the community itself. There are a few that are coming up around the area but quite a	Aug 29, 2013 7:44 AM

**Q5. How would you describe community concerns or issues, if any?**

few are not so much concerned with building the community but instead taking the money out of it, ex. Pawnshops and Payday loans.

**Q6. Where do you get most of your information about the complex and related environmental activities?**

1	NEAT	Nov 14, 2013 1:25 PM
2	Jim	Sep 4, 2013 3:46 PM
3	GSA letter	Sep 4, 2013 3:44 PM
4	from GSA	Sep 4, 2013 3:42 PM
5	didn't have any / GSA	Sep 4, 2013 3:36 PM
6	Jim and GSA	Sep 4, 2013 2:30 PM
7	GSA	Aug 29, 2013 11:09 AM
8	Jim	Aug 29, 2013 10:48 AM
9	neighborhood assoc, people	Aug 29, 2013 8:02 AM

**Q7. Would you like more information about the environmental investigation and cleanup at the site and what is going on there and in its surrounding areas? (All said yes.) If yes, how would you like to receive that information?**

1	NEAT. Northeast News	Nov 14, 2013 1:25 PM
2	Northeast News	Nov 14, 2013 1:25 PM
3	card on doors	Sep 4, 2013 3:42 PM
4	interested in joining a team	Aug 29, 2013 11:14 AM
5	NEAT list 150-200 on scarrit email list welcome to come to neighborhood assoc mtg 1st mon of month 6:30 at KC museum (sept is second due to holiday)	Aug 29, 2013 10:48 AM
6	library (adm record) internet	Aug 29, 2013 8:02 AM

**Q8. What types of environmental information related to the site would you be interested in?**

1	in plain language	Sep 4, 2013 3:44 PM
2	extent/distance of migration; concentration; human health risk; when it will be cleaned up - need good explanation of process of clean up and how we are held accountable and who holds GSA accountable	Sep 4, 2013 3:42 PM
3	- want to understand - no info need better explanation of problem itself and how we are trying to fix it	Sep 4, 2013 3:36 PM
4	- here is the standard, here is what we found, maps with plume area, plan of action	Sep 4, 2013 2:30 PM
5	when is it finished and when are we moving on?	Aug 29, 2013 10:48 AM
6	updates	Aug 29, 2013 10:30 AM
7	- explanation of separation of water systems, drinking vs. run off vs. groundwater systems - details	Aug 29, 2013 8:12 AM
8	what the contaminates are; transport codes for the chemicals (changed route off of hwy based on truck carrying contaminates next to him)	Aug 29, 2013 8:02 AM
9	testing next steps	Aug 29, 2013 7:55 AM

**Q9. How involved do you think the community wants to be in the clean up conversations and decision-making?**

1	- Her center is in pendleton heights and they are vocal and very involved - important to them to have all the information possible - weekly cleanups - hired more patrol officers and street lights - Jessica Ray - PH pres	Nov 14, 2013 1:25 PM
2	white community willing and interested. hispanic too scared. immigrant population knows it can be way worse	Nov 14, 2013 1:25 PM
3	- will say they want to be involved but about 20% of the people who say yes will actually follow through and be involved - don't expect a lot of engagement	Sep 4, 2013 3:46 PM
4	- people that grew up here neighborhood means a lot and want to know what's going on and would want to be involved - hispanics too afraid to come in or talk to us	Sep 4, 2013 3:44 PM
5	want to be involved. there is a concern that's being expressed to her. she is the one who is finding out and [telling?] others	Sep 4, 2013 3:42 PM
6	- no idea b/c no idea what's going on. - think every person is in same situation of not knowing. - if GSA provides more info, yes would be interested	Sep 4, 2013 3:36 PM
7	- next to nothing for most. - a few ppl who will want to be very involved	Sep 4, 2013 2:30 PM
8	- north part of indian mound will be more cooperative than the less organized South IM	Aug 29, 2013 11:14 AM
9	- along the lines of ratio of homeowners to renters	Aug 29, 2013 11:09 AM
10	just want to know it will be done, it will be done right, when it will be done	Aug 29, 2013 10:48 AM
11	don't know	Aug 29, 2013 10:30 AM
12	in general, not going to be involved. most ppl want to know it's in good hands who are trying to clean up to best of ability	Aug 29, 2013 8:02 AM
13	Like to be involved if they know	Aug 29, 2013 7:55 AM
14	- no, mostly hispanic/latino - has friends - hispanic distrust of government - most don't take KC Star	Aug 29, 2013 7:49 AM
15	I'd say there are some that want to really help the community and make it a better place, but I would not call them the majority. For the most part the people within the community are trying to help them and theirs. If it actually has a bearing on their quality of life I would imagine more would want to have a say in their community.	Aug 29, 2013 7:44 AM

**Q10. Do you see the General Services Administration as a trustworthy source of information?**

1	not enough experience - assume you have to give accurate information b/c oversight	Nov 14, 2013 1:25 PM
2	i hope so. want to see redevelopment	Nov 14, 2013 1:25 PM
3	- community members may not because GSA has to pay for the clean up and have a perceived interest in minimizing the problem - most people will probably think we will do what's right - would help to have 3rd party (non-govt) review and sign off on the science. LISC has worked with the KSU TAB(?) and it worked well in their experience	Sep 4, 2013 3:46 PM
4	we are the ones who stepped up and brought to attention. young generation bringing it forward. older generation shouldn't have let it get this far.	Sep 4, 2013 3:42 PM
5	no idea. doesn't know anything about us	Sep 4, 2013 3:36 PM
6	good process, third party involvement, transparency, plus this is a small issue compared to past issues, can see the commitment to handle it properly	Sep 4, 2013 2:30 PM
7	know a few people that work for GSA	Aug 29, 2013 11:09 AM
8	know that just it took so long to get anything rolling. also heard about bannister past dealings of not knowing where federal properties are	Aug 29, 2013 10:48 AM
9	I don't know enough to answer that, but so far I have no reason to be skeptical	Aug 29, 2013 10:30 AM
10	no pos or neg feelings at this point. don't know. funding is unknown. motive is unknown. - having outside source involved - fact that we are trying to communicate with him and that we went to meeting lends credibility - politicians are sometimes career criminals	Aug 29, 2013 8:02 AM
11	- no previous notions	Aug 29, 2013 7:49 AM
12	I tend to trust until proven wrong. I don't know much about the GSA but I haven't seen anything that makes me raise an eyebrow at them. Other than a general slight mistrust of government agencies I don't see a reason to mistrust them.	Aug 29, 2013 7:44 AM

**Q11. How do you usually get information about important issues?**

1	- Northeast news - community groups - email - city council - citizens association of kansas city, inc. -- dcofran@southwesternbell.net	Nov 14, 2013 1:25 PM
2	- like to take in as little info as possible - when it's important ppl tell me then i research	Sep 4, 2013 2:30 PM
3	book	Aug 29, 2013 11:09 AM
4	- not social media b/c that's just public opinion - no facebook - no text	Aug 29, 2013 8:02 AM

**Q12. Which local newspapers, TV stations, radio stations, websites and social media outlets do you regularly follow?**

1	- biz journal - ingram's magazine - city council website - citizens assoc website	Nov 14, 2013 1:25 PM
2	KUDL radio and gospel stations	Nov 14, 2013 1:25 PM
3	NE Chamber of Commerce website	Sep 4, 2013 3:46 PM
4	NPR, internet, FrontLine	Sep 4, 2013 3:44 PM
5	- best way to reach hispanic population is through radio: La X1250, La Grande 1340	Sep 4, 2013 3:36 PM
6	Internet news sources	Sep 4, 2013 2:30 PM
7	106.5, 94.9, 105 Jack FM	Aug 29, 2013 10:48 AM
8	Sunday Star only	Aug 29, 2013 10:30 AM
9	most info from internet through tight filter.	Aug 29, 2013 8:02 AM
10	Library website and databases accessed from home	Aug 29, 2013 7:55 AM
11	Northeast news - every house gets it (best way for general pop) phone number is good - ppl answer and respond meetings - lykins local news - channel 19,	Aug 29, 2013 7:49 AM
12	I watch a bunch of different TV news programs, I normally go through Google news and find various articles, social media wise Twitter and Facebook seems to be the big two for me.	Aug 29, 2013 7:44 AM

**Q13. Are you a member of any local civic clubs, service clubs or faith organizations that would be interested in receiving information about the environmental testing near the Hardesty Complex? If so, which ones?**

1	- NEAT - community center - chamber has had charter school for years, but next july it is moving to Bosco school - ask bobbi baker about reaching minority - samuel rodgers - della lamb - don bosco - willing to ask the principal of the school (which leases) if can put up info	Nov 14, 2013 1:25 PM
2	Children's Lutheran Memorial Church,	Nov 14, 2013 1:25 PM
3	- NE Chamber - North East Alliance Together (NEAT) - hispanic chamber of commerce	Sep 4, 2013 3:46 PM
4	Pastor Westlake at Cheffield Church	Sep 4, 2013 3:44 PM
5	- would like to be involved with Indian Mound neighborhood assoc	Sep 4, 2013 3:42 PM
6	no	Sep 4, 2013 3:36 PM
7	Lykins, urban farm guys, King's Family Church (recently moved to rivermarket but members in NE - Ryan Kuvicina is pastor - can ask him)	Sep 4, 2013 2:30 PM
8	no	Aug 29, 2013 11:14 AM
9	no	Aug 29, 2013 11:09 AM
10	northeast chamber, downtown council (may not be interested)	Aug 29, 2013 10:48 AM
11	Rock of KC Church, Rock Solid Urban Impact, Urban Farming Guys	Aug 29, 2013 10:30 AM
12	no	Aug 29, 2013 8:12 AM
13	urban gardeners - soil contamination food, not lawns urban farm guys seed savers	Aug 29, 2013 8:02 AM
14	Sheffield Church, church on Winner Road, big	Aug 29, 2013 7:55 AM
15	NE neighborhood Unity Temple on Plaza - not in neighborhood	Aug 29, 2013 7:49 AM
16	No	Aug 29, 2013 7:44 AM

**Q14. Tell me about a success story for your community or something you or your fellow community members are proud of.**

1	- CID and community members that made it happen - getting things started around here - bobbi baker and kay barnes - streamlining social welfare needs as we partner and communicate b/w orgs	Nov 14, 2013 1:25 PM
2	The clean up on her block sparked by her. Clean up of her own property. Shared sense of pride. neighbors helped clean up brush.	Nov 14, 2013 1:25 PM
3	- Community Improvement District championed by NE Chamber and Bobbi Baker Hughes - took a long time to get approved. started effort in 2006, approved May 13 - along Indep Ave from Wilson to Paseo - 1% sales tax and a certain property tax increase are going to fund improvements	Sep 4, 2013 3:46 PM
4	- when closed liquor store at 10th and hardesty, sheffield church took over and turned into a food pantry - helped clean up and keep trouble away - hispanic renovating properties (9th st and 6th and 7th); stucco and lawn kept up	Sep 4, 2013 3:44 PM
5	- clean up day in past - need again	Sep 4, 2013 3:42 PM
6	- opened a park close to where i live - nice - everyone glad to have it - has soccer field and grasses - didn't participate	Sep 4, 2013 3:36 PM
7	- community gardens - after-school art program - wrestling program	Sep 4, 2013 2:30 PM
8	none	Aug 29, 2013 11:14 AM
9	none wish I [could]	Aug 29, 2013 11:09 AM
10	scarritt - worked hard on codes violations, improving housing stock, crime prevention activities, working to get funding for playground in concourse park, fighting to keep kc museum neat - getting sus places grant and city funding and planning related to that to expand and improve the avenue - will have great impact on residential also	Aug 29, 2013 10:48 AM
11	Establishing urban farms/gardens to bring the community together	Aug 29, 2013 10:30 AM
12	- trash clean up day with dumpsters at park. helped with tires in alleys. organized by IM neighborhood assoc	Aug 29, 2013 8:12 AM
13	- since moving in, started with 1000 sf of garden as a test. ppl coming by. 6 other neighbors have started gardening as a result - wants to do own community garden soon 7th and benton is his house	Aug 29, 2013 8:02 AM
14	cultural programming - vietnamese (prevalent; grant allowed , kurtish (not many in community) and butan GED programming spanish classes coming Mexican consulate north of river - living in US but from Mexico Somali foundation - may have info	Aug 29, 2013 7:55 AM
15	- new soccer field at street off 9th - old lykins assoc - used to have cleanups - ppl would get outside and talk to each other - know each other - have functions	Aug 29, 2013 7:49 AM
16	I have been working with a fellow community member Maria King in getting the North-East area cleaned up. I've helped her organize the information she has placed to the 311 action center as well has help her keep landlords accountable	Aug 29, 2013 7:44 AM

**Q14. Tell me about a success story for your community or something you or your fellow community members are proud of.**

for the upkeep of their properties.

**Q15. Where are the natural gathering points in your community?**

1	- Taste and Tour at sons of columbus (coming up soon)	Nov 14, 2013 1:25 PM
2	Sons of Columbus Maddie Rhodes Center Don Bosco Dairy Barn	Sep 4, 2013 3:46 PM
3	Old guys hang out at Hardee's on Independence	Sep 4, 2013 3:44 PM
4	holy cross church - sunday services. parish priest Father Jason Koch (816) 231-4845 (online says Rev. Joeseeph Cisetti), library, parks	Sep 4, 2013 3:42 PM
5	- gardens - churches, but they have a lot of commuter members - elementary schools	Sep 4, 2013 2:30 PM
6	Holy Cross, St. John's	Aug 29, 2013 11:09 AM
7	church, community gardens	Aug 29, 2013 10:30 AM
8	urban farm locations; lot of ppl drive past to see how it's going	Aug 29, 2013 8:02 AM
9	soccer field	Aug 29, 2013 7:55 AM
10	- old apple market - now mi mercado - don't take advantage of parks - fountains - soccer field	Aug 29, 2013 7:49 AM

**Q16. When there are celebrations, where are they held and who do you celebrate with?**

1	- KC Museum - sons of columbus hall	Sep 4, 2013 3:46 PM
2	- used to have fireworks at sheffield church before recession	Sep 4, 2013 3:44 PM
3	through church functions	Sep 4, 2013 3:42 PM
4	- at school - only place enclosed and good venue - schools in general	Sep 4, 2013 3:36 PM
5	- neighborhood cmas party at neighborhood assoc mtg location (now eleos) - block party - about 50 ppl at a time - basement of King's Family church building was old assoc mtg spot	Sep 4, 2013 2:30 PM
6	- benton blvd and gladstone blvd = corinthian hall / museum of natural history - concourse park - st. johns & belmont (behind SuperFlea) softball fields	Aug 29, 2013 11:09 AM
7	- union station / memorial -- not in neighborhood	Aug 29, 2013 7:49 AM

**Q17. Who do community members turn to for support?**

1	- Restart program - cherith brook - have community dinners on thursday and shower and breakfast for homeless - della lamb especially adopting families around holidays - faith hope ministries - maddie rhodes - christ presbeterian - Laura will draw in the new minister when he gets here	Nov 14, 2013 1:25 PM
2	call 311 KCMO 816-513-1313	Nov 14, 2013 1:25 PM
3	- immigrants turn to own leadership - somali have Somali Foundation - hispanics have Hispanic Economic Development Corporation (HEDC) or Maddie Rhodes - Vietnamese turn to own subleaders	Sep 4, 2013 3:46 PM
4	Food pantry, EBT cards for food stamps	Sep 4, 2013 3:44 PM
5	Mary Rose	Sep 4, 2013 3:36 PM
6	- no central support system - sometimes block captain - churches - maddie rhodes	Sep 4, 2013 2:30 PM
7	plaza	Aug 29, 2013 11:14 AM
8	Della Lamb	Aug 29, 2013 11:09 AM
9	35-40 ppl come to neighborhood assoc mtgs; city council	Aug 29, 2013 10:48 AM
10	library	Aug 29, 2013 8:12 AM
11	- own neighbors, salvation army, food banks, sheffield church - strong men's organization too - Pastor Westlake	Aug 29, 2013 7:49 AM
12	Well it would really depend on what type of support they are looking for. To be honest there are a few organizations that help people in need, Restart, Sheffield, Bishop Sullivan Center, Kansas City Public Library. Some of the government organizations seem to be unwilling or unable to help people directly their tendency is to push them off to the library and have them look at the organizations website on our public computers. The problem arises that a great deal of the websites are hard to operate with moderate or below experience with computers. It's not really the organizations fault considering how there is a massive push to the internet but quite a few get lost in the shuffle.	Aug 29, 2013 7:44 AM

**Q18. What other organizations have you heard are doing work in the community? Any community enhancement projects?**

1	Historic clean up - Scarritt neighborhood	Nov 14, 2013 1:25 PM
2	- CASEUMB - social service agencies but their clients are mostly transient and wouldn't be our target audience	Sep 4, 2013 3:46 PM
3	Independence Ave west improvements and historic lights; nice big houses toward Truman's old neighborhood	Sep 4, 2013 3:44 PM
4	don bosco	Sep 4, 2013 3:42 PM
5	- jewish vocational service starting to put in community gardens - vacation bible school (Baptist church) - Cherith Brook (anti-war, protested at bannister, etc.)	Sep 4, 2013 2:30 PM
6	- see ppl helping ppl but don't know the groups - united way (hotline 211)	Aug 29, 2013 11:14 AM
7	- Old Northeast organization working to improve area and remove blight - Independence Ave. CID project	Aug 29, 2013 11:09 AM
8	pendelton heights neighborhood doing work; want to expand sidewalk to meet scarrit; going to start orchard; just started community garden; have a lot of young professionals in their neighborhood; st. anthony church providing ESL classes for residents - started within	Aug 29, 2013 10:48 AM
9	Eleos Coffee Shop, Victory Christian Fellowship, ROCK, RSUI, Urban Farming Guys, Cherith Brook	Aug 29, 2013 10:30 AM
10	- google fibre by fall	Aug 29, 2013 8:12 AM
11	indep ave - tear down old gas station - rebuild - .. apple market is now mi mercado	Aug 29, 2013 7:55 AM
12	I know there are some but I have troubles remembering all the acronyms.	Aug 29, 2013 7:44 AM

**Q19. Do you know anyone else in the community who would be interested in receiving information about the Hardesty work?**

1	Cherith Brook	Sep 4, 2013 2:30 PM
2	- - talk to students in the GED classes at library b/c wanting to learn	Aug 29, 2013 11:14 AM
3	Michael Bushnell - used to be pres of scarrit. is editor of NE News Tom rabira and laura ranier - independence plaza jessica ray - pendleton heights kay barnes - facilitating the NEAT process for grant (former mayor); consultant; founded program for Park Univ leadership program no official role in neighborhood, but David Remley takes a lot of pictures in NE and ppl follow him on facebook. dremley@mac.com	Aug 29, 2013 10:48 AM
4	Lykins Neighborhood Assoc members	Aug 29, 2013 10:30 AM
5	- at lykins mtg	Aug 29, 2013 8:02 AM
6	Dave Nook - tonight - branch employee Shirl - call branch	Aug 29, 2013 7:55 AM

**Q20. Who else would be interested in participating in these interviews?**

1	- Jim's list - new community organizer through maddie rhodes	Sep 4, 2013 3:46 PM
2	John (neighbor)	Sep 4, 2013 3:42 PM

**Q21. Do you have any final questions, comments or suggestions regarding the site, the environmental work or future communications?**

1	all wells are closed up by city big on gardening - sunflowers, fruit trees, sunflowers interviewee knows english and spanish. husband from guatemala. can speak spanish	Nov 14, 2013 1:25 PM
2	- LISC is working with six neighborhoods right now and NEKC is the most difficult one in terms of the people, not the assets or opportunities - in the past, the area has missed out on opportunities because the different subgroups in the population wouldn't work together. Now their eyes are a little more open and they seem to have stopped actively sabotaging each other, but they are still not collaborating. - LISC has provided financial support of feasibility study through a grant. Also working on an affordable housing project	Sep 4, 2013 3:46 PM
3	- african and asian population near KC College on Independence	Sep 4, 2013 3:44 PM
4	- need a presentation portion where we give our speech a few times at next info session - has brother who may be willing/able to interpret for us. lives in KS now. Joe "Jose" Gomez (816) 665-5698 --- GSA has list of vacancies -- share with neighborhood assoc?	Sep 4, 2013 3:42 PM
5	- willing to pass along info and encourage others to attend and get informed - best way to reach hispanic is through radio - La X1250, La Grande 1340	Sep 4, 2013 3:36 PM
6	- fliers on light poles and bulletin boards - test strips you hang to see if it changes color - give to residents for them to hang in their own basements	Aug 29, 2013 11:14 AM
7	no	Aug 29, 2013 11:09 AM
8	translation/interpretation: have a community organizer - he speaks spanish - maddie rhodes staff provides funds for community org. - focusing on keeping streets clean - getting more hispanic at meetings - getting people involved maddie rhodes staff leslie can help jason fields	Aug 29, 2013 10:48 AM
9	email fliers and our contact info -- need to know what the government can do (financial support) b/c property will be hard to sell b/c of contaminates - dug pond a few years ago - How does contaminated ground water effect trees, and especially fruit trees?	Aug 29, 2013 8:12 AM
10	Reach out to Indian Mound neighborhood assoc. mtg 3rd monday of month at library at 7:00 Brian Stadler - secretary? every two weeks water at library gets tested - i think by the city NE chamber mtg is next tues Word of mouth will be how many people learn about this issue If GSA puts info on bookmarks, library staff will stuff them into outgoing books/materials	Aug 29, 2013 7:55 AM
11	[communications through] Hispanic Chamber of Commerce	Aug 29, 2013 7:49 AM
12	no	Aug 29, 2013 7:44 AM

**Q23. In which neighborhood do you live or work?**

1	Office not located in NEKC. Program Officer, Greater KC LISC	Sep 4, 2013 3:46 PM
---	--	---------------------

**Q23. In which neighborhood do you live (or work)? (Found on Interview Scheduler Google spreadsheet.)**



# Former Hardesty Federal Complex

## 607 Hardesty Ave.

## Kansas City, Missouri

### **Property Description**

The complex occupies approximately 18 acres of primarily commercial and light industrial land with multiple buildings. The surrounding area generally consists of mixed commercial, light industrial and residential land use.

### **History**

The first building on the property was constructed in 1920 and included a power plant that supplied electrical power to the buildings located directly northwest of the property at the southeast corner of Independence and Hardesty.

During World War II, the site was used as the U.S. Army Kansas City Quartermaster Depot. The Depot opened Dec. 4, 1940, and served camps and stations in Kansas, Missouri, Arkansas, Nebraska, Oklahoma, Wyoming, South Dakota and Utah. Operations included receiving and storing protective clothing, dry cleaning supplies, inks, lithographic chemicals, and petroleum products.

Between 1940 and 1943, 15 additional buildings were constructed on the property. Two other buildings were constructed after 1943.

The site was transferred to the U.S. General Services Administration (GSA) in 1960. The site housed several federal agencies throughout its service until it was vacated in the early 2000s. In September 2011, the complex was sold through a public auction to Hardesty Economic Development Corporation, a Missouri non-profit corporation.

GSA retains environmental liability for sampling and remediation as part of the sale.

### **Environmental Contamination and Testing**

For several years, GSA has worked to investigate the source and the extent of the pollution in and around the site of the former federal complex. The Missouri Department of Natural Resources provides oversight at this facility under the Comprehensive Environmental Response, Compensation, and Liability Act or the Superfund Law.

The primary materials present in the groundwater are fuel and dry cleaning by-products, most likely due to operations during and immediately following World War II.

The facility once used several underground storage tanks. Some were used to hold petroleum products; others held cleaning solvents. Over time, the tanks deteriorated and fluids leaked into the soil and groundwater. It is the leaked material which is the current source of the groundwater pollution both on and off-site of the facility. The primary chemical that is present in the groundwater is trichloroethylene (TCE).

GSA has now entered the next phase of that investigative work, which includes more sampling of the soil and groundwater in the neighborhood. In late spring 2013, we received preliminary information that indicated TCE is closer to the ground's surface, at about 6 feet deep, in two sample locations just north of the facility. As a result, GSA expanded its sampling in the residential area north of the complex, including drilling into the ground near homes to collect groundwater samples. In the future, GSA may also request to perform vapor intrusion testing inside some homes as we further evaluate the area. Vapor intrusion is the evaporation of the chemical into the air. All testing results and analysis to date do not indicate a related health risk in residential areas surrounding the complex.

GSA is committed to ensuring that any potential environmental concerns are addressed as quickly as possible. The Missouri Department of Natural Resources will continue to provide oversight and assistance on the cleanup of the site.

If any testing results indicate a potential health concern, we will work with the environmental health experts and environmental regulators to find solutions, and we will immediately communicate those concerns to the community.

### **For More Information**

Online at <http://gsa.gov/portal/content/173655>. Or for specific questions, leave a voicemail at 816-926-6903 or email [r6environment@gsa.gov](mailto:r6environment@gsa.gov).



## Antiguo Complejo Federal de Hardesty 607 Hardesty Ave Magaalada Kansas, Missouri

### **Descripción de la propiedad**

El complejo ocupa aproximadamente 18 acres de tierra principalmente comercial y de industria liviana con varios edificios. Los alrededores generalmente están compuestos de un área mixta comercial, de industria liviana y residencial.

### **Historia**

El primer edificio de la propiedad se construyó en 1920 e incluyó una planta eléctrica que suministró servicio eléctrico a los inmuebles ubicados directamente al noroeste de la propiedad, en la esquina sudeste de Independence y Hardesty.

Durante la Segunda Guerra Mundial se utilizó como Depósito de la Intendencia de la Ciudad de Kansas para el Ejército de los Estados Unidos. El Depósito se inauguró el 4 de diciembre de 1940 y sirvió a campamentos y estaciones de Kansas, Missouri, Arkansas, Nebraska, Oklahoma, Wyoming, South Dakota y Utah. Las operaciones incluyeron recibir y almacenar el equipo de protección, los insumos de limpieza a seco, las tintas, los productos químicos de litografía y los productos derivados del petróleo.

Entre 1940 y 1943, se construyeron 15 edificios adicionales en la propiedad. Después de 1943 se construyeron otros dos inmuebles.

El sitio fue transferido a la Administración de Servicios Generales de los Estados Unidos (GSA, por sus siglas en inglés) en 1960. En el sitio se emplazaron diversas agencias federales durante todo su período de servicio hasta que fue desalojado a principios de la década de 2000. En septiembre de 2011, el complejo fue vendido a través de un remate público a Hardesty Economic Development Corporation, una organización sin fines de lucro de Missouri.

La GSA tomó la responsabilidad ambiental de llevar a cabo el muestreo y la restauración como parte de la venta.

### **Contaminación y pruebas ambientales**

Durante muchos años, la GSA ha trabajado para investigar el origen y el grado de contaminación en el sitio y en los alrededores del antiguo complejo federal. El Departamento de Recursos Naturales de Missouri realiza la supervisión de este establecimiento conforme a la Ley de Responsabilidad, Compensación y Recuperación Ambiental o la Ley Superfund.

Los materiales principales presentes en las aguas subterráneas son combustible y derivados de productos de limpieza a seco, seguramente debido a las operaciones realizadas durante la Segunda Guerra Mundial y en el período inmediatamente posterior a ella.

En el establecimiento, alguna vez hubo diversos tanques de almacenamiento subterráneo. Algunos se utilizaron para almacenar productos derivados del petróleo, otros contenían solventes de limpieza. Con el paso del tiempo, los tanques se deterioraron y el líquido empezó a filtrarse en el suelo y el agua subterránea. El material filtrado es la fuente actual de contaminación del agua subterránea tanto dentro como fuera del establecimiento. El producto químico principal presente en el agua subterránea es tricloroetileno (TCE).

La GSA ahora ha ingresado en la próxima fase de ese trabajo de investigación, que incluye más muestreo del suelo y del agua subterránea en el vecindario. A fines de la primavera de 2013, recibimos información preliminar que indicó que el TCE está más cerca de la superficie del suelo, a aproximadamente 6 pies de profundidad, en dos lugares donde se tomó la muestra, justo al norte del establecimiento. Como resultado, la GSA expandió su área de muestreo en el área residencial norte del complejo, incluyendo la perforación en el suelo cercano a los hogares para recolectar muestras de agua subterránea. En el futuro, la GSA además puede solicitar que se lleven a cabo pruebas de intrusión de vapor dentro de algunos hogares a medida que evaluemos el área más en profundidad. La intrusión de vapor es la evaporación del producto químico presente en el aire. Todos los resultados de las pruebas y los análisis realizados hasta la fecha no indican un riesgo para la salud relacionado en las áreas residenciales ubicadas en los alrededores del complejo.

La GSA se compromete a garantizar que cualquier problema ambiental posible se tratará lo más pronto posible. El Departamento de Recursos Naturales de Missouri continuará brindando supervisión y asistencia respecto de la limpieza del sitio.

Si los resultados de alguna prueba indican que existe un posible problema para la salud, trabajaremos junto con los expertos en salud ambiental y las autoridades de organismos reguladores del medio ambiente para encontrar una solución y le comunicaremos inmediatamente a la comunidad estos problemas.

### **Para más información**

En Internet: <http://gsa.gov/portal/content/173655>. O si desea hacer preguntas específicas, deje un mensaje de voz al 816-926-6903 o envíe un correo electrónico a [r6environment@gsa.gov](mailto:r6environment@gsa.gov).



## Khu Liên hợp Liên bang Hardesty Cũ 607 Hardesty Ave. Kansas City, Missouri

### Mô tả Khu liên hợp

Khu liên hợp nằm trên diện tích khoảng 18 mẫu chủ yếu là đất thương mại và công nghiệp nhẹ với nhiều tòa nhà. Khu vực xung quanh thường bao gồm đất sử dụng hỗn hợp cho thương mại, công nghiệp nhẹ và nhà ở.

### Lịch sử

Tòa nhà đầu tiên trên khu liên hợp được xây dựng vào năm 1920 và bao gồm một nhà máy điện cung cấp năng lượng điện cho các tòa nhà nằm trực tiếp ở phía tây bắc của khu liên hợp tại góc đông nam của Independence và Hardesty.

Trong Thế chiến II, khu liên hợp này được sử dụng làm Kho Hậu cần Quân nhu tại Thành phố Kansas của Quân đội Hoa Kỳ. Kho Hậu cần mở cửa vào ngày 4 tháng Mười hai năm 1940, và phục vụ các trại và trạm ở Kansas, Missouri, Arkansas, Nebraska, Oklahoma, Wyoming, South Dakota và Utah. Các hoạt động bao gồm tiếp nhận và lưu trữ quần áo bảo hộ, vật liệu tẩy rửa khô, mực, hóa chất in thạch bản, và các sản phẩm dầu khí.

Từ năm 1940 đến năm 1943, 15 tòa nhà khác được xây dựng trên khu liên hợp này. Hai tòa nhà khác được xây dựng sau năm 1943.

Khu liên hợp đã được chuyển giao cho Cục Quản lý Dịch vụ Hoa Kỳ (GSA) vào năm 1960. Khu liên hợp là nơi làm việc của một số cơ quan liên bang trong suốt thời gian phục vụ của mình đến khi bị bỏ trống vào đầu những năm 2000. Vào tháng Chín năm 2011, khu liên hợp đã được bán qua một phiên đấu giá công khai cho Công ty Phát triển Kinh tế Hardesty, một công ty phi lợi nhuận của Missouri.

GSA giữ trách nhiệm lấy mẫu và xử lý về mặt môi trường như một phần của giao dịch này.

### Ô nhiễm và Xét nghiệm Môi trường

Trong vài năm, GSA đã làm việc để điều tra nguồn và mức độ ô nhiễm trong và xung quanh địa điểm của khu liên hợp liên bang cũ. Sở Tài nguyên Môi trường Missouri cung cấp giám sát tại cơ sở này theo Đạo luật Trách nhiệm, Đền bù và Giải quyết Vấn đề Môi trường Toàn diện hoặc Luật Superfund.

Các vật liệu chính trong nước ngầm là nhiên liệu và phó phẩm tẩy rửa khô, nhiều khả năng nhất là do các hoạt động trong và ngay sau Thế Chiến II.

Cơ sở này từng sử dụng nhiều bể chứa ngầm. Một số được sử dụng để chứa các sản phẩm dầu khí; những bể khác chứa dung môi tẩy rửa. Theo thời gian, những bể này bị hư hỏng và các chất lỏng rò rỉ vào đất và nước ngầm. Chính vật liệu rò rỉ là nguồn ô nhiễm nước ngầm hiện tại ở cả trong và ngoài khu vực của cơ sở. Hóa chất cơ bản hiện có trong nước ngầm là trichloroethylene (TCE).

GSA đã bước vào giai đoạn tiếp theo của công việc điều tra, bao gồm việc lấy mẫu bổ sung đất và nước ngầm trong khu lân cận. Vào cuối mùa xuân năm 2013, chúng tôi nhận được thông tin sơ bộ cho thấy có TCE ở gần bề mặt của mặt đất, ở độ sâu khoảng 6 foot, tại hai địa điểm lấy mẫu ở phía bắc của cơ sở. Kết quả là GSA mở rộng việc lấy mẫu trong khu dân cư ở phía bắc của khu liên hợp, bao gồm cả việc khoan vào lòng đất gần các căn nhà để thu thập mẫu nước ngầm. Trong tương lai, GSA cũng có thể yêu cầu thực hiện xét nghiệm hơi xâm nhập trong một số căn nhà khi chúng tôi tiếp tục đánh giá khu vực. Hơi xâm nhập là sự bay hơi của hóa chất vào không khí. Tất cả các kết quả xét nghiệm và phân tích cho đến hôm nay không cho thấy có nguy cơ sức khỏe liên quan trong các khu dân cư xung quanh khu liên hợp.

GSA cam kết đảm bảo rằng bất kỳ vấn đề môi trường tiềm năng nào sẽ được giải quyết nhanh nhất có thể. Sở Tài nguyên Môi trường Missouri sẽ tiếp tục cung cấp giám sát và hỗ trợ cho việc làm sạch khu vực.

Nếu có bất kỳ kết quả xét nghiệm cho thấy một lo ngại về sức khỏe tiềm tàng, chúng tôi sẽ làm việc với các chuyên gia sức khỏe môi trường và quản lý môi trường để tìm ra giải pháp, và chúng tôi sẽ thông tin những lo ngại này cho cộng đồng ngay lập tức.

### **Để biết Thêm Thông tin**

Trực tuyến tại <http://gsa.gov/portal/content/173655>. Hoặc nếu có thắc mắc cụ thể, hãy để lại một tin nhắn thoại tại 816-926-6903 hoặc gửi email đến [r6environment@gsa.gov](mailto:r6environment@gsa.gov).



## Hardesty Federal Complex Hore 607 Hardesty Ave Magaalada Kansas, Missouri

### Qeexida Hantida

Dhismuhu waxa uu ku fadiyaa ugu dhawaan 18 acres kaasi oo ay ku badan tahay dhul ganacsi iyo warshado yar kuwaasi oo leh dhismayaal farabadan. Goobta ku hareersan badanaa waxa ay ka kooban tahay ganacsi isku dhafan, warshadaha yaryar iyo dhul loo isticmaalo degenaansho.

### Taariikh

Dhismihii ugu horeeyay ee hantida waxa la dhisay 1920 waxana kujiray mishiin koronto taasi oo siiya awooda korontada dhismayaasha kuyaala waqooyi gableed ee hantida dhinaca koonfur-bari ee Independence iyo Hardesty.

Intii lagu guda jiray Dagaalkii Labaad ee Adduunka, goobta waxa loo isticmaalay guriga kaydka Ciidanka Maraykanka ee Kansas. Guriga Kaydka waxa la furay Diisambar 4, 1940, waxa uuna u adeegaa xerooyinka iyo goobaha kuyaala Kansas, Missouri, Arkansas, Nebreska, Oklahama, Wyoming, South Dakota iyo Utah. Hawlgalada waxa kujiray helida iyo kaydinta dharka dhawrista, alaabta nadiifinta qallalan, khadadka, kimikooyinka wax lagu qoro, iyo waxsoosaarka baatoolka.

Intii u dhaxaysay 1940 iyo 1943, 15 dhisme oo dheeri ah ayaa laga dhisay hantida, laba dhisme oo kalena waxa la dhisay kadib 1943.

Goobta waxa loo wareejiyay Maamulka Adeegyada Guud ee Maraykanka 1960. Goobta waxa deganaa dhawr ah wakaaladaha federaalka dhammaan intii adeegeeda ilamaa intii la faaruqiya horraantii 2000. Sebteembar 2011, dhismaha waxa lagaga iibiyay iib dadweyne Iskaashiga Horumarka Dhaqaalaha ee Hardesty, oo ah Iskaashato aan macaash doon ahayn ee Missouri.

GSA waxa ay u haysay masuuliyadda bey'eed muunad qaadista iyo xallinta kaqayb ahan iibka.

### Wasakhaynta Deegaanka iyo Tijaabinta

Dhawr sanno, GSA waxa ay ka shaqaysay inay baadho isha iyo xaddiga diikhawga ah ee gudaha iyo meelaha ku xeeran goobta ee dhismihii hore ee fedreraalka. Waaxda Missouri ee khayraadka dabiiciga ahi waxa ay ka bixisaa kormeerid xarunta marka la eego Xeerka Jawaabta, Magdhawga, iyo Masuuliyadda Baaxadda leh ee Bey'eed iyo Sharciga Maalgalinta Sare.

Walxaha muhiimka ah ee ku jir biyaha dhulku waa shidaal iyo waxsoosaarka nadiifinta qallalan, waxaana ugu dhaw inay ugu wacan tahay hawlgalada intii lagu guda jiray iyo inyar kadib dagaalkii labaad ee adduunka.

Xarunta mar waxaa loo isticmaalay dhawr ah taankiyada kaydinta ee dhulka hoostiisa. Qaarna waxa loo isticmaalay haynta waxsoosaarka baatoolka; qaar kalena waxa laga dhigay milayaasha nadiifinta. Wakhti kadib, taankiyadii way xumaadeen dareerayaashiina waxa ay ku dareereen ciidda iyo biyihii dhulka. Waa

walaxdii ku dareertay taasi oo hadda ah isha dikhawga biyaha dhulka kaasi oo ah ama ka baxsan qalabka. Kimikada koowaad taasi oo kujirta biyaha dhulku waa trichloroethylene. (TCE).

GSA hadda waxa ay gashay wajigii labaad ee shaqada baadhista ah, taasi oo ay kujiraan muunado badan oo ah ciidda iyo biyaha dhulka hoostiisa ee xaafadda. Xilliyadii dambe ee gurigii 2013, waxa aanu helnay macluumaad bilaw ah kaasi oo muujinaya TCE inay u dhawdahay oogada dhulka, qiyaastii qoto ah 6 fuudh, laba goobood oo laga keenay muunadaha waqooyiga xarunta. Sida dhacday, GSA waxa ay u fidisay muunadeedii goobaha la dagan yahay ee waqooyiga dhismaha, iyada oo ay kujiraan qodniin la qodayo guryaha agtooda si ay usoo ururiyaan muunada biyaha dhulka hoostiisa. Mustaqbalka, GSA sidoo kale waxa laga yaabaa inay codsato inay ku samayso tijaabooyin uumibaxa kiimikadu guryaha gudaha u soo gashay marka aanu qiimayno dheeraad ah goobta kusii samayno. Uumbaxa kiimikadu waa ku uumi bixinta kimikada hawada. Dhammaan natiijooyinka tijaabooyinka iyo falanqayntooda taariikheed ma tusinayaan khatar caafimaad oo la xidhiidha goobaha la degan yahay ee ku hareeraysan dhismaha.

GSA waxa ka go'an inay hubiso in waxyaalo kale oo khuseeya deegaanka una kaydsan loo sheegi doono sida ugu suurta gashan uguna dagdaga badan. Waaxda Missouri ee Khayraadka Dabiiciga ah waa ay sii wadi doontaa si ay u bixiso kormeer inay inay ka caawiso nadiifinta goobta.

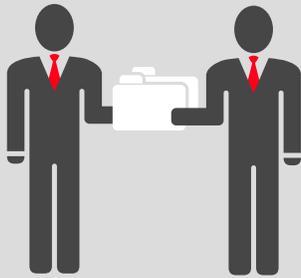
Haddii natiijada tijaabo kastaa ay muujiso arrin caafimaadka khusaysa oo kaydsan, waxa aanu la shaqayn doonaa ku xeeldheerayaasha caafimaadka deegaanka iyo maareeyayaasha deegaanka si loo helo xal, sida ugu dag daga badan lehna waanu u gaadhsiin doonaa arrimahan bulshada.

### **Macluumaad dheeri ah**

Waxa aad ka heli kartaa onlayn <http://gsa.gov/portal/content/173655>. Ama su'aalo cayiman, kaga tag cod 816-926-6903 ama iimayl [r6environment@gsa.gov](mailto:r6environment@gsa.gov).

# CERCLA Environmental Investigation and Cleanup Process

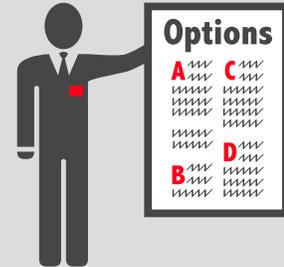
A First Look



A Closer Look



What are our options?



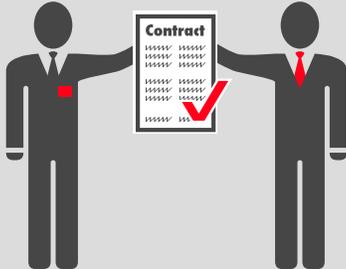
1

Preliminary Assessment (PA)/Site Inspection (SI)

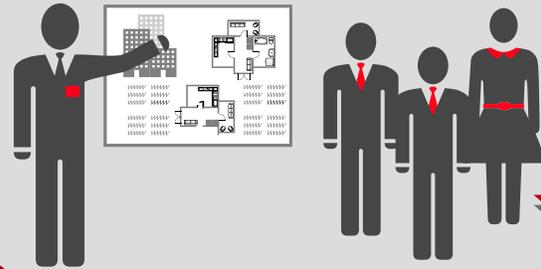
2

Feasibility Study (FS) and Remedial Investigation (RI)

Document agreed-upon cleanup strategy



Choose best options & get public input



4

Record of Decision (ROD)

3

Proposed Plan

Specifics of cleanup plan



Cleanup of physical site



5

Remedial Design (RD)

6

Remedial Action (RA)

Monitoring, reporting and new use of property



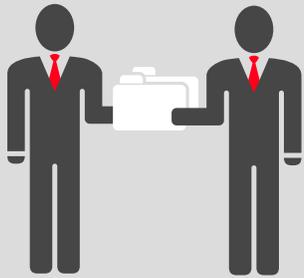
7

Long-Term Maintenance and Site Reuse

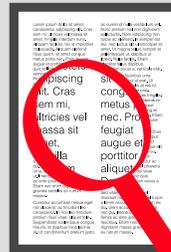
# Proceso de Limpieza e Investigación Ambiental basado en la ley de Responsabilidad, Compensación y Recuperación Ambiental

(CERCLA, por sus siglas en inglés)

Un primer vistazo



Una mirada más de cerca



¿Cuáles son nuestras opciones?



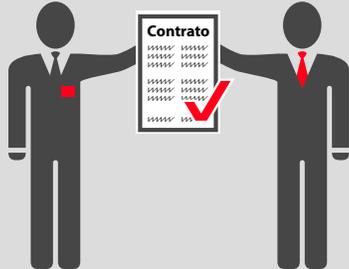
1

Evaluación Preliminar (PA, por sus siglas en inglés) / Inspección del sitio (SI, por sus siglas en inglés)

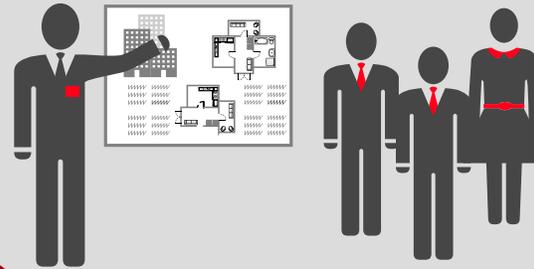
2

Estudio de viabilidad (FS, por sus siglas en inglés) e Investigación de la tecnología (RI, por sus siglas en inglés)

Estrategia de limpieza acordada mediante un documento



Elegir la mejor opción y conocer la opinión del público



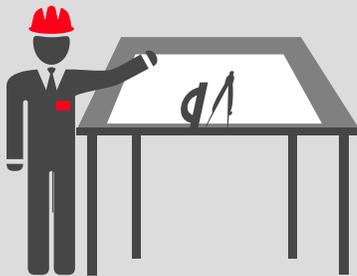
4

Registro de la decisión (ROD, por sus siglas en inglés)

3

Plan propuesto

Detalles sobre el plan de limpieza



Limpieza del sitio físico



5

Diseño de la tecnología (RD, por sus siglas en inglés)

6

Acción de restauración a largo plazo (RA, por sus siglas en inglés)

Monitoreo, notificación y nuevo uso de la propiedad

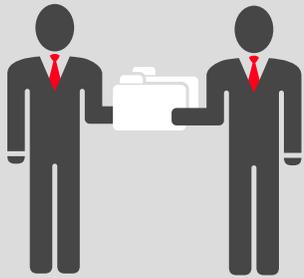


7

Mantenimiento a largo plazo y Reutilización del sitio

# Quá trình Dọn sạch và Điều tra Môi trường CERCLA

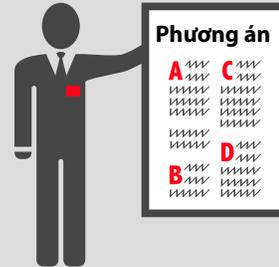
Cái nhìn Đầu tiên



Xem xét Kỹ hơn



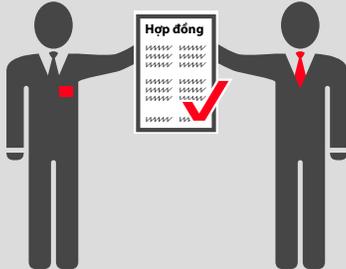
Những phương án của chúng ta là gì?



1

Đánh giá Sơ bộ (PA)/Kiểm tra Địa điểm (SI)

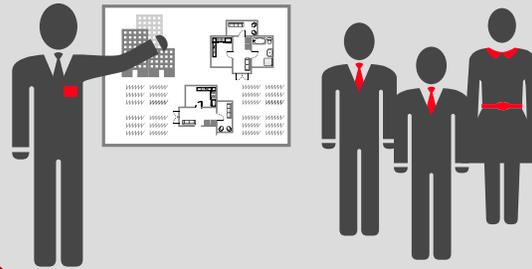
Lập tài liệu chiến lược dọn sạch đã thỏa thuận



2

Nghiên cứu Tính khả thi (FS) và Điều tra Khắc phục (RI)

Chọn những phương án tốt nhất & lấy ý kiến công chúng



4

Biên bản Quyết định (ROD)

Chi tiết cụ thể của kế hoạch dọn sạch



3

Kế hoạch Đề xuất

Dọn sạch địa điểm tự nhiên



5

Đề cương Khắc phục (RD)

6

Hành động Khắc phục (RA)

Giám sát, báo cáo và sử dụng cơ sở mới

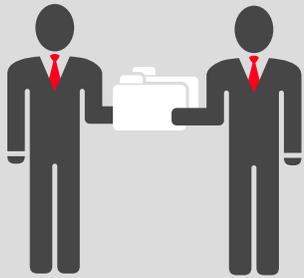


7

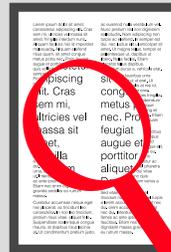
Bảo trì Dài Hạn và Tái sử dụng Địa điểm

# Baadhitaanka Deegaanka iyo Habka Nadiifinta CERCLA

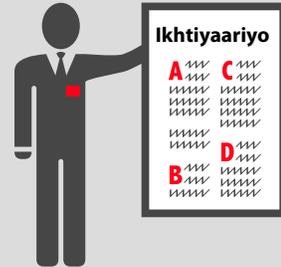
Eegmada Koowaad



Eegmo Dhaw



Waa maxay Ikhtiyaarigayagu ?



1

Qiimaynta Gogol xaarida (PA)/Baadhida Goobta (SI)

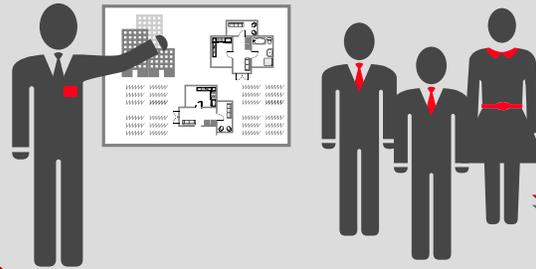
2

Qiimayn La arki karo (FS) iyo Dib ugu Noqoshada Baadhitaanka (RI)

Qoraalka la isku raacay qorshaha nadiifinta



Dooro ikhtiyaariga ugu fican & helna gashiga dadka



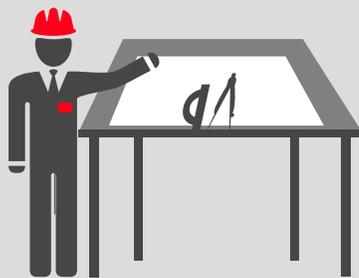
4

Go'aanka Diwaangalinta

3

Qorshe La diyaariyay

Qorshayaasha nadiifinta ee qeexan



Nadiifinta goobaha muuqda



5

Qaabka Dib ugu noqoshada (RD)

6

Ficilka Dib ugu Noqoshada (RA)

Maamulida, soo tabinta iyo isticmaalida cusub ee hantida



7

Hagaajinta Muddada dheer iyo Dib u Isticmaalida Goobta

## **Tentative Schedule for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Cleanup Actions at the Former Hardesty Federal Complex**

Below is a tentative schedule for milestones in the cleanup process at the former Hardesty Federal Complex. Many activities will occur between milestones.

- Preliminary Assessment and Site Inspection (PA/SI): Complete 2002
- Remedial Investigation (RI): October 2014
- Feasibility Study (FS): April 2015
- Proposed Plan: June 2015
- Record of Decision (ROD): October 2015
- Remedial Design (RD): April 2016
- Remedial Action (RA): October 2016
- Interim Remedial Action Report: April 2017
- Operating Properly and Successfully: October 2017
- Long Term Operations and Monitoring (LTO&M): Quarterly to annually in accordance with approved plans
- Remedial Action Completion Report: October 2025

For more information about the cleanup process, visit <http://www.epa.gov/superfund/cleanup/>.

For information en Espanol, visit <http://www.epa.gov/superfund/spanish/index.htm>.

## **Cronograma Provisorio para las Acciones de Limpieza conforme a la Ley de Responsabilidad, Compensación y Recuperación Ambiental (CERCLA, por sus siglas en inglés) en el Antiguo Complejo Federal de Hardesty**

A continuación se detalla el cronograma provisorio de los puntos importantes del proceso de limpieza en el Antiguo Complejo Federal de Hardesty. Diversas actividades se llevarán a cabo entre los puntos importantes.

- Evaluación Preliminar e Inspección del Sitio (PA/SI, por sus siglas en inglés): Completo en 2002
- Investigación de la Tecnología (RI, por sus siglas en inglés): Octubre 2014
- Estudio de viabilidad (FS, por sus siglas en inglés): Abril 2015
- Plan Propuesto: Junio 2015
- Registro de la Decisión (ROD, por sus siglas en inglés): Octubre 2015
- Diseño de la Tecnología (RD, por sus siglas en inglés): Abril 2016
- Acción de restauración a largo plazo (RA, por sus siglas en inglés): Octubre 2016
- Informe Provisorio de Acción de Restauración: Abril 2017
- Operación adecuada y exitosa: Octubre 2017
- Operaciones y Monitoreo a Largo Plazo (LTO&M, por sus siglas en inglés): Trimestralmente o anualmente de acuerdo con los planes aprobados
- Informe Final de Acción de Restauración: Octubre 2025

Para obtener más información sobre el proceso de limpieza, visite <http://www.epa.gov/superfund/cleanup/>.

Para obtener información en español, visite <http://www.epa.gov/superfund/spanish/index.htm>.

## **Lịch Dự kiến cho các Hành động Dọn sạch theo Đạo luật Trách nhiệm, Đền bù và Giải quyết Vấn đề Môi trường Toàn diện (CERCLA) tại Khu liên hợp Liên bang Hardesty Cũ**

Dưới đây là lịch dự kiến của các mốc thời gian trong quá trình dọn sạch tại Khu liên hợp Liên bang Hardesty cũ. Nhiều hoạt động sẽ diễn ra giữa các mốc thời gian.

- Đánh giá Sơ bộ và Kiểm tra Địa điểm (PA/SI): Hoàn tất năm 2002
- Điều tra Khắc phục (RI): Tháng Mười năm 2014
- Nghiên cứu Tính khả thi (FS): Tháng Tư năm 2015
- Kế hoạch Đề xuất: Tháng Sáu năm 2015
- Biên bản Quyết định (ROD): Tháng Mười năm 2015
- Đề cương Khắc phục (RD): Tháng Tư năm 2016
- Hành động Khắc phục (RA): Tháng Mười năm 2016
- Báo cáo Hành động Khắc phục Lâm thời: Tháng Tư năm 2017
- Hoạt động hợp thức và thành công: Tháng Mười năm 2017
- Hoạt động và Giám sát Dài Hạn (LTO&M): Hàng quý đến hàng năm phù hợp với kế hoạch đã được phê duyệt
- Báo cáo Hoàn tất Hành động Khắc phục: Tháng Mười năm 2025

Để biết thêm thông tin về quá trình dọn sạch, vào trang <http://www.epa.gov/superfund/cleanup/>.

Để xem thông tin bằng tiếng Tây Ban Nha, vào trang <http://www.epa.gov/superfund/spanish/index.htm>.

**Jadwalka aan Sugnayn ee Xeerka Tallaabooyinka Nadiifinta Jawaabaha,  
Magdhawga, iyo Baaxadda leh ee Bey'eed Masuuliyadda (CERCLA) ee Hardesty  
Federal Complex-kii Hore**

Waxa hoose waa jadwalka aan sugnayn ee bartilmaameedyada habka nadiifinta ee Hardesty Federal Complex. Hawlo badan ayaa dhici doona inta u dhaxaysa bartilmaameedyada.

- Qiimaynta Hore iyo Kormeerista Goobta (PA/SI): Dhammaystiran 2002
- Baadhista Xaleed (RI): Oktoobar 2014)
- Dasaaradda Suurogalnimada (FS): Abriil 2015
- Qorshaha la Soojeediyey: Juun 2015
- Go'aanka Diiwaangalintaa (ROD): Oktoobar 2015
- Nashqadda Xaleed (RD): Abriil 2016
- Tallaabada Xaleed (RA): Oktoobar 2016
- Warbixinta Tallaabada Xaleed ee Dhexe: Abriil 2017
- U Hawlgalista Si Habboon oo Fiican: Oktoobar 2017
- Hawlgalka Muddada Fog iyo La-socodka(LTO&M): Saddexdii biloodba ilaa sannadkiiba mar iyadoo la raacayo qorshayaasha la oggolaaday
- Warbixinta Dhammaystirka Tallaabada Xaleed: Oktoobar 2025

Macluumaad dheeraad ah oo kusaabsan habka nadiifinta, booqo <http://www.epa.gov/superfund/cleanup/>.

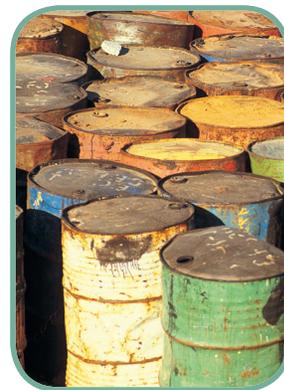
Macluumaad isbaanish ku qoran, booqo <http://www.epa.gov/superfund/spanish/index.htm>.

# Trichloroethylene (TCE)

## What is TCE?

Trichloroethylene (TCE) is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet, burning taste. It's mainly used to remove grease from metal parts. But it's also a part of adhesives, paint removers, and spot removers.

TCE doesn't occur naturally in the environment. It is found in soil and underground water sources when it is manufactured, used, and disposed of improperly. When TCE evaporates from contaminated soil or groundwater, its vapors sometimes move up through the soil and can get into air inside buildings.



## How might I be exposed to TCE?

- Drinking, swimming, or showering in water that is contaminated with TCE.
- Direct contact with soil contaminated with TCE (such as near a hazardous waste site) and unintentionally swallowing the soil.
- Breathing air inside homes or other buildings that have been contaminated by TCE as it evaporates from the soil or groundwater underneath the building.



## How can I reduce exposure to TCE in my home?

Use Products carefully:

- Make sure rooms are well ventilated with a fan or an open window
- Store household products in a safe place
- Keep household products in the boxes or bottles in which you bought them
- Don't mix one household product with another
- Follow the directions on the boxes or bottles

## How is TCE noticed in indoor air?

If TCE is in your indoor air you most likely would not be able to smell it. If you think TCE is in your indoor air, you can have that air tested by a professional with air sampling equipment. This test is expensive and may have to be done more than one time.

## How can TCE affect my health?

What happens to you when you contact any chemical depends on

- The dose—that is, how much of the chemical gets into your body
- The duration—how long and how often you're exposed to it
- The route—how you're exposed to the chemical (such as breathing air or drinking water that contains TCE)

How a chemical will affect someone is hard to determine. Especially without knowing exactly how much that person was exposed to and for how long and how often. Certain groups of people—such as children, the elderly and particularly unborn babies—may be more vulnerable than other groups to health effects from TCE exposure.



Some facts about TCE exposure:

- The U.S. Environmental Protection Agency and the National Toxicology Program say TCE can cause cancer. Worker exposure to TCE has been associated with liver cancer, non-Hodgkin's lymphoma, and kidney cancer.
- Human and animal studies show that exposure to low levels of TCE may cause heart-related health effects to unborn babies and effects to the immune system.
- Human studies show that people exposed to very high levels of TCE may have headaches, lung irritation, dizziness, poor coordination, and difficulty paying attention.
- Breathing high amounts of TCE (such as what people could be exposed to if they using TCE at work) could cause improper heart function, unconsciousness, and death.

### Can any medical test detect TCE exposure?

If you have been exposed to TCE recently, it can be detected in your breath, blood, or urine. For small amounts of TCE, breath testing must occur within an hour or two after exposure. For large amounts of TCE, blood and urine tests can find TCE and its byproducts up to a week after exposure. Because exposure to other chemicals can produce similar byproducts in the body, test results do not absolutely prove exposure to TCE. Only a doctor or other medical professional familiar with these tests should give them.

### Can I be treated for TCE exposure?

No medical treatment can remove TCE from your body, but your body does remove TCE on its own. You breathe out TCE. It also leaves your body in your urine. Avoiding TCE exposure is always recommended.

### Where can I get more information?

- If you have concerns about your health, call or see your doctor.
- If you would like more information on TCE, call the Centers for Disease Control and Prevention Information Line. The toll-free phone number is **1-800-232-4636**. Let the operator know that you would like to speak to someone about TCE or trichloroethylene.
- If you would like more information on the Agency for Toxic Substances and Disease Registry, visit our Web site at [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov). You will find telephone numbers to contact an ATSDR regional staff member in your state.

### References:

1. Forand SP, Lewis-Michl EL, Gomez MI, 2011 Adverse Birth Outcomes and Maternal Exposure to Trichloroethylene and Tetrachloroethylene through Soil Vapor Intrusion in New York State. *Environ Health Perspect* 120(4): doi:10.1289/ehp.1103884
2. Johnson P, Goldberg S, Mays M, Dawson B. 2003. Threshold of trichloroethylene contamination in maternal drinking waters affecting fetal heart development in the rat. *Environ Health Perspect*, 111, 289-292.
3. Keil DE, Peden-Adams M M, Wallace S, Ruiz P, Gilkeson G S, 2009. Assessment of trichloroethylene (TCE) exposure in murine strains genetically-prone and non-prone to develop autoimmune disease. *J Environ Sci Health A Tox Hazard Subst Environ Eng*, 44, 443-453.
4. The Agency for Toxic Substances and Disease Registry. Fact Sheet: How to Reduce Your Exposure to Chemicals at Home, Work, and Play. Atlanta, GA: US Department of Health and Human Services; 2011.
5. The Agency for Toxic Substances and Disease Registry. Toxicological Profiles: Trichloroethylene (TCE). CAS# 000079-01-6. Atlanta, GA, US Department of Health and Human Services; 2010 September.

# Tricloroetileno (TCE)

## ¿Qué es el TCE?

El tricloroetileno (TCE) es un líquido no inflamable e incoloro con un cierto olor dulce y un gusto dulce y ardiente. Se utiliza principalmente para remover la grasa de las piezas metálicas. Pero también es un componente de los pegamentos, los removedores de pintura y los quitamanchas.

El TCE no se libera naturalmente al medio ambiente. Se encuentra en el suelo y en fuentes de agua subterránea cuando se fabrica, utiliza y elimina de manera indebida. Cuando el TCE se evapora del suelo o el agua subterránea contaminados, su vapor a veces asciende a través de la tierra y se puede introducir en el aire dentro de los edificios.



## ¿Cómo podría estar expuesto al TCE?

- Al beber, nadar o bañarse en agua contaminada con TCE.
- El contacto directo con el suelo contaminado con TCE (tal como la cercanía a un sitio de desechos peligrosos) y la ingesta accidental del suelo.
- Respirar el aire de los hogares u otros edificios que estén contaminados con TCE, dado que este se evapora del suelo o del agua subterránea ubicada debajo del edificio.



## ¿Cómo puedo reducir la exposición al TCE en mi hogar?

Utilice los productos con cuidado:

- Asegúrese de que las habitaciones estén bien ventiladas con un ventilador o una ventana abierta
- Guarde los productos de limpieza del hogar en un lugar seguro
- Mantenga los productos de limpieza del hogar en las cajas o botellas originales
- No mezcle un producto de limpieza con otro
- Siga las instrucciones que figuran en las cajas o botellas.

## ¿Cómo se puede advertir el TCE en el aire del interior de la vivienda?

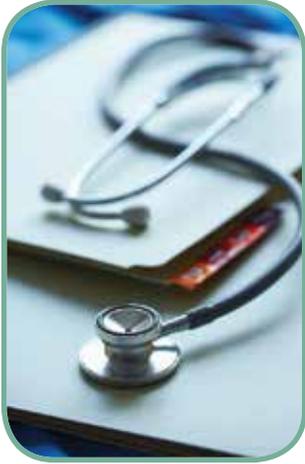
Si el TCE está presente en el aire del interior de su hogar, es muy probable que no sea capaz de olerlo. Si cree que el TCE está presente en el aire del interior de su hogar, un profesional puede realizar una prueba con un equipo de muestreo del aire. Esta prueba es costosa y posiblemente haya que realizarla más de una vez.

## ¿Cómo puede el TCE afectar mi salud?

Lo que le sucede cuando entra en contacto con algún producto químico depende de lo siguiente:

- La dosis: o sea, qué cantidad de producto químico ingresó en su cuerpo
- La duración: cuánto tiempo y con qué frecuencia estuvo expuesto a él
- La vía: de qué forma estuvo expuesto al producto químico (tal como respirar el aire o beber el agua que contiene TCE)

Cómo un producto químico afectará a una persona es difícil de determinar. Especialmente si no se conoce con exactitud a qué cantidad estuvo expuesta esa persona y por cuánto tiempo y con qué frecuencia. Algunos grupos de personas, tales como niños, personas de edad avanzada y especialmente bebés sin nacer, pueden ser más vulnerables que otros grupos con respecto a los efectos sobre la salud de la exposición al TCE.



#### Algunos datos sobre la exposición al TCE:

- La Agencia de Protección Ambiental de los Estados Unidos y el Programa Nacional de Toxicología afirman que el TCE puede causar cáncer. La exposición del trabajador al TCE ha estado relacionada con cáncer hepático, linfoma no Hodgkin y cáncer renal.
- Estudios realizados en seres humanos y animales demuestran que la exposición a niveles bajos de TCE puede causar efectos sobre la salud relacionados con problemas cardíacos en bebés sin nacer y efectos sobre el sistema inmunitario.
- Estudios en seres humanos demuestran que las personas expuestas a niveles muy altos de TCE pueden sufrir dolor de cabeza, irritación pulmonar, mareos, disminución de la coordinación y dificultad para prestar atención.
- Respirar grandes cantidades de TCE (la misma exposición que las personas que utilizan el TCE en el trabajo) podría causar problemas cardíacos, pérdida del conocimiento y muerte.

#### ¿Existe alguna prueba médica que pueda detectar la exposición al TCE?

Si la exposición al TCE ha sido reciente, puede detectarse en el aliento, la sangre o la orina. Para pequeñas cantidades de TCE, la prueba de aliento se debe llevar a cabo una o dos horas después de la exposición. Para grandes cantidades de TCE, las pruebas en sangre u orina pueden detectar el TCE y sus derivados hasta una semana después de la exposición. Debido a que la exposición a otros productos químicos puede producir derivados similares en el cuerpo, los resultados de la prueba no comprueban plenamente la exposición al TCE. Solo un médico u otro profesional de la salud que esté familiarizado con estas pruebas debe realizarlas.

#### ¿Existe un tratamiento para la exposición al TCE?

Ningún tratamiento médico puede quitar el TCE de su cuerpo, pero su cuerpo sí lo elimina por sí solo. Usted exhala TCE. También se elimina a través de la orina. Se recomienda evitar la exposición al TCE.

#### ¿Dónde puedo obtener más información?

- Si tiene alguna duda con respecto a su salud, consulte con su médico.
- Si desea obtener más información sobre el TCE, comuníquese con la línea de información de los Centros de Control y Prevención de Enfermedades. La línea gratuita es **1-800-232-4636**. Informe al operador que desea hablar con alguien sobre el TCE o tricloroetileno.
- Si desea más información sobre la Agencia para el Registro de Sustancias Tóxicas y Enfermedades, visite nuestro sitio web [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov). Allí podrá encontrar los números telefónicos para comunicarse con un miembro del personal regional de ATSDR de su estado

#### Referencias:

1. Forand SP, Lewis-Michl EL, Gomez MI, 2011 Adverse Birth Outcomes and Maternal Exposure to Trichloroethylene and Tetrachloroethylene through Soil Vapor Intrusion in New York State. *Environ Health Perspect* 120(4): doi:10.1289/ehp.1103884
2. Johnson P, Goldberg S, Mays M, Dawson B. 2003. Threshold of trichloroethylene contamination in maternal drinking waters affecting fetal heart development in the rat. *Environ Health Perspect* 111(289):
3. Keil DE, Peden-Adams M M, Wallace S, Ruiz P, Gilkeson G S. 2009. Assessment of trichloroethylene (TCE) exposure in murine strains genetically-prone and non-prone to develop autoimmune disease. *J Environ Sci Health A Tox Hazard Subst Environ Eng*, 44, 443-453.
4. The Agency for Toxic Substances and Disease Registry. Fact Sheet: How to Reduce Your Exposure to Chemicals at Home, Work, and Play. Atlanta, GA: US Department of Health and Human Services; 2011.
5. The Agency for Toxic Substances and Disease Registry. Toxicological Profiles: Trichloroethylene (TCE). CAS# 000079-01-6. Atlanta, GA, US Department of Health and Human Services; 2010 September.

# Trichloroethylene (TCE)

## TCE là gì?

Trichloroethylene (TCE) là một chất lỏng không bắt lửa, không màu, có mùi hơi ngọt và vị ngọt, cháy. TCE chủ yếu được sử dụng để loại bỏ dầu mỡ khỏi các bộ phận kim loại. Nhưng TCE cũng có trong chất dán, thuốc tẩy sơn, và thuốc tẩy vết bẩn.

TCE không xuất hiện tự nhiên trong môi trường. TCE được tìm thấy trong đất và nguồn nước ngầm khi nó được sản xuất, sử dụng và tiêu hủy không đúng cách. Khi TCE bốc hơi từ đất hoặc nước ngầm bị ô nhiễm, hơi của nó đôi khi di chuyển lên trên qua đất và có thể truyền vào không khí bên trong các tòa nhà.

## Tôi có thể bị phơi nhiễm TCE bằng cách nào?

- Uống, bơi, hoặc tắm nước nhiễm TCE.
- Tiếp xúc trực tiếp với đất nhiễm TCE (như là gần khu rác thải độc hại) và vô tình nuốt phải đất này.
- Hít thở không khí trong các căn nhà hoặc các tòa nhà khác đã bị nhiễm TCE khi TCE bốc hơi từ đất hoặc nước ngầm bên dưới tòa nhà.

## Tôi có thể giảm phơi nhiễm TCE trong nhà mình bằng cách nào?

Hãy sử dụng các Sản phẩm một cách thận trọng:

- Đảm bảo rằng các phòng được thông gió tốt với quạt hoặc cửa sổ mở
- Lưu trữ các sản phẩm gia dụng ở nơi an toàn
- Giữ các sản phẩm gia dụng trong hộp hoặc chai mà quý vị mua
- Không trộn lẫn sản phẩm gia dụng với nhau
- Làm theo hướng dẫn trên hộp hoặc chai

## Nhận thấy có TCE trong không khí trong nhà bằng cách nào?

Nếu có TCE trong không khí trong nhà của quý vị, nhiều khả năng quý vị sẽ không thể ngửi thấy nó. Nếu quý vị nghĩ có TCE ở trong không khí trong nhà của mình, quý vị có thể yêu cầu một chuyên gia xét nghiệm không khí với thiết bị lấy mẫu không khí. Xét nghiệm này khá tốn kém và có thể phải được thực hiện nhiều hơn một lần.

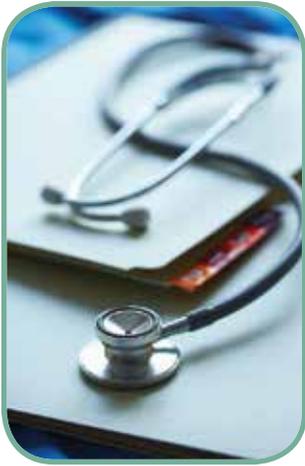
## TCE có thể ảnh hưởng đến sức khỏe của tôi như thế nào?

Điều gì xảy ra với quý vị khi quý vị tiếp xúc với bất kỳ hóa chất nào phụ thuộc vào

- Liều lượng—nghĩa là lượng hóa chất xâm nhập vào cơ thể quý vị
- Thời gian—khoảng thời gian và mức độ thường xuyên quý vị tiếp xúc với hóa chất
- Cách tiếp xúc—cách quý vị tiếp xúc với hóa chất (như là hít thở không khí hoặc uống nước chứa TCE)

Việc xác định một hóa chất sẽ ảnh hưởng đến một người như thế nào là rất khó. Đặc biệt là khi không biết liều lượng và khoảng thời gian và mức độ thường xuyên người đó bị phơi nhiễm. Một số nhóm người—chẳng hạn như trẻ em, người già và nhất là thai nhi—có thể dễ bị tổn thương hơn so với các nhóm khác với những ảnh hưởng sức khỏe do phơi nhiễm TCE.





Một số thông tin về phơi nhiễm TCE:

- Cơ quan Bảo vệ Môi trường Hoa Kỳ và Chương trình Phòng chống độc Quốc gia tuyên bố rằng TCE có thể gây ung thư. Người lao động phơi nhiễm TCE đã bị liên quan tới ung thư gan, ung thư hạch không Hodgkin, và ung thư thận.
- Nghiên cứu trên con người và động vật cho thấy rằng tiếp xúc với các nồng độ TCE thấp có thể gây ảnh hưởng sức khỏe liên quan đến tim ở thai nhi và ảnh hưởng đến hệ miễn dịch.
- Nghiên cứu trên con người cho thấy những người tiếp xúc với các nồng độ cao TCE rất cao có thể bị đau đầu, kích ứng phổi, chóng mặt, phổi hợp kém, và khó tập trung.
- Hít thở lượng TCE lớn (như liều lượng mọi người có thể bị phơi nhiễm nếu họ sử dụng TCE ở nơi làm việc) có thể gây ra chức năng tim bất thường, bất tỉnh, và tử vong.

### Có xét nghiệm y tế nào có thể phát hiện phơi nhiễm TCE không?

Nếu gần đây quý vị đã bị phơi nhiễm TCE, nó có thể được phát hiện trong hơi thở, máu, hoặc nước tiểu của quý vị. Đối với một lượng TCE nhỏ, xét nghiệm hơi thở phải được thực hiện trong vòng một hoặc hai giờ sau khi bị phơi nhiễm. Đối với một lượng TCE lớn, xét nghiệm máu và nước tiểu có thể phát hiện TCE và phó phẩm của nó lên đến một tuần sau khi bị phơi nhiễm. Do phơi nhiễm các hóa chất khác có thể tạo ra các phó phẩm tương tự trong cơ thể, kết quả xét nghiệm không tuyệt đối chứng minh được phơi nhiễm TCE. Chỉ bác sĩ hoặc chuyên gia y tế khác quen thuộc với những xét nghiệm này nên thực hiện xét nghiệm.

### Tôi có thể được điều trị phơi nhiễm TCE không?

Không phương pháp điều trị nào có thể loại bỏ TCE khỏi cơ thể của quý vị, nhưng cơ thể của quý vị sẽ tự loại bỏ TCE. Quý vị thở ra TCE. TCE cũng ra khỏi cơ thể của quý vị trong nước tiểu. Quý vị được khuyến khích luôn tránh tiếp xúc với TCE.

### Tôi có thể lấy thêm thông tin từ đâu?

- Nếu quý vị lo ngại về sức khỏe của mình, gọi điện hoặc đến gặp bác sĩ của quý vị.
- Nếu quý vị muốn có thêm thông tin về TCE, hãy gọi đến Đường dây Thông tin Trung tâm Kiểm soát và Phòng ngừa Bệnh tật. Số điện thoại miễn phí là **1-800-232-4636**. Cho nhân viên điều hành biết quý vị muốn nói chuyện với một người nào đó về TCE hoặc trichloroethylene.
- Nếu quý vị muốn biết thêm thông tin về Cơ quan Đặc trách các chất Độc hại và Theo dõi Bệnh tật, vào trang Web của chúng tôi tại [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov). Quý vị sẽ thấy số điện thoại để liên lạc với một nhân viên khu vực của ATSDR ở tiểu bang của mình.

#### Tham khảo:

1. Forand SP, Lewis-Michl EL, Gomez MI, 2011 Adverse Birth Outcomes and Maternal Exposure to Trichloroethylene and Tetrachloroethylene through Soil Vapor Intrusion in New York State (Kết quả Sinh đẻ Có hại và Phơi nhiễm Trichloroethylene và Tetrachloroethylene của Mẹ qua Hơi Xâm nhập qua Đất ở Tiểu bang New York). Environ Health Perspect 120(4): doi:10.1289/ehp.1103884
2. Johnson P, Goldberg S, Mays M, Dawson B. 2003. Threshold of trichloroethylene contamination in maternal drinking waters affecting fetal heart development in the rat (Ngưỡng ô nhiễm trichloroethylene trong nước uống cho mẹ ảnh hưởng đến sự phát triển tim thai ở chuột). Environ Health Perspect, 111, 289-292.
3. Keil DE, Peden-Adams M M, Wallace S, Ruiz P, Gilkeson G S. 2009. Assessment of trichloroethylene (TCE) exposure in murine strains genetically-prone and non-prone to develop autoimmune disease (Đánh giá phơi nhiễm trichloroethylene (TCE) trong các giống chuột dễ và không dễ phát triển bệnh tự miễn dịch về mặt di truyền). J Environ Sci Health A Tox Hazard Subst Environ Eng, 44, 443-453.
4. Cơ quan Đặc trách các chất Độc hại và Theo dõi Bệnh tật. Tờ Thông tin: Cách Giảm Phơi nhiễm Hóa chất ở Nhà, ở Nơi làm việc, và ở Nơi vui chơi). Atlanta, GA: Bộ Y tế và Dịch vụ Nhân sinh Hoa Kỳ; 2011.
5. Cơ quan Đặc trách các chất Độc hại và Theo dõi Bệnh tật. Hồ sơ Độc chất: Trichloroethylene (TCE). CAS số 000079-01-6. Atlanta, GA, Bộ Y tế và Dịch vụ Nhân sinh Hoa Kỳ; Tháng Chín năm 2010.

# Trichloroethylene (TCE)

## Waa maxay TCE?

Trichloroethylene (TCE) waa dareere aan ololin, bilaa midab ah oo leh ur yara macaan iyo dhadhan hah leh, oo macaan. badanaa waxa loo isticmaalaa inuu xaydha ka baabiiyo qaybaha birta ah. laakiin sidoo kale xabagta, baabiiyayaasha ranjiga, iyo baabiiyayaasha dhibcaha.

TCE lagama helo badanka deegaanka. Waxa laga helaa ciidda iyo biyaha ilaha biyaha dhulka hoostiisa marka lasoo saaro, la isticmaalo, loona tuuro si aan fiicnayn. Marka TCE ay ku uumi baxdo ciid wasakhaysan ama biyaha dhulka, waa ay uumi baxdaa mararka qaarhalka sare ayay u dhaqaaqdaa iyadoo sii dhexmaraysa camuuda waxa ayna hawada ka gali kartaa dhismayaasha dhexdooda.



## Sidee ayaan ula kulmi karaa TCE?

- Cabitaabka, dabaasha, ama ku maydhashada biyo kuwaasi oo ay wasakhaysay TCE.
- Taabashada tooska ah ee ciidda ay wasakhaysay TCE ( sida meel u dhaw goob wasakh oo halis ah) iyo Iyo u liqada ciidda si khalad ah.
- Neefsashada hawada guryaha dhexdooda ama dhismayaasha kale kuwaasi oo ay wasakheeyeen TCE markii ay kasoo uumi baxday ciidda ama biyaha dhulka ee ka hooseeya dhismaha.



## Side ayaan u yarayn karaa la kulanka TCE ee gurigayga?

U isticmaal waxsoosaarka si taxadir leh:

- Hubi in qolalka si fiican loogu laydhiyay buufis ama daaqad la furay.
- Ku kaydi waxsoosaarka qoyska meel ammaan ah
- Ku ilaali waxsoosaarka qoyska saxaradaha ama quraaradaha kaasi oo aad kusoo iibisay
- Haku darin hal waxsoosaar mid kale
- Raac tilmaamaha saxaradaha ama quraaradaha

## Sidee ayaa TCE loogu ogaanayaa hawada gudaha?

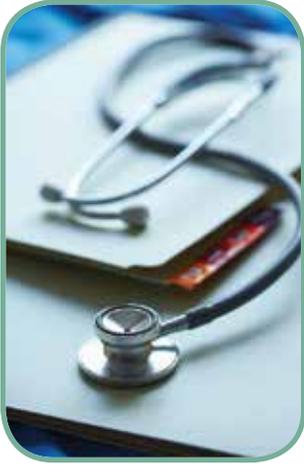
Haddii TCE ay kujirto hawada gudahaaga ma awoodi kartid inaad uriso. Haddii aad u malayso in TCE ay kujirto hawada gudaha gurigaaga, waxa aad haysan kartaa tijaabada hawada oo ka imiday xeeldheere kaasi oo watana qalabka muunad qaadista hawada. Tijaabadani waa qaali waxana laga yaabaa in la sameeyey in kabadan halmar.

## Sidee ayay TCE u saamayn kartaa caafimaadkayga?

Waxa kugu dhacaya marka aad kimiko kasta oo ku tiirsan

- Dooska ---- taasi oo ah, inta kimiko gashay jidhkaaga
- Wakhtiga ay qaadatay - intee in le'eg iyo inta badanka aad la kulantay
- Meesha ay martay - sida aad ula kulantay kimikada (sida neefsiga hawo ama cabista biyo ay kujiro TCE)

Sida ay kimikadu u saamayn karto qof waa ay adag tahay in go'aan laga gaadho. Gaar ahaan iyadoon si sax ah loo garanayn inta jeer la kulantay iyo sida uu ula kulmay. Kooxo gaar ah oo dad ah – sida carruurta, dadka waaweyn iyo gaar ahaan ciyaalka aan dhalan – waxa laga yaabaa inay khatar aad ah ku sugnaadaan marka loo eego kooxaha kale ee caafimaadkooda uu saameeyay TCE baylahsan.



Xaqiiqooyin dhab ah oo ku saabsan la kulanka TCE:

- Wakaalada Ilaalinta Deegaanka Maraykanka Iyo Barnaamijka Qaran ee Barashada Suntu waxa ay yidhaahdeen TCE inay sababi karto kansar. Shaqaale la kulmay TCE ayaa waxa lala xidhiidhiyay kansarka beerka, non-Hodgkin's lymphoma, iyo kansarka kalyaha.
- Daraasado lagu sameeyay dadka iyo xayawaanku waxa ay tsiyeen in dayacaada heerar hoose oo ah TCE ay sababi karto saamayn ah caafimaadka la xidhiidha wadnaha ee ilmaha aan dhalan ee habka mudniinka.
- Daraasadaha Dadku waxa ay tusiyeen iyo dadka la kulma heer sare oo ah TCE ay yeelan karaan madax xannuun, sanbab xannuun, dawakhaad, wada shaqayn la'aan, iyo dareen bixinta oo ku adkaata.
- Neefsashada xaddi aad u badan oo ah TCE (sida waxa ay dadku la kulmi karaan haddii ay isticmaalaan TCE marka shaqada) waxa ay sababi kartaa shaqada wadnaha oo aan fiicnaan, koomo, iyo dhimasho.

### Miyay tijaabo daaweyn kastaa baadhi kartaa la kulanka TCE?

Haddii aad la kulantay TCE dhawaanahan, waxa laga baadhi karaa neeftaada, dhiiga, ama kaadida. Xaddiyo yar ee TCE, tijaabada neefsashadu waa inay dhacdaa saacad ama laba saacadood gudahood kadib la kulanka. Xaddiyada badan ee TCE, tijaabada dhiiga iyo kaadida waa laga heli karaa TCE iyo waxa ay ka samaysan tahay toddobaad kadib la kulanka. La kulanka kimikooyin kale ayaa waxa ay kusoo saari karaan jidhka waxsoosaar kale jidhka, natiijada tijaabada si cad uma sheegto la kulanka TCE. Kaliyaata dhakhtar ama xeeldheere caafimaad oo ku caan ah tijaabooyinkan ayey tahay inuu siiyo.

### Ma iska daaweyn karaa la kulanka TCE?

Daaweyn kasta oo caafimaad kama baabiin karto jidhkaaga TCE, laakiin jidhkaagu isaga ayaa iska baabiin kara TCE. Waxa aad neef tuurtay TCE. Sidoo kale waxa ay jidhkaaga kaga baxdaa kaadidaada. Kahortaga la kulanka TCE had iyo jeer waa la soo jeediyaa.

### Halkee ayaan ka hali karaa macluumaad dheeri badan?

- addii aad hayso arrimo ku saabsan caafimaadkaaga, wac ama arag dhakhtarkaaga.
- Haddii aad jeclaan lahayd macluumaad badan oo ah TCE, wac Xarumaha Kaantaroolka Cudurada iyo Laynka Macluumaadka Kahortaga. lambarka telefoonka bilaashka ahi waa **1-800-232-4636**. u ogolaw hawl fuliyaha inuu ogaado inaad jeclaan lahayd inaad qof kala hadasho wax ku saabsan TCE ama trichloroethylene.
- Haddii aad jeclaan lahayd macluumaad badan oo ah Wakaalada Walxaha Sunta ah iyo Diwangalinta Cuddurada, booqo websaytkayaga [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov). Waxa aad heli doontaa telefoon lambarada si aad ula xidhiidho ATSDR xubinta shaqaalaha gobolka ee gobolkaaga.

### Tixraacyo:

1. Forand SP, Lewis-Michl EL, Gomez MI, 2011 Natiijada Dhalnada adag iyo la kulanka hooyada Trichloroethylene iyo Tetrachloroethylene Iyada oo loo marayo Xadgudubka Uumiga Ciidda ee Gobolka New York. Environ Health Perspect 120(4): doi:10. 1289/ehp. 1103884
2. Johnson P, Goldberg S, Mays M, Dawson B. 2003. Thresold of trichloroethylene ee wasakahyanta cabbitaanka hooyada waxa ay saameeyaan krrriinka muhiimka ee wadnaha jiiirka. Environ Health Perspect, 111, 289-292.
3. Keil DE, Peden-Adams M M, Wallace S, Ruiz P, Gilkeson G S. 2009. Qiimaynta la kulanka trichloroethylene (TCE) ee xannuunada kaadida kaasi oo hidde side ahaan suuroobi kara ama aan suuroobi karin si uu u samayso xannuunka weerarka difaaca ee isla unugyada jidhka. J Environ Sci Health A Tox Hazard Subst Environ Eng, 44, 443-453.
4. Wakaalada Walxaha Sunta ah iyo Diwaanka Xannuunada.. Waraaqda Caddaynta: Sida loo yareeyo La kulankaaga Kimikooyinka marka aad joogto Guriga, Shaqada, iyo Ciyaarta. Atlanta, GA: Waaxda Maraykanka Caafimaadka iyo Adeegyada Dadka; 2011.
5. The Wakaalada Walxaha Sunta ah iyo Diwaangalinta Xannuunada. Qorshaha Barshada Sunta: Trichloroethylene (TCE). CAS# 000079-01-6. Atlanta, GA, Waaxda Maraykanka Caafimaadka iyo Adeegyada Dadka; 2010 Sabteembar.



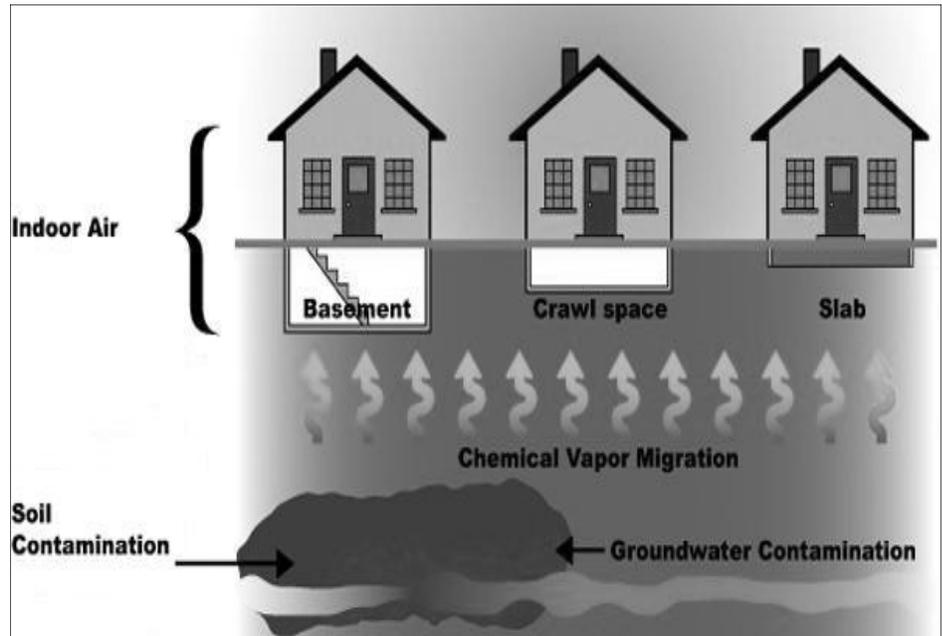
## FACTS ABOUT...

# VAPOR INTRUSION

### What is vapor intrusion?

Vapor intrusion is a way in which chemicals in the ground can get into the air in your home (see figure at right). Chemicals are released to the soil and groundwater from various sources including: chemical spills at a factory, chemical dumping, leaks from underground storage tanks, or buried wastes. Certain types of chemicals evaporate and may travel as vapors through the soil and groundwater and into nearby buildings, contaminating indoor air.

A variety of factors can influence whether vapor intrusion may occur at a building located near a source of soil or groundwater contamination including: soil type, depth to groundwater, the construction of the building, and the condition of the foundation and existence of underground utilities that can create pathways for vapors to travel. Homes in the same neighborhood and even next door to each other can be affected differently by vapor intrusion.



### Why is vapor intrusion a concern?

Vapor intrusion is a concern because chemical vapors affect indoor air quality and can build up to a point where the health of occupants in affected buildings could be at risk. In general, exposure to any chemical does not necessarily mean that health effects will occur. Whether or not a person experiences any health effects depends on several factors, including the toxicity of the chemical, the length and amount of exposure, and the health and sensitivity of the individual exposed. If chemical levels build up in indoor air high enough, individuals may temporarily experience eye and respiratory irritation, headache, and/or nausea. Low-level chemical exposures over many years may increase an individual's risk of developing cancer or chronic disease.

### What types of chemicals are associated with vapor intrusion?

Only "volatile" chemicals that readily evaporate are a concern with vapor intrusion. The most common class of chemicals associated with vapor intrusion are volatile organic compounds (VOCs). VOCs are widely used and are found in petroleum products such as gasoline and solvents for dry cleaning and industrial uses.

### Can vapors be in my home from other sources?

VOCs also are found in many household products and can affect indoor air quality. Paints, paint strippers and thinners, cigarette smoke, aerosol sprays, moth balls, air fresheners, new carpeting or furniture, hobby supplies (glues and solvents), stored fuels, and clothing that has been dry-cleaned all contain VOCs. Such household sources are more likely to be a cause of indoor air quality problems in your home than vapor intrusion.



In addition, indoor air quality may also be affected by outdoor air. VOCs are present in outdoor air from a combination of sources such as vehicle exhaust and various industries.

Both indoor and outdoor sources are taken into account when evaluating whether vapor intrusion is contributing to unhealthy indoor air.

## ***What happens if vapor intrusion is a concern near my home?***

If you live near a site with VOC contamination, the potential for vapor intrusion may be investigated. To determine whether vapor intrusion may be a concern, samples of groundwater and soil gas may be collected near your home. If this sampling indicates a potential problem, sampling on your property and in your home may be necessary.

If such sampling is necessary, you would be contacted by the site owner or others working on the investigation and cleanup with information about the project. Your cooperation and consent would be requested before any testing or sampling is done on your property. Additionally, such sampling would be done at no cost to you.

Soil gas samples collected beneath the foundation are often the most reliable method to determine if vapors are present that could cause a problem. Indoor and outdoor air sampling may also be collected. A comparison of all the data is conducted to determine whether vapor intrusion is a concern.

Depending on the investigation results, additional sampling or monitoring may be recommended. Additional sampling may be performed to determine the extent of vapor contamination and to verify results. Monitoring (sampling on a recurring basis) may be conducted if there is a potential for vapor intrusion to occur should conditions change.

## ***What happens if a vapor intrusion problem is found?***

If testing confirms vapor intrusion is affecting the air in your home, measures can be taken to address the problem. Mitigation steps may be taken to minimize exposures associated with vapor intrusion. Mitigation steps may include sealing cracks in the building's foundation, adjusting the building's heating, ventilation, and air-conditioning system to maintain a positive pressure to prevent infiltration of subsurface vapors, or installing a subsurface depressurization system. This system prevents vapors from entering the building by continuously venting the vapors from beneath the building to the exterior of the structure. Subsurface depressurization systems are also used throughout the country to reduce levels of naturally-occurring radon gas. This system uses minimal electricity and should not noticeably affect heating and cooling efficiency. Usually, the party responsible for cleaning up the contamination is also responsible for paying for installation of this system. The system typically remains in place until the contamination is cleaned up and may remain in place permanently.

## ***What can I do to improve my indoor air quality?***

Household products and other factors, such as mold growth, carbon monoxide, and radon, can degrade the quality of air in your home. Consider the following tips to improve indoor air quality:

- Be aware of household products that contain VOCs. Do not buy more chemicals than you need at a time. Store unused chemicals in tightly-sealed containers in a well-ventilated location, preferably away from the living space in your home.
- Fix all water leaks promptly, as well as other moisture problems that encourage mold growth.
- Don't make your home too air tight. Fresh air helps prevent build-up of chemicals in the air as well as mold growth.
- Check all appliances and fireplaces annually. Make sure they are properly vented and in good condition.
- Install carbon monoxide detectors in your home; take immediate actions to reduce carbon monoxide levels if needed. These detectors are available at hardware and home improvement stores.
- Test your home for radon; take actions to reduce radon levels if needed. Test kits are available at hardware and home improvement stores or you can call the DHSS Radon Program at (573) 751-6160 or (866) 628-9891.

## ***For more information:***

For health-related questions regarding vapor intrusion, please contact:

Missouri Department of Health and Senior Services, Health and Risk Assessment Program (573) 751-6102

Additional information about vapor intrusion is available at the following Web sites:

- U.S. Environmental Protection Agency—[www.epa.gov/epawaste/hazard/correctiveaction/eis/vapor.htm](http://www.epa.gov/epawaste/hazard/correctiveaction/eis/vapor.htm)
- Interstate Technology and Regulatory Council—[www.itrcweb.org/guidancedocument.asp?TID=49](http://www.itrcweb.org/guidancedocument.asp?TID=49)

Additional information on indoor air quality is available at the following Web sites:

- DHSS—[www.dhss.mo.gov/IndoorAir](http://www.dhss.mo.gov/IndoorAir)
- U.S. Environmental Protection Agency—[www.epa.gov/iaq](http://www.epa.gov/iaq)



# Community Involvement Plans

## Description

A Community Involvement Plan (CIP) is a site-specific strategy to enable meaningful community involvement throughout the Superfund cleanup process. CIPs specify planned community involvement activities to address community needs, concerns, and expectations that are identified through community interviews and other means.

The CIP is both a *document* and the culmination of a *planning process*.<sup>1</sup> As such, the CIP provides the backbone of the community involvement program and serves as a useful reference that the Site Team often turns to during the Superfund cleanup for advice on appropriate activities for community involvement. A well-written CIP will enable community members affected by a Superfund site to understand the ways in which they can participate in decision making throughout the cleanup process.

## Required Activity?

Yes. The National Contingency Plan (NCP) requires the lead agency -- in the case of the former Hardesty Federal Complex, U.S. General Services Administration (GSA) -- to prepare a Community Involvement Plan “based on community interviews and other relevant information, specifying the community relations activities that the lead agency expects to undertake during the remedial response.” The NCP specifies that the CIP must be in place before remedial investigation field activities start, “to the extent practicable.”

The NCP further requires that EPA review the CIP prior to initiating the remedial design (RD) “to determine whether it should be revised to describe

further public involvement activities during Remedial Design/Remedial Action (RD/RA) that are not already addressed or provided for” in the CIP.

For removal actions lasting 120 days or more, the NCP specifies that the lead agency must prepare a CIP based on community interviews and other relevant information “by the end of the 120-day period.” For removal actions with a planning period of at least six months, the NCP requires the CIP to be completed prior to the completion of the Engineering Evaluation/Cost Analysis (EE/CA).

These requirements are equally applicable to federal facilities and sites using the Superfund Alternative Approach (SAA).

## Making it Work

A carefully prepared CIP provides a game plan or road map for the Site Team’s use throughout the cleanup process. The Community Involvement Coordinator has primary responsibility for the CIP, but all members of the Site Team—the Remedial Project Manager or On-Scene Coordinator, CIC, Risk Assessor, the enforcement case team, EPA contractor, state, tribal, or local agency staff, or others—should be involved in the development and implementation of the CIP.

The CIP should be a “living” document and is most effective when it is updated or revised as site conditions change. The CIP document:

- Describes the release and affected areas (a.k.a., “the site”), including relevant history, type and extent of contamination, and environmental exposures and concerns, both related to the site and in a broader sense;

<sup>1</sup>Hellier, Justin, *Planning for Participation: Trends & Opportunities in Superfund’s Community Involvement Plan*, 2010: Report prepared for the U.S. EPA by National Network for Environment Management Studies Fellow. Many of the ideas for this tool were informed by this report.



- Describes the community in a comprehensive Community Profile that includes demographics, local government structure, and any relevant community characteristics;
- Identifies key community needs, questions, and concerns, as well as expectations and unique needs of the community (e.g., translation and disability services) or unique cultural behaviors, customs, and values. This information is typically collected through *Community Interviews* and depicted in the *Community Profile*;
- Describes the need for technical assistance services and, if appropriate, identifies appropriate programs and mechanisms for providing access to *Technical Assistance for Communities*;
- Specifies EPA’s planned outreach activities and community involvement mechanisms, including a projected sequence of project milestones tied to site activities (with projected timeframes, whenever possible), and describes the mechanisms that will be used to explain to the public how community feedback is considered during the cleanup process;
- Identifies any additional special services or approaches EPA will use to address unique needs of the community, which may include encouraging the formation of a Community Advisory Group (CAG), providing *Facilitation/Conflict Resolution/Alternative Dispute Resolution (ADR)* services for community meetings or groups, *Translation Services*, or supporting an approach for *Community Visioning* (i.e., allowing open-ended brainstorming for community stakeholders to envision the future potential reuse of the site);
- Allows for community comment on the draft CIP and describes the mechanisms used to receive and consider feedback before issuing the “final” CIP (e.g., formal or informal public comments, community meetings, public meeting, etc.); and
- Describes future plans for updating or revising the CIP.

To get involved in the creation of the Hardesty Complex CIP, contact U.S. General Services Administration at (816) 926-6903 or [r6environment@gsa.gov](mailto:r6environment@gsa.gov).



# Planes de participación comunitaria

## Descripción

Un plan de participación comunitaria (CIP, por sus siglas en inglés) es una estrategia específica del sitio para permitir la valiosa participación de la comunidad durante todo el proceso de limpieza de Superfund. Los CIP especifican las actividades de participación comunitaria planeadas para satisfacer las necesidades, las preocupaciones y las expectativas de la comunidad que se identifican a través de entrevistas en la comunidad y por otros medios.

El CIP es un *documento* y la culminación de un *proceso de planificación*<sup>1</sup>. Como tal, el CIP proporciona el eje del programa de participación comunitaria y sirve a modo de referencia útil, donde normalmente recurre el Equipo del Sitio durante la limpieza de Superfund para conseguir recomendaciones sobre las actividades apropiadas para la participación comunitaria. Un CIP bien redactado permitirá que los miembros de la comunidad afectados por un sitio de Superfund sepan de qué modo pueden participar en la toma de decisiones durante todo el proceso de limpieza.

## ¿Requirió una actividad?

Sí. El Plan Nacional de Contingencia (NCP, por sus siglas en inglés) requiere que la agencia principal en el caso del antiguo Complejo Federal de Hardesty, la Administración de Servicios Generales (GSA, por sus siglas en inglés) de los Estados Unidos prepare un Plan de Participación Comunitaria “sobre la base de la entrevistas en la comunidad y otra información relevante, especificando las actividades de relaciones con la comunidad que la agencia principal tiene previsto llevar a cabo durante la respuesta de remediación a largo plazo”.

El NCP especifica que el CIP debe implementarse antes del comienzo de las actividades de campo de la investigación de la tecnología, “en la medida de lo posible”. El NCP requiere que la EPA revise el CIP antes de iniciar el diseño de la tecnología (RD) “para

determinar si debe ser revisado para describir otras actividades de participación del público durante el diseño de la tecnología/acción de restauración a largo plazo (RD/RA, por sus siglas en inglés) que no hayan sido contempladas o previstas” en el CIP.

Para las acciones de remoción que duren 120 días o más, el NCP especifica que la agencia principal debe preparar un CIP basado en las entrevistas con la comunidad y otra información relevante “antes de que finalice el período de 120 días”. Para las acciones de remoción con un período de planificación de al menos seis meses, el NCP requiere que el CIP esté completo antes de que finalice la Evaluación de Ingeniería/ Análisis de Costos (EE/CA, por sus siglas en inglés).

Estos requisitos se aplican de igual modo a los establecimientos y sitios federales que utilizan el Enfoque Alternativo de Superfund (SAA, por sus siglas en inglés).

## Haciendo que funcione

Un CIP elaborado cuidadosamente proporciona un plan de acción o mapa de ruta para que el Equipo del Sitio utilice durante todo el proceso de limpieza. El Coordinador de Participación Comunitaria es el principal responsable del CIP, pero todos los integrantes del Equipo del Sitio –el Gerente del Proyecto de Restauración o el Coordinador en Escena, CIC, Asesor de Riesgos, el equipo de casos de cumplimiento de la ley, contratista de EPA, el personal de agencias estatales, tribales o locales u otros- deben participar en el desarrollo y la implementación del CIP.

El CIP debe ser un documento “vivo” y es más efectivo cuando se actualiza o revisa a medida que cambian las condiciones del sitio. El documento del CIP:

- escribe las áreas afectadas y de liberación (de aquí en adelante, “el sitio”), incluidos la historia relevante, el tipo y el grado de contaminación, y las exposiciones y los problemas ambientales,

<sup>1</sup> Hellier, Justin, *Planning for Participation: Trends & Opportunities in Superfund's Community Involvement Plan*, 2010: Informe preparado para la EPA de EE.UU. por la Red Nacional de Becario de Estudios sobre Gestión Ambiental. Muchas de las ideas para esta herramienta fueron obtenidas de este informe.



- relacionados con el sitio y en sentido más amplio;
- Describe la comunidad en un Perfil Comunitario integral que incluye los datos demográficos, la estructura gubernamental local y cualquier característica relevante de la comunidad;
  - Identifica las necesidades, preguntas e inquietudes clave de la comunidad, así como las expectativas y necesidades únicas de la comunidad (p. ej. servicios de traducción y para personas con discapacidades) o conductas culturales, costumbres y valores únicos. Esta información es comúnmente reunida a través de las *Entrevistas con la Comunidad* y se representa en el *Perfil de la Comunidad*;
  - Describe la necesidad de servicios de asistencia técnica y, en caso de que corresponda, identifica los programas y los mecanismos apropiados para brindar acceso a la *Asistencia Técnica para Comunidades*;
  - Especifica las actividades comunitarias planeadas y los mecanismos de participación comunitaria de EPA, incluida una secuencia proyectada de puntos importantes del proyecto relacionados con las actividades del sitio (con marcos de tiempo proyectados, siempre que sea posible) y describe los mecanismos que se utilizarán para explicar al público de qué forma se consideran los aportes de la comunidad durante el proceso de limpieza;
  - Identifica cualquier servicio o enfoque especial adicional que EPA utilizará para satisfacer las necesidades únicas de la comunidad, que pueden incluir alentar la formación de un Grupo Asesor de la Comunidad (CAG, por sus siglas en inglés), proporcionar servicios de *Facilitación/Resolución de Conflictos/Resolución de Disputas Alternativas (ADR, por sus siglas en inglés)* para las reuniones o grupos de la comunidad, *Servicios de Traducción* o apoyar un enfoque para la *Visión de la Comunidad* (es decir, permitir el intercambio de ideas indefinido para que el público interesado de la comunidad prevea la posible reutilización futura del sitio);
  - Permite que la comunidad comente sobre la versión preliminar del CIP y describe los mecanismos utilizados para recibir y considerar los aportes antes de emitir el CIP "final" (p. ej., comentarios formales o informales del público, reuniones de la comunidad, reuniones del público, etc.); y
  - Describe los planes futuros para actualizar o revisar el CIP.

Para participar en la creación del CIP del Complejo de Hardesty, comuníquese con la Administración de Servicios Generales de Estados Unidos al (816) 926-6903 o [r6environment@gsa.gov](mailto:r6environment@gsa.gov).



# Kế hoạch Thu hút Cộng đồng Tham gia

## Mô tả

Một Kế hoạch Thu hút Cộng đồng Tham gia (CIP) là một chiến lược địa điểm cụ thể nhằm thúc đẩy cộng đồng tham gia một cách có ý nghĩa trong suốt quá trình dọn sạch Superfund. CIP nêu rõ các hoạt động tham gia của cộng đồng được lên kế hoạch để giải quyết các nhu cầu, lo ngại, và kỳ vọng của cộng đồng được xác định thông qua các cuộc phỏng vấn cộng đồng và các phương tiện khác.

CIP vừa là một tài liệu vừa là kết quả của một quá trình lên kế hoạch<sup>1</sup>. Như vậy, CIP cung cấp phần xương sống của chương trình thu hút cộng đồng tham gia và phục vụ như là một tài liệu tham khảo hữu ích mà Nhóm Địa điểm thường sử dụng trong thời gian dọn dẹp Superfund để được tư vấn về các hoạt động phù hợp với sự tham gia của cộng đồng. Một CIP được soạn thảo tốt sẽ giúp các thành viên cộng đồng bị ảnh hưởng bởi một địa điểm Superfund hiểu được cách thức mà họ có thể tham gia vào việc ra quyết định trong suốt quá trình dọn sạch.

## Hoạt động Bắt buộc?

Có. Kế hoạch Dự phòng Quốc gia (NCP) quy định cơ quan chủ trì trong trường hợp Khu liên hợp Liên bang Hardesty cũ, Cục Quản lý Dịch vụ Hoa Kỳ (GSA) chuẩn bị một Kế hoạch Thu hút Cộng đồng Tham gia “dựa trên các cuộc phỏng vấn cộng đồng và các thông tin liên quan khác, nêu rõ các hoạt động quan hệ cộng đồng cơ quan chủ trì dự kiến sẽ thực hiện trong thời gian khắc phục hậu quả.”

NCP nêu rõ rằng CIP phải được thực hiện trước khi các hoạt động thực địa điều tra khắc phục bắt đầu, “trong phạm vi có thể.” NCP còn quy định rằng EPA phải xem xét CIP trước khi bắt đầu đề cương khắc phục (RD) “để xác định xem CIP có cần phải được sửa đổi để mô tả hơn nữa các hoạt động tham gia của công chúng trong

Đề cương Khắc phục/Hành động Khắc phục (RD/RA) mà chưa được đề cập đến hoặc quy định không” trong CIP.

Đối với các hành động tháo dỡ kéo dài 120 ngày trở lên thì NCP nêu rõ rằng cơ quan chủ trì phải chuẩn bị một CIP dựa trên các cuộc phỏng vấn cộng đồng và các thông tin liên quan khác “vào cuối giai đoạn 120 ngày.” Đối với các hành động tháo dỡ có thời gian quy hoạch ít nhất sáu tháng, NCP quy định CIP phải được hoàn tất trước khi hoàn thành Đánh giá Kỹ thuật/Phân tích Chi phí (EE/CA).

Những quy định này đều áp dụng một cách bình đẳng cho các cơ sở và địa điểm liên bang sử dụng Phương pháp tiếp cận Thay thế Superfund (SAA).

## Thực hiện CIP Hiệu quả

Một CIP được chuẩn bị kỹ càng cung cấp một kế hoạch chiến lược hoặc lộ trình cho Nhóm Địa điểm sử dụng trong suốt quá trình dọn sạch. Điều phối viên Tham gia của Cộng đồng chịu trách nhiệm chính cho CIP, nhưng mọi thành viên của Nhóm Địa điểm—Quản lý Dự án Khắc phục hoặc Điều phối viên Thực địa, CIC, Người đánh giá Rủi ro, nhóm hồ sơ thực thi, nhà thầu EPA, tiểu bang, bộ lạc, hoặc nhân viên của cơ quan địa phương, hoặc những người khác—nên tham gia vào việc phát triển và thực hiện CIP.

CIP phải là một tài liệu “sống” và đạt hiệu quả nhất khi được cập nhật hoặc chỉnh lý khi các điều kiện ở địa điểm thay đổi. Tài liệu CIP:

- Mô tả sự rò rỉ và những khu vực bị ảnh hưởng (còn gọi là “địa điểm”), bao gồm lịch sử liên quan, loại và phạm vi ô nhiễm, và phơi nhiễm và quan ngại về môi trường, đều liên quan đến địa điểm và mang một ý nghĩa rộng hơn;

<sup>1</sup> Hellier, Justin, *Planning for Participation: Trends & Opportunities in Superfund's Community Involvement Plan (Quy hoạch Tham gia: Xu hướng và Cơ hội trong Kế hoạch Thu hút Cộng đồng Tham gia của Superfund)*, 2010: Báo cáo do Mạng lưới Nghiên cứu sinh Quốc gia Nghiên cứu Quản lý Môi trường chuẩn bị cho EPA Hoa Kỳ. Nhiều ý tưởng cho công cụ này xuất phát từ báo cáo này.



- Mô tả cộng đồng trong một Hồ sơ Cộng đồng toàn diện bao gồm thông tin nhân khẩu, cấu trúc chính quyền địa phương, và bất kỳ đặc điểm cộng đồng liên quan nào;
- Xác định các nhu cầu, thắc mắc, và quan ngại cơ bản của cộng đồng, cũng như kỳ vọng và nhu cầu đặc biệt của cộng đồng (ví dụ, dịch vụ chuyển ngữ và dịch vụ cho người khuyết tật) hoặc hành vi, phong tục, và giá trị văn hóa độc đáo. Thông tin này thường được thu thập thông qua *Phòng vấn Cộng đồng* và được miêu tả trong *Hồ sơ Cộng đồng*;
- Mô tả nhu cầu cho các dịch vụ hỗ trợ kỹ thuật và, nếu thích hợp, xác định các chương trình và cơ chế thích hợp để cung cấp khả năng truy cập vào *Hỗ trợ Kỹ thuật cho Cộng đồng*;
- Nêu rõ các hoạt động tiếp cận được lên kế hoạch và cơ chế cho cộng đồng tham gia của EPA, bao gồm một chuỗi đề án của các mốc dự án gắn liền với các hoạt động tại địa điểm (với khung thời gian dự kiến, bất cứ khi nào có thể), và mô tả các cơ chế sẽ được sử dụng để giải thích cho công chúng cách phản hồi của cộng đồng được xem xét trong quá trình dọn sạch;
- Xác định bất kỳ dịch vụ đặc biệt hoặc phương pháp tiếp cận bổ sung nào mà EPA sẽ sử dụng để giải quyết các nhu cầu đặc biệt của cộng đồng, có thể bao gồm việc khuyến khích thành lập một Nhóm Cố Vấn Cộng Đồng (CAG), cung cấp dịch vụ *Tạo điều kiện/ Giải quyết Xung đột/ Giải quyết Tranh chấp Thay thế (ADR)* cho các cuộc họp hoặc các nhóm cộng đồng, *Dịch vụ Chuyển ngữ*, hoặc hỗ trợ một phương pháp tiếp cận cho *Tâm nhìn Cộng đồng* (tức là, cho phép các bên liên quan trong cộng đồng thảo luận tự do không hạn chế để hình dung việc tái sử dụng địa điểm tiềm năng trong tương lai);
- Cho phép cộng đồng đóng góp ý kiến về CIP dự thảo và mô tả các cơ chế được sử dụng để nhận và xem xét phản hồi trước khi ban hành CIP “cuối cùng” (ví dụ, ý kiến công chúng chính thức hoặc không chính thức, các cuộc họp cộng đồng, cuộc họp với công chúng, v.v...); và
- Mô tả các kế hoạch cập nhật hoặc chỉnh lý CIP trong tương lai.

Để tham gia vào quá trình xây dựng CIP về Khu liên hợp Hardesty, liên lạc với Cục Quản lý Dịch vụ Hoa Kỳ theo số (816) 9266903 hoặc [r6environment@gsa.gov](mailto:r6environment@gsa.gov).



# Qorshayaasha Ku lugyeelashada Bulshada

## Qeexid

Qorshayaasha Kulugyeelashada Bulshada (CIP) waa qorshe gooboo cayiman si uu awood ugu siiyo ku luglaahaansho bulsheed oo micne badan leh dhammaan habka nadiifinta Superfund. CIP waxa ay caddaynaysaa hawlaha ku luglaahaanshaha qorshayaasha bulshada si loo daraasadeeyo baahiyaha bulshada, danayaasha, iyo filashooyinka kuwaasi oo lagu sheegay waraysiyadii bulshada iyo waxyaalo kale.

CIP waa *Qoraal* iyo gunaanad *habka qorshaynta*<sup>1</sup>. Sidaa oo kale, CIP waxa ay bixisaa barnaamijka lafdhabarta ah ee ku luglaahaanshaha bulshada waxa ayna u adeegtaa tixraac faa'iido leh kaasi oo Kooxda Goobtu badanaa waxa ay sii wadaan inta lagu guda jiro nadiifinta Superfund talo ku haboon hawlaha ku luglaahaanshaha bulshada. CIP si fiican u qoran waxa uu awood usiin doonaa xubnaha bulshada ee ay saamaysay goobta Superfund inay fahmaan hababka ay kaga qayb qaadan karaan go'aan gaadhida inta lagu guda jiro habka nadiifinta.

## Waa maxay Hawlaha loo baahan yahay?

Haa. Qorshaha Gargaarka ee Qaranku (NCP) waxa uu u baahdaa wakaalada hogaamisa kiiska Hardesty Federal Complex ee hore, Maamulka Adeegyada Guud ee Maraykanka (GSA) si uu u diyaariyo Qorshe Ku Luglaahaansho oo Bulsheed "kaasi oo ku salaysan waraysiyadii bulshada iyo macluumaad kale oo la isku halayn karo, kaasi oo caddaynaya xidhiidhka hawlaha bulshada kaasi oo wakaalada hogaanku ay rajaynayso inay bilawdo jawaabta dib u sixida.

NCP waxa ay caddaynaysaa in CIP meel lasii dhigo kahor inta ayna bilaabmin hawlaha sixida baadhista goobtu, "ilamaa heerka ay suurtagal noqon karto." NCP waxa ay usii baahan tahay in dib u eegista EPA inta ka horaysa bilawga qaabka sixida (RD) "si loo go'aamiyo in dib loogu noqon karo siloo sharaxo hawlo badan

oo ku luglaahaansho dad inta lagu guda jiro Qaabka Sixida/Ficilka (RD/RA) kuwaasi oo aan mar hore la daraasadayn ama aan la siin " CIP.

Shaqooyinka ka baabiintu waxa ay ku dhammaadaan 120 cisho ama kabadan, NCP waxa ay caddaysay in wakaalada hogaanku ay tahay inay diyaariso CIP ku salaysan waraysiyada bulshada iyo macluumaad kale oo la isku halayn karo "dhammaadka muddada ah 120 cisho." Shaqooyinka ka baabiinta oo leh qorshe muddaysan oo ah ugu yaraan lix bilood, NCP waxa ay uga baahataa CIP inay dhammaystirto inta ka horaysa dhammaystirka Qiimaynta Injineerka/Falanqaynta Qiimaha (EE/CA).

Waxyaalahan looga baahan yahay sidoo kale waxa ay ku haboon yihiin qalabka dawladda iyo goobaha iyo oo la isticmaalayo Superfund Alternative Approach (SAA).

## Ka dhigida mid shaqaysa

CIP si taxadir leh loo diyaariyay waxa uu siiyaa qorshe ama meel loo maro Goobta oo ay Kooxdu isticmaali Kooxda inta lagu gudajiro habka nadiifinta. Xidhiidhiyaha ku Luglaahaanshaha Bulshada waxa uu leeyahay masuuliyada ugu wayn ee CIP, laakiin dhammaan xubnaha Kooxda Goobtu – Maareeyaha Kiiska Sixida ama Xidhiidhiyaha On-Scene, CIC, Qiimeeyaha Khatarta, kooxda meelmarinta kiiska, heshiisgalaha EPA, gobolka, qabiilka, ama shaqaalaha wakaalada deegaanka, ama kuwa kale – ayaa ku luglaahaan doona horumarinta iyo hirgalinta CIP.

CIP waa inuu noqdaa qoraal jira waxa uuna ugu saamayn badan yahay marka la cusboonaysiiyo marka xaaladaha goobtu ay isbaddelaan. Qoraalka CIP:

- Waxa uu sharaxaa fasixida iyo meelaha saamayntu ku dhacday (a.k.a., "goobta"), waxa kujira taariikh la isku halayn karo, nooca iyo xaddiga wasakhda, iyo la kulanka deegaanka iyo danayaasha, labadooduba waxa ay ula xidhiidhaan goobta si aad ah;

<sup>1</sup> *Hellier, Justin, Qorshaynta ka Qaybqaadashada: Habka cusub & Fursadaha Qorshaha Ku lugyeelashada Superfund ee Bulshada, 2010: Warbixin ay diyaariyeen EPA ee Maraykanka Shabakada Qaranka ee Daraasadaha Maaraynta Deegaanka. Qaar badan oo kamid ah fikradaha ee qalabkan ayaa lagu sheegay warbixintan.*



- Waxa ay u sharaxdaa bulshada Qorshe Bulsheed oo dhammaystiran kaasi oo ay kujiraan qaab dhismeedka bulshada, qaab dhismeedka dawlada hoose, iyo astaamo kasta oo bulsho oo la isku halayn karo;
- Waxa ay sheegtaa baahiyaha bulshada furaha ah, su'aalo, iyo danayaasha, sidoo kale waxyaalaha la filanayo iyo baahiyaha gaarka ah ee bulshada (Tusaale., turjumida iyo adeegyada naafada) ama dabecado dhaqan oo gaar ah, habka noloshu, iyo qiime. Macluumaadkani waxa laga soo ururiyay *Waraysiyo Bulsho waxana uu matalayaa Qaabka Bulshada*;
- Waxa ay sharaxdaa baahida adeegyada caawin farsamo iyo, hadii ay ku haboon tahay, waxa ay sheegtaa barnaamijyo ku haboon iyo farsamooyin kuwaasi oo bixinaya galaan gal u yeelashada *Caawinta Farsmo ahaan ee Bulshada*;
- Waxa ay caddaysaa hawlaha qorshaysan ee EPA's ku luglaahanshaha bulsho ee farsamada, ay kujiraan mashruucyo isku xig xiga oo ah ujeedooyinka mashruuca kuna xidhaya goobta shaqada (kuwaasi oo leh wakhtiyo mashruuc, markasta oo ay suurta gal tahay), waxa ayna sharaxdaa farsamada taasi oo loo isticmaali doono in loogu sharaxo dadka sida jawaabta dadka loo tixgaliyo inta lagu guda jiro habka nadiifinta;
- Waxa ay sheegtaa adegyo kasta oo gaar ah isla markaana dheeri ah amase xeelado EPA ay u isticmaali doonto inay ku daraasadayso baahiyaha gaarka ah ee bulshada, kaasi oo laga yaabo inay kujiraan dhiirigalinta samaynta Kooxda Latalinta Bulshada (CAG), oo bixinaya *Fududaynta/Isku dhacyada Xalinta/Xalinta Murano Kala duwan (ADR)* Adeegyada kulanka bulshada ama kooxaha, *Adeegyada Turjumida*, ama taageerida *fikrada aragtida bulshada* (tus., u oggolaanshaha maskax tuujis xidhan oo furan bulshada daneeyayaasha si ay umala awaalaan dib u isticmaalka ku kaydsan goobta);
- Waxa ay u oggolaataa bulshada inay faaleeyaan waraaqda CIP waxa ayna sharaxdaa farsamooyinka loo isticmaalo siloo helo loona tixgaliyo jawaabta kahor inta aan la sheegin CIP da ugu "danbaysa" (tus., faalooyinka caadiga ah ama aan caadiga ahayn ee bulshada, kulamada bulshada, kulamada bulshada, iwm.); iyo
- Waxa ay sharaxdaa qorshayaasha mustaqbalka ee cusboonaysiinta ama dib ugu noqoshada CIP.

Si aad u saamayso abuurida Hardesty Complex CIP, la xidhiidh Maamulka Adeegyada Guud ee Maraykanka (816) 9266903 ama [r6environment@gsa.gov](mailto:r6environment@gsa.gov).



U.S. General Services Administration

Dear resident,

You are invited to attend a public information session Thursday, Dec. 5, from 5 to 8 p.m., at the Kansas City Public Library North-East Branch at 6000 Wilson Road in Kansas City to discuss environmental sampling results at the former Hardesty Federal Complex.

At 5:30 and 6:30, short presentations will be given about environmental sampling to-date and the next steps in the cleanup process. Representatives from the U.S. General Services Administration (GSA), Missouri Department of Natural Resources (MDNR), Missouri Department of Health and Senior Services, Terracon (an environmental engineering firm), and Hardesty Renaissance (current owner of the property) will be present to answer questions throughout the evening.

Spanish and Vietnamese interpreters will be on site to provide assistance.

During World War II, the complex served as a U.S. Army Quartermaster Depot, storing military supplies and chemically treating soldiers' clothing. Over time, some of the chemicals used in support of depot operations were released into the environment. The site is now undergoing an environmental study to determine the type and extent of pollutants due to historical operations.

We encourage you to attend the public information session to learn more about the facility and past, present and future testing. This information session is a follow-up to the session held June 20, 2013, and to several conversations with community members. It is also an opportunity for those not yet familiar with the environmental work to learn more about all testing and results to date.

For additional information before the public information session, or if you will have special needs for the session, please leave a voicemail at (816) 926-6903 or email [r6environment@gsa.gov](mailto:r6environment@gsa.gov), and we will respond as soon as possible. For more information, visit GSA's website at <http://www.gsa.gov/portal/content/173655> and MDNR's website <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

Thank you,

A handwritten signature in black ink that reads "Jason Klumb".

Jason Klumb  
Heartland Regional Administrator  
U.S. General Services Administration



U.S. General Services Administration

Estimado residente:

Por la presente lo invitamos a asistir a una sesión informativa pública el próximo jueves 5 de diciembre, de 5 pm a 8 pm, en la Kansas City Public Library North-East Branch, en 6000 Wilson Road, Kansas City para conversar sobre los resultados de la muestra ambiental del antiguo Hardesty Federal Complex.

A las 5:30 y a las 6:30, se realizarán presentaciones cortas sobre las muestras ambientales tomadas hasta la fecha y los próximos pasos que se tomarán en el proceso de limpieza. Los representantes de la Administración de Servicios Generales de los EE. UU. (GSA, en inglés), del Departamento de Recursos Naturales de Missouri (MDNR, en inglés), Departamento de Salud y Servicios para Mayores de Missouri, de Terracon (una empresa de ingeniería ambiental) y Hardesty Renaissance (actual dueña de la propiedad) estarán presentes para responder preguntas a lo largo de la noche.

Habrán intérpretes de español y vietnamita para prestar asistencia.

Durante la Segunda Guerra Mundial, el complejo fue utilizado como Depósito de Intendencia del Ejército de los EE. UU. y allí se almacenaban provisiones y se realizaban tratamientos químicos a la ropa de los soldados. Con el tiempo algunos de los químicos utilizados como apoyo para operaciones del depósito fueron liberados al medio ambiente. El sitio ahora está siendo sometido a un estudio ambiental para determinar el tipo y el alcance de los contaminantes debido a operaciones históricas.

Le sugerimos que asista a esta sesión informativa pública para conocer más sobre el establecimiento y sus pruebas pasadas, presentes y futuras. Esta sesión informativa es un seguimiento de la sesión realizada el 20 de junio de 2013 y de varias conversaciones con miembros de la comunidad. También es una oportunidad para quienes no están familiarizados con el trabajo ambiental para conocer más sobre todas las pruebas y resultados obtenidos hasta la fecha.

Para obtener mayor información antes de la sesión informativa pública o en caso de tener necesidades especiales para esta sesión, deje un mensaje de voz en el (816) 926-6903 o envíe un correo electrónico a [r6environment@gsa.gov](mailto:r6environment@gsa.gov) y le responderemos con la mayor brevedad posible. Para mayor información, visite el sitio web de la GSA en <http://www.gsa.gov/portal/content/173655> y el sitio web del MDNR en <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

Muchas gracias

A handwritten signature in black ink that reads "Jason Klumb".

Jason Klumb  
Administrador de Heartland Regional  
Administración de Servicios Generales de los EE. UU.



U.S. General Services Administration

Gửi cư dân,

Chúng tôi xin mời quý vị tham dự một buổi thông tin dành cho công chúng vào Thứ Năm, ngày 5 tháng Mười hai, từ 5 giờ chiều đến 8 giờ tối, tại Chi nhánh Đông Bắc của Thư viện Công Thành phố Kansas ở 6000 Wilson Road, Thành phố Kansas để thảo luận về kết quả lấy mẫu môi trường tại Khu liên hợp Liên bang Hardesty (Hardesty Federal Complex) cũ.

Vào 5:30 và 6:30, chúng tôi sẽ trình bày ngắn gọn về việc lấy mẫu môi trường cho tới hôm nay và những bước tiếp theo của quá trình dọn sạch. Những đại diện từ Cục Quản lý Dịch vụ Hoa Kỳ (GSA), Sở Tài nguyên Môi trường Missouri (MDNR), Sở Y tế và Dịch vụ Người cao tuổi Missouri, Terracon (một công ty kỹ thuật môi trường), và Hardesty Renaissance (chủ sở hữu hiện tại của khu liên hợp) sẽ có mặt để giải đáp các thắc mắc trong suốt buổi tối.

Thông dịch viên tiếng Tây Ban Nha và tiếng Việt cũng sẽ có mặt để hỗ trợ.

Trong Thế Chiến II, khu liên hợp này là một Kho Hậu cần của Quân đội Hoa Kỳ, chứa quân nhu và quần áo binh sĩ được xử lý hóa học. Trải qua thời gian, một số chất hóa học sử dụng để phục vụ các hoạt động lưu kho bị thải ra môi trường. Khu vực này hiện đang được nghiên cứu về môi trường để xác định loại và mức độ ô nhiễm do các hoạt động trong quá khứ.

Chúng tôi khuyến khích quý vị tham dự buổi thông tin cho công chúng để tìm hiểu thêm về cơ sở này và việc xét nghiệm trong quá khứ, hiện tại và tương lai. Buổi thông tin này sẽ tiếp nối buổi thông tin được tổ chức vào ngày 20 tháng Sáu năm 2013, và một số trao đổi đối thoại với các thành viên cộng đồng. Buổi thông tin này cũng là một cơ hội cho những người chưa quen thuộc với công việc về môi trường tìm hiểu thêm về mọi xét nghiệm và kết quả tính đến ngày hôm nay.

Để biết thêm thông tin về buổi thông tin cho công chúng, hoặc nếu quý vị sẽ có nhu cầu đặc biệt cho buổi thông tin này, xin hãy để lại tin nhắn thoại theo số (816) 926-6903 hoặc email đến [r6environment@gsa.gov](mailto:r6environment@gsa.gov), và chúng tôi sẽ trả lời ngay khi có thể. Để biết thêm thông tin, truy cập trang web của GSA tại <http://www.gsa.gov/portal/content/173655> và trang web của MDNR <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

Xin cảm ơn quý vị,

A handwritten signature in black ink that reads "Jason Klumb".

Jason Klumb  
Quản trị Khu vực Trung tâm  
Cục Quản lý Dịch vụ Hoa Kỳ

## **Public Information Session Dec. 5 from 5 to 8 p.m. at North-East Library**

You are invited to attend a public information session Thursday, Dec. 5, from 5 to 8 p.m., at the Kansas City Public Library North-East Branch at 6000 Wilson Road in Kansas City to discuss environmental sampling results at the former Hardesty Federal Complex.

At 5:30 and 6:30, short presentations will be given about environmental sampling to-date and the next steps in the cleanup process. Representatives from the U.S. General Services Administration (GSA), Missouri Department of Natural Resources (MDNR), Missouri Department of Health and Senior Services, Terracon (an environmental engineering firm), and Hardesty Renaissance (current owner of the property) will be present to answer questions throughout the evening.

Spanish and Vietnamese interpreters will be on site to provide assistance.

During World War II, the complex served as a U.S. Army Quartermaster Depot, storing military supplies and chemically treating soldiers' clothing. Over time, some of the chemicals used in support of depot operations were released into the environment. The site is now undergoing an environmental study to determine the type and extent of pollutants due to historical operations.

We encourage you to attend the public information session to learn more about the facility and past, present and future testing. This information session is a follow-up to the session held June 20, 2013, and to several conversations with community members. It is also an opportunity for those not yet familiar with the environmental work to learn more about all testing and results to date.

For additional information before the public information session, or if you will have special needs for the session, please leave a voicemail at (816) 926-6903 or email [r6environment@gsa.gov](mailto:r6environment@gsa.gov), and we will respond as soon as possible. For more information, visit GSA's website at <http://www.gsa.gov/portal/content/173655> and MDNR's website <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

## **Información Pública Sesión 5 de diciembre de 4 a 8 pm en la Biblioteca del Nordeste**

Por la presente lo invitamos a asistir a una sesión informativa pública el próximo jueves 5 de diciembre, de 5 pm a 8 pm, en la Kansas City Public Library North-East Branch, en 6000 Wilson Road, Kansas City para conversar sobre los resultados de la muestra ambiental del antiguo Hardesty Federal Complex.

A las 5:30 y a las 6:30, se realizarán presentaciones cortas sobre las muestras ambientales tomadas hasta la fecha y los próximos pasos que se tomarán en el proceso de limpieza. Los representantes de la Administración de Servicios Generales de los EE. UU. (GSA, en inglés), del Departamento de Recursos Naturales de Missouri (MDNR, en inglés), Departamento de Salud y Servicios para Mayores de Missouri, de Terracon (una empresa de ingeniería ambiental) y Hardesty Renaissance (actual dueña de la propiedad) estarán presentes para responder preguntas a lo largo de la noche.

Habrán intérpretes de español y vietnamita para prestar asistencia.

Durante la Segunda Guerra Mundial, el complejo fue utilizado como Depósito de Intendencia del Ejército de los EE. UU. y allí se almacenaban provisiones y se realizaban tratamientos químicos a la ropa de los soldados. Con el tiempo algunos de los químicos utilizados como apoyo para operaciones del depósito fueron liberados al medio ambiente. El sitio ahora está siendo sometido a un estudio ambiental para determinar el tipo y el alcance de los contaminantes debido a operaciones históricas.

Le sugerimos que asista a esta sesión informativa pública para conocer más sobre el establecimiento y sus pruebas pasadas, presentes y futuras. Esta sesión informativa es un seguimiento de la sesión realizada el 20 de junio de 2013 y de varias conversaciones con miembros de la comunidad. También es una oportunidad para quienes no están familiarizados con el trabajo ambiental para conocer más sobre todas las pruebas y resultados obtenidos hasta la fecha.

Para obtener mayor información antes de la sesión informativa pública o en caso de tener necesidades especiales para esta sesión, deje un mensaje de voz en el (816) 926-6903 o envíe un correo electrónico a [r6environment@gsa.gov](mailto:r6environment@gsa.gov) y le responderemos con la mayor brevedad posible. Para mayor información, visite el sitio web de la GSA en <http://www.gsa.gov/portal/content/173655> y el sitio web del MDNR en <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

## **Hội nghị Thông tin công cộng 05 tháng 12 từ 5 đến 8 vào buổi tối tại Đông Bắc Thư viện**

Chúng tôi xin mời quý vị tham dự một buổi thông tin dành cho công chúng vào Thứ Năm, ngày 5 tháng Mười hai, từ 5 giờ chiều đến 8 giờ tối, tại Chi nhánh Đông Bắc của Thư viện Công Thành phố Kansas ở 6000 Wilson Road, Thành phố Kansas để thảo luận về kết quả lấy mẫu môi trường tại Khu liên hợp Liên bang Hardesty (Hardesty Federal Complex) cũ.

Vào 5:30 và 6:30, chúng tôi sẽ trình bày ngắn gọn về việc lấy mẫu môi trường cho tới hôm nay và những bước tiếp theo của quá trình dọn sạch. Những đại diện từ Cục Quản lý Dịch vụ Hoa Kỳ (GSA), Sở Tài nguyên Môi trường Missouri (MDNR), Sở Y tế và Dịch vụ Người cao tuổi Missouri, Terracon (một công ty kỹ thuật môi trường), và Hardesty Renaissance (chủ sở hữu hiện tại của khu liên hợp) sẽ có mặt để giải đáp các thắc mắc trong suốt buổi tối.

Thông dịch viên tiếng Tây Ban Nha và tiếng Việt cũng sẽ có mặt để hỗ trợ.

Trong Thế Chiến II, khu liên hợp này là một Kho Hậu cần của Quân đội Hoa Kỳ, chứa quân nhu và quần áo binh sĩ được xử lý hóa học. Trải qua thời gian, một số chất hóa học sử dụng để phục vụ các hoạt động lưu kho bị thải ra môi trường. Khu vực này hiện đang được nghiên cứu về môi trường để xác định loại và mức độ ô nhiễm do các hoạt động trong quá khứ.

Chúng tôi khuyến khích quý vị tham dự buổi thông tin cho công chúng để tìm hiểu thêm về cơ sở này và việc xét nghiệm trong quá khứ, hiện tại và tương lai. Buổi thông tin này sẽ tiếp nối buổi thông tin được tổ chức vào ngày 20 tháng Sáu năm 2013, và một số trao đổi đối thoại với các thành viên cộng đồng. Buổi thông tin này cũng là một cơ hội cho những người chưa quen thuộc với công việc về môi trường tìm hiểu thêm về mọi xét nghiệm và kết quả tính đến ngày hôm nay.

Để biết thêm thông tin về buổi thông tin cho công chúng, hoặc nếu quý vị sẽ có nhu cầu đặc biệt cho buổi thông tin này, xin hãy để lại tin nhắn thoại theo số (816) 926-6903 hoặc email đến [r6environment@gsa.gov](mailto:r6environment@gsa.gov), và chúng tôi sẽ trả lời ngay khi có thể. Để biết thêm thông tin, truy cập trang web của GSA tại <http://www.gsa.gov/portal/content/173655> và trang web của MDNR <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

## **Kulan Macluumaad Dadweyne Diismabar 5 laga bilaabo 5 illaa 8 habeenimo Maktabadda North-East**

Waxa lagugu martiqaaday inaad timaaddo kulan macluumaad dadweyne Khamiista, Diismabar 5, laga bilaabo 5 illaa 8 habeenimo, Maktabadda Dadweynaha Magaalada Kansas Laanta North-East ee 6000 Wilson Road ee Magaalada Kansas si looga wada-hadlo natiijooyinka saambalada deegaanka ee kaambookii hore ee federaalka “Hardesty Federal Complex”.

Saacadaha 5:30 iyo 6:30 bandhigyo gaagaaban ayaa laga bixin doonaa saambal qaadista deegaanka illaa had iyo tallaabooyinka xiga ee habka nadiifinta. Wakiilo ka socda Maamulka Adeegyada Guud ee Maraykanka (GSA), Waaxda Missouri ee Khayraadka Dabiiciga ah (MDNR), Waaxda Missouri ee Caafimaadka iyo Adeegyada Waayeelka, Terracon (sharikad ah handisada deegaanka), iyo Hardesty Renaissance (mulkiilaha hadda ee hantida) ayaa joogi doona si ay uga jawaabaan su'aalaha habeenkaas oo dhan.

Turjubaano Isbaanish iyo Fiyatnamiis ah ayaa goobta joogi doona si ay u bixiyaan taageero.

Muddadii Dagaalkii Labaad ee Adduunka, kamboolka Ciidanka Maraykanka ayaa u adeegsaday bakhaar ahaan (Quartermaster Depot), oo dhigan jiray qalabka milatariga kuna sifayn jiray kiimiko dharka askarta. Mudda dabadeed, kiimikadii qaar loo isticmaali jiray hawsha bakhaaraka ayaa ku baxsatay deegaanka. Goobta hadda waxa ka socda daraasad deegaaneed oo lagu qeexayo nooca iyo heerka wasakhda ay sababeen hawlaahaas taariikhdaas hore dhacay.

Waxaan kugu dhiirigelinaynaa inaad timaaddo kulanka macluumaadka dadweynaha oo aad wax dheeraad ah ka ogaato goobta iyo baaritaanadii hore, kuwa hadda iyo kuwa mustaqbalka. Kulanka macluumaadka wuxu daba-socdaa kulankii la qabtay Juun 20, 2013, iyo wada-hadala dhawr ah oo lala yeeshay xubnaha jaaliyadda. Waxa kale oo ay fursad u tahay kuwa aan aad ula socon shaqada deegaanka inay wax badan ka bartaan baaritaanada iyo natiijooyinka jira illaa hadda.

Wixii macluumaad dheeraad ah kahor kulanka macluumaadka deegaanka, ama haddii aad qabto baahiyo gaar ah, fadlan farriin cod ah kaga tag (816) 926-6903 ama iimaylka [r6environment@gsa.gov](mailto:r6environment@gsa.gov), oo sida ugu dhakhso badan ayaanu kuugu soo jawaabi. Wixii macluumaad dheeraad ah, booqo degelka websaydka GSA <http://www.gsa.gov/portal/content/173655> iyo websaydka MDNR <http://dnr.mo.gov/hwp/fedfec/hardesty.htm>



**northeastnews.net**



**The online voice of Historic Northeast Kansas City**

## [Hardesty Complex public meeting scheduled Dec. 5](#)

Posted November 27, 2013 at 12:00 am

*Northeast News*  
*November 27, 2103*

Ever wondered just what kind of chemicals were leached into the ground under the former Hardesty Federal Complex during its use as the Army Quartermaster depot? Environmental testing results will be released at a public information session Thursday, Dec. 5, at 5:30 p.m. and 6:30 p.m. at the North-East Public Library, 6000 Wilson Rd.

Representatives from the U.S. General Services Administration (GSA) will join staff from Missouri's Department of Natural Resources, Missouri Health and Senior Services, Terracon, an environmental engineering firm, and current site owner Hardesty Renaissance to review and discuss environmental samplings done on the site to date as well as how future clean ups of the property will be handled.

Spanish and Vietnamese interpreters will be on site to provide assistance.

For more information on the meeting, visit the GSA's website at [www.gsa.gov/portal/content/173655](http://www.gsa.gov/portal/content/173655) or MDNR's website at <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

## **Popular stories**

### [First-year elementary teacher says she scored dream job](#)

Posted December 18, 2013, 12:00 am

### [New elm at James Elementary](#)

Posted May 7, 2013, 11:00 pm

### [MR340 kicks off at Kaw Point, more than 500 paddlers compete](#)

Posted July 23, 2013, 2:46 pm



## almanac

Posted November 27, 2013 at 12:00 am

### *Sunday, December 1*

#### **Northeast Book Club**

Join the North-East Public Library, 6000 Wilson Rd., for its monthly Northeast Book Club at 2 p.m. Share your passion for books and join in on riveting book discussions.

### *Monday, December 2*

#### **Della Lamb ESL Enrollment Begins**

Della Lamb's Adult English as a Second Language (ESL) program will begin enrolling attendees Dec. 2 for its January session. Deadline to enroll for ESL classes is Dec. 11. Interested individuals may enroll from Dec. 2 to Dec. 11 from 8 a.m. to 4 p.m. by calling (816) 231-3665. Classes are free.

#### **Scarritt Renaissance Monthly Meeting**

Scarritt Renaissance Neighborhood Association will host its monthly meeting at 6:30 p.m. at the Kansas City Museum. Agenda items will include an update on the Mattie Rhodes/Hardesty Renaissance Housing grant, increasing membership, a playground update, among other items.

### *Upcoming*

#### **Hardesty Federal Complex Informational Meeting**

A public information session regarding the Hardesty Federal Complex will be held Thursday, Dec. 5, from 5:30 p.m. to 8 p.m. at the North-East Public Library, 6000 Wilson Rd. Short presentations will be given at 5:30 p.m. and 6:30 p.m. regarding the environmental sampling to date and the next steps in the cleanup process. Representatives from GSA, the Missouri Department of Natural Resources, the Missouri Department of Health and Senior Services, Terracon (an environmental engineering firm), and Hardesty Renaissance (current owner of the property) will be present to answer questions. Spanish and Vietnamese interpreters will also provide assistance. This information session is a follow-up to the session held June 20, 2013, and to the community interviews.

#### **KC Museum Holiday Open House**



## almanac

Posted December 4, 2013 at 12:00 am

*Thursday, December 5*

### **Hardesty Federal Complex Informational Meeting**

A public information session regarding the Hardesty Federal Complex will be held from 5:30 p.m. to 8 p.m. at the North-East Public Library, 6000 Wilson Rd. Short presentations will be given at 5:30 p.m. and 6:30 p.m. regarding the environmental sampling to date and the next steps in the cleanup process. Representatives from GSA, the Missouri Department of Natural Resources, the Missouri Department of Health and Senior Services, Terracon (an environmental engineering firm), and Hardesty Renaissance (current owner of the property) will be present to answer questions. Spanish and Vietnamese interpreters will also provide assistance.

*Friday, December 6*

### **KC Museum Holiday Open House**

The Kansas City Museum will host its annual Neighborhood Holiday Open House from 5 p.m. to 8 p.m. at the museum, 3218 Gladstone Blvd. Fairy Princess Costume Contest winners will be honored and attendees can listen to seasonal music and nosh on delectable treats. Fairy Princesses will also be on hand to greet guests.

### **Story Time and Craft**

Join North-East Public Library for its weekly story time and craft at 10:30 a.m. geared toward toddlers and pre-schoolers.

*Saturday, December 7*

### **Pendleton Heights Holiday Homes Tour**

Pendleton Heights will host its 7th Annual Holiday Homes Tour from noon to 5 p.m. Pick up a map and booklet or pay for tickets at 546 Olive St. on the day of the tour. In addition to a variety of food trucks, there will also be an artist market. Five homes will be featured on this year's tour. Tickets may be purchased the day of the event or online at <http://phtour.uticketit.com/>. Advance tickets are \$10 and \$15 the day of the tour.

### **Cruise to Achievement**

Kansas City Public Schools will host a Cruise to Achievement recruiting and retention event from 9 a.m. to 3 p.m. at Paseo Academy, 4747 Flora Ave. Learn more about your local schools and how they make students college and career ready. There will be free pancakes and hot dogs, entertainment and activities for adults and children.

### **Fairy Princess Days**

The Kansas City Museum will host its Fairy Princess days on Saturdays in December on Dec. 7, 14 and 21 from 10 a.m. to 4 p.m. and on Sundays on Dec. 8, 15 and 22 from noon to 4 p.m. at the museum. Cost is \$10 and includes Fairy Princess themed crafts, a complementary photo and Fairy Princess gift.

### ***Monday, December 9***

#### **Reduce Holiday Stress**

Learn how to meditate and reduce your holiday stress during the Plaza Branch Library's "Reduce Your Holiday Stress...Learn to Meditate" event from 6:30 p.m. to 7:45 p.m. at the library, 4801 Main St., Kansas City, Mo. Instructor will be Kelsang Namdrol, American Buddhist nun and resident teacher at the Kalpa Bhadra Kadampa Buddhist Center in Wichita, Kan. Attendees will also learn about the benefits of meditation. All are welcome to this free event.

### ***Tuesday, December 10***

#### **NextRail KC Meeting**

A NextRail KC Joint Advisory/Steering/Technical Committee meeting will be held at 8:30 a.m. at AIA Kansas City, 1801 McGee, Kansas City, Mo. The meeting will include discussion regarding the next steps for the corridors that the City Council chose to advance and the follow-up work to be completed on those that did not make the cut. The Independence Avenue corridor in Northeast was one of the streetcar lines chosen for further study. All are welcome to attend this meeting.

#### **Hardesty Renaissance Groundbreaking Ceremony**

Hardesty Renaissance Economic Development Corporation (EDC) will host a groundbreaking ceremony on Tuesday, Dec. 10, from noon to 1 p.m. at the former Hardesty Federal Complex, 607 Hardesty Ave. Refreshments will be provided. All are welcome to attend. Please RSVP by Dec. 6 to [events@hardestyrenaissance.org](mailto:events@hardestyrenaissance.org) or call (816) 922-0273.

#### **Wimpy Kid Club**

Come and celebrate your favorite series at the North-East Public Library at 5 p.m. The Wimpy Kid Club is open to ages 8 to 11 and activities will include reading from the book, acting out scenes, craft time and playing games.



# ONE STOP

is all it takes to handle your insurance needs...  
life, home, auto, farm, business.

[shelterinsurance.com](http://shelterinsurance.com)



Call  
**Sam Davis**  
913-649-3399  
for a free quote.



We're your shield. We're your shelter.



# northeastnews.net



The online voice of Historic Northeast Kansas City

## Information session regarding environmental findings at former Hardesty Federal Complex scheduled tonight

Posted December 5, 2013 at 10:58 am

*Northeast News*  
*December 5, 2013*

Residents are invited to attend a public meeting tonight (Dec. 5) to learn about the environmental sampling findings at the former Hardesty Federal Complex located in Historic Northeast.

The public meeting will be held from 5 p.m. to 8 p.m. at the North-East Public Library, 6000 Wilson Rd., Kansas City, Mo. Short presentations will be given at 5:30 p.m. and 6:30 p.m. regarding the environmental sampling to-date and the next steps in the cleanup process. Representatives from the U.S. General Services Administration (GSA), Missouri Department of Natural Resources (MDNR), Missouri Department of Health and Senior Services, Terracon (an environmental engineering firm), and Hardesty Renaissance (current owner of the property) will be present to answer questions throughout the evening.

Spanish and Vietnamese interpreters will be on site to provide assistance.

During World War II, the complex served as a U.S. Army Quartermaster Depot, storing military supplies and chemically treating soldiers' clothing. Over time, some of the chemicals used in support of depot operations were released into the environment. The site is now undergoing an environmental study to determine the type and extent of pollutants due to historical operations.

The public is encouraged to attend the public information session to learn more about the facility and past, present and future testing. This information session is a follow-up to the session held June 20, 2013, and to several conversations with community members. It is also an opportunity for those not yet familiar with the environmental work to learn more about all testing and results to date.

For additional information before the public information session, or if you will have special needs for the session, please leave a voicemail at (816) 926-6903 or email [r6environment@gsa.gov](mailto:r6environment@gsa.gov). For more information, visit GSA's website at <http://www.gsa.gov/portal/content/173655> and MDNR's website <http://dnr.mo.gov/env/hwp/fedfac/hardesty.htm>.

## Popular stories



**State and federal officials discuss former Hardesty Federal Complex environmental contamination**

Posted December 11, 2013 at 12:00 am



Findings. Ruben Zamarripa of the Missouri Department of Natural Resources (center) explains the environmental testing process and GSA's findings to attendees during the Dec. 5 public meeting at North-East Public Library. Leslie Collins

***By LESLIE COLLINS***  
***Northeast News***  
***December 11, 2013***

According to the General Services Administration (GSA), environmental contamination from the former Hardesty Federal Complex poses no immediate risk to human health.

Both state and federal government officials gathered at the North-East Public Library Dec. 10 to update residents on recent environmental testing results.

The former Hardesty Federal Complex at 607 Hardesty once served as an Army Quartermaster Depot during the 1940s and early 1950s. During WWII, the Army treated uniforms on-site with chemicals to protect against enemy gas attacks. One of the solvents used to treat the uniforms was trichloroethylene (TCE) which later leaked into the soil and groundwater. Fuel from underground storage tanks also contaminated the ground. Those tanks have since been removed.

GSA took ownership of the site in 1960, which housed a number of agencies including the Commerce Department and Environmental Protection Agency (EPA). Until 2011, the site sat

vacant for more than a decade, and GSA is currently responsible for testing, monitoring and remediating the soil and groundwater contamination. In addition to testing on-site, GSA is also testing the surrounding neighborhood. To test the groundwater, GSA installed more than 65 groundwater monitoring wells and will continue to monitor those. More than 300 soil samples have been collected, said Eric Gorman, P.G., department manager of environmental services at Terracon. Terracon, based in Lenexa, Kan., is the GSA contracted company that's in charge of testing and monitoring the contamination.

Three wells off site detected TCE contamination levels that were above the EPA standard for maximum contaminant levels. Two of the sites were located about 125 feet north of the property and the other site was located near Wilson Avenue and Belmont Boulevard.

The environmental investigation and cleanup process is a seven step process and the project is currently in Phase II, which is the feasibility study and remedial investigation phase. The remedial investigation is expected to be complete in October of 2014 and the feasibility study is expected to be complete in April of 2015. Next phases will include a detailed cleanup plan, record of decision, remedial design, cleanup of the physical site and long-term maintenance and site reuse.



Test sites. The General Services Administration has installed more than 60 monitoring wells to test the groundwater for TCE contamination. Above is a graphic showing some of the wells. Wells with yellow outlines represent areas where groundwater contained contamination higher than the EPA's acceptable maximum contaminant level. Leslie Collins

## Key Players

**Terracon** – GSA contracted environmental consulting firm that's testing and analyzing results

**General Services Administration (GSA)** – responsible for testing and clean-up

**Missouri Department of Health and Senior Services** – reviews test results for health concerns

**Missouri Department of Natural Resources** – monitors testing and clean-up and works closely with GSA.

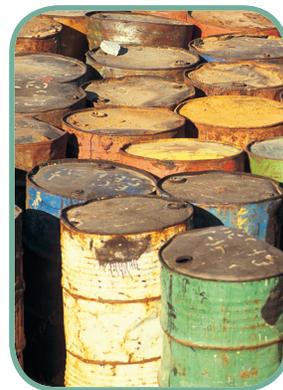


# Trichloroethylene (TCE)

## What is TCE?

Trichloroethylene (TCE) is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet, burning taste. It's mainly used to remove grease from metal parts. But it's also a part of adhesives, paint removers, and spot removers.

TCE doesn't occur naturally in the environment. It is found in soil and underground water sources when it is manufactured, used, and disposed of improperly. When TCE evaporates from contaminated soil or groundwater, its vapors sometimes move up through the soil and can get into air inside buildings.



## How might I be exposed to TCE?

- Drinking, swimming, or showering in water that is contaminated with TCE.
- Direct contact with soil contaminated with TCE (such as near a hazardous waste site) and unintentionally swallowing the soil.
- Breathing air inside homes or other buildings that have been contaminated by TCE as it evaporates from the soil or groundwater underneath the building.



## How can I reduce exposure to TCE in my home?

Use Products carefully:

- Make sure rooms are well ventilated with a fan or an open window
- Store household products in a safe place
- Keep household products in the boxes or bottles in which you bought them
- Don't mix one household product with another
- Follow the directions on the boxes or bottles

## How is TCE noticed in indoor air?

If TCE is in your indoor air you most likely would not be able to smell it. If you think TCE is in your indoor air, you can have that air tested by a professional with air sampling equipment. This test is expensive and may have to be done more than one time.

## How can TCE affect my health?

What happens to you when you contact any chemical depends on

- The dose—that is, how much of the chemical gets into your body
- The duration—how long and how often you're exposed to it
- The route—how you're exposed to the chemical (such as breathing air or drinking water that contains TCE)

How a chemical will affect someone is hard to determine. Especially without knowing exactly how much that person was exposed to and for how long and how often. Certain groups of people—such as children, the elderly and particularly unborn babies—may be more vulnerable than other groups to health effects from TCE exposure.



Some facts about TCE exposure:

- The U.S. Environmental Protection Agency and the National Toxicology Program say TCE can cause cancer. Worker exposure to TCE has been associated with liver cancer, non-Hodgkin's lymphoma, and kidney cancer.
- Human and animal studies show that exposure to low levels of TCE may cause heart-related health effects to unborn babies and effects to the immune system.
- Human studies show that people exposed to very high levels of TCE may have headaches, lung irritation, dizziness, poor coordination, and difficulty paying attention.
- Breathing high amounts of TCE (such as what people could be exposed to if they using TCE at work) could cause improper heart function, unconsciousness, and death.

### Can any medical test detect TCE exposure?

If you have been exposed to TCE recently, it can be detected in your breath, blood, or urine. For small amounts of TCE, breath testing must occur within an hour or two after exposure. For large amounts of TCE, blood and urine tests can find TCE and its byproducts up to a week after exposure. Because exposure to other chemicals can produce similar byproducts in the body, test results do not absolutely prove exposure to TCE. Only a doctor or other medical professional familiar with these tests should give them.

### Can I be treated for TCE exposure?

No medical treatment can remove TCE from your body, but your body does remove TCE on its own. You breathe out TCE. It also leaves your body in your urine. Avoiding TCE exposure is always recommended.

### Where can I get more information?

- If you have concerns about your health, call or see your doctor.
- If you would like more information on TCE, call the Centers for Disease Control and Prevention Information Line. The toll-free phone number is **1-800-232-4636**. Let the operator know that you would like to speak to someone about TCE or trichloroethylene.
- If you would like more information on the Agency for Toxic Substances and Disease Registry, visit our Web site at [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov). You will find telephone numbers to contact an ATSDR regional staff member in your state.

### References:

1. Forand SP, Lewis-Michl EL, Gomez MI, 2011 Adverse Birth Outcomes and Maternal Exposure to Trichloroethylene and Tetrachloroethylene through Soil Vapor Intrusion in New York State. *Environ Health Perspect* 120(4): doi:10.1289/ehp.1103884
2. Johnson P, Goldberg S, Mays M, Dawson B. 2003. Threshold of trichloroethylene contamination in maternal drinking waters affecting fetal heart development in the rat. *Environ Health Perspect*, 111, 289-292.
3. Keil DE, Peden-Adams M M, Wallace S, Ruiz P, Gilkeson G S, 2009. Assessment of trichloroethylene (TCE) exposure in murine strains genetically-prone and non-prone to develop autoimmune disease. *J Environ Sci Health A Tox Hazard Subst Environ Eng*, 44, 443-453.
4. The Agency for Toxic Substances and Disease Registry. Fact Sheet: How to Reduce Your Exposure to Chemicals at Home, Work, and Play. Atlanta, GA: US Department of Health and Human Services; 2011.
5. The Agency for Toxic Substances and Disease Registry. Toxicological Profiles: Trichloroethylene (TCE). CAS# 000079-01-6. Atlanta, GA, US Department of Health and Human Services; 2010 September.

**Table 1**  
**Preliminary Human Health Conceptual Site Model**  
 Hardesty Federal Complex - Kansas City, Missouri  
 Terracon Project No. 02107147

Historical Source/Operation	Primary Release Mechanism	Secondary Source	Secondary Release Mechanism	Contaminated Medium	Exposure Route	Exposed Populations (Receptors)		
						Construction Workers	Industrial / Commercial Workers	Off-Site Residents
Fabric Treatment, Chemical Storage, Fuels & Solvents Stored in Tanks	Spills and Leaks	Surface Soil	Wind Erosion of Particles	Air	Inhalation*	█		
			Volatilization	Surface Water	Oral Dermal			
		Subsurface Soil	Surface Water Run-Off	Sediments	Oral Dermal			
			Digging/Excavation	On-Site Surface Soil	Oral Dermal	█	█	
				On-Site Subsurface Soil	Oral Dermal	█		
				Groundwater	Oral Dermal Inhalation - trenching Vapor Intrusion	█	█	█

**KEY:**  
 = Pathway not complete; no evaluation required.  
 = Pathway is or might be complete; however, data are lacking and/or pathway judged to be minor. No evaluation performed.  
 = Pathway is or might be complete; data are available and pathway will be evaluated.

\* Includes surface and subsurface soil.



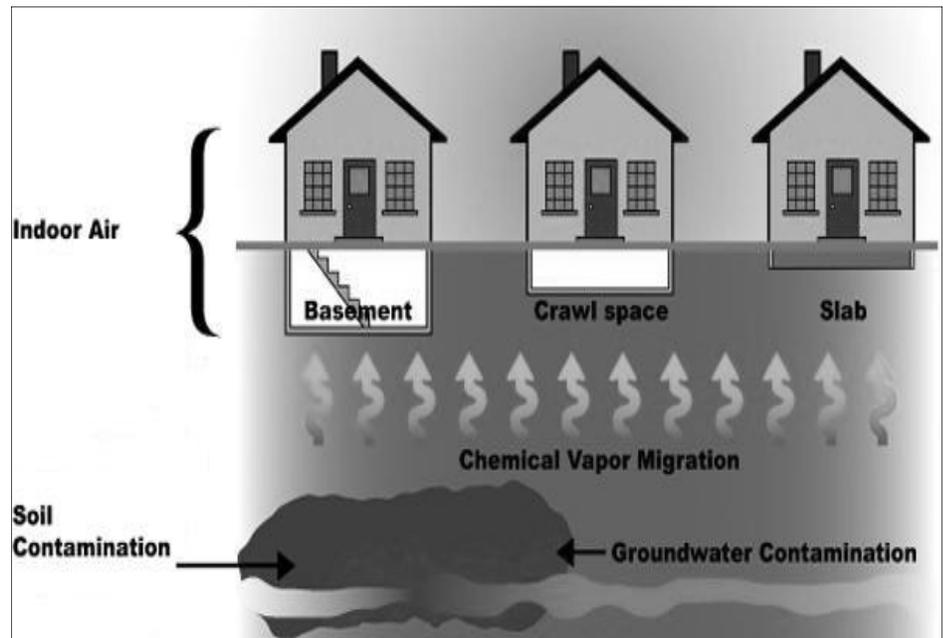
## FACTS ABOUT...

# VAPOR INTRUSION

### What is vapor intrusion?

Vapor intrusion is a way in which chemicals in the ground can get into the air in your home (see figure at right). Chemicals are released to the soil and groundwater from various sources including: chemical spills at a factory, chemical dumping, leaks from underground storage tanks, or buried wastes. Certain types of chemicals evaporate and may travel as vapors through the soil and groundwater and into nearby buildings, contaminating indoor air.

A variety of factors can influence whether vapor intrusion may occur at a building located near a source of soil or groundwater contamination including: soil type, depth to groundwater, the construction of the building, and the condition of the foundation and existence of underground utilities that can create pathways for vapors to travel. Homes in the same neighborhood and even next door to each other can be affected differently by vapor intrusion.



### Why is vapor intrusion a concern?

Vapor intrusion is a concern because chemical vapors affect indoor air quality and can build up to a point where the health of occupants in affected buildings could be at risk. In general, exposure to any chemical does not necessarily mean that health effects will occur. Whether or not a person experiences any health effects depends on several factors, including the toxicity of the chemical, the length and amount of exposure, and the health and sensitivity of the individual exposed. If chemical levels build up in indoor air high enough, individuals may temporarily experience eye and respiratory irritation, headache, and/or nausea. Low-level chemical exposures over many years may increase an individual's risk of developing cancer or chronic disease.

### What types of chemicals are associated with vapor intrusion?

Only "volatile" chemicals that readily evaporate are a concern with vapor intrusion. The most common class of chemicals associated with vapor intrusion are volatile organic compounds (VOCs). VOCs are widely used and are found in petroleum products such as gasoline and solvents for dry cleaning and industrial uses.

### Can vapors be in my home from other sources?

VOCs also are found in many household products and can affect indoor air quality. Paints, paint strippers and thinners, cigarette smoke, aerosol sprays, moth balls, air fresheners, new carpeting or furniture, hobby supplies (glues and solvents), stored fuels, and clothing that has been dry-cleaned all contain VOCs. Such household sources are more likely to be a cause of indoor air quality problems in your home than vapor intrusion.



In addition, indoor air quality may also be affected by outdoor air. VOCs are present in outdoor air from a combination of sources such as vehicle exhaust and various industries.

Both indoor and outdoor sources are taken into account when evaluating whether vapor intrusion is contributing to unhealthy indoor air.

## ***What happens if vapor intrusion is a concern near my home?***

If you live near a site with VOC contamination, the potential for vapor intrusion may be investigated. To determine whether vapor intrusion may be a concern, samples of groundwater and soil gas may be collected near your home. If this sampling indicates a potential problem, sampling on your property and in your home may be necessary.

If such sampling is necessary, you would be contacted by the site owner or others working on the investigation and cleanup with information about the project. Your cooperation and consent would be requested before any testing or sampling is done on your property. Additionally, such sampling would be done at no cost to you.

Soil gas samples collected beneath the foundation are often the most reliable method to determine if vapors are present that could cause a problem. Indoor and outdoor air sampling may also be collected. A comparison of all the data is conducted to determine whether vapor intrusion is a concern.

Depending on the investigation results, additional sampling or monitoring may be recommended. Additional sampling may be performed to determine the extent of vapor contamination and to verify results. Monitoring (sampling on a recurring basis) may be conducted if there is a potential for vapor intrusion to occur should conditions change.

## ***What happens if a vapor intrusion problem is found?***

If testing confirms vapor intrusion is affecting the air in your home, measures can be taken to address the problem. Mitigation steps may be taken to minimize exposures associated with vapor intrusion. Mitigation steps may include sealing cracks in the building's foundation, adjusting the building's heating, ventilation, and air-conditioning system to maintain a positive pressure to prevent infiltration of subsurface vapors, or installing a subsurface depressurization system. This system prevents vapors from entering the building by continuously venting the vapors from beneath the building to the exterior of the structure. Subsurface depressurization systems are also used throughout the country to reduce levels of naturally-occurring radon gas. This system uses minimal electricity and should not noticeably affect heating and cooling efficiency. Usually, the party responsible for cleaning up the contamination is also responsible for paying for installation of this system. The system typically remains in place until the contamination is cleaned up and may remain in place permanently.

## ***What can I do to improve my indoor air quality?***

Household products and other factors, such as mold growth, carbon monoxide, and radon, can degrade the quality of air in your home. Consider the following tips to improve indoor air quality:

- Be aware of household products that contain VOCs. Do not buy more chemicals than you need at a time. Store unused chemicals in tightly-sealed containers in a well-ventilated location, preferably away from the living space in your home.
- Fix all water leaks promptly, as well as other moisture problems that encourage mold growth.
- Don't make your home too air tight. Fresh air helps prevent build-up of chemicals in the air as well as mold growth.
- Check all appliances and fireplaces annually. Make sure they are properly vented and in good condition.
- Install carbon monoxide detectors in your home; take immediate actions to reduce carbon monoxide levels if needed. These detectors are available at hardware and home improvement stores.
- Test your home for radon; take actions to reduce radon levels if needed. Test kits are available at hardware and home improvement stores or you can call the DHSS Radon Program at (573) 751-6160 or (866) 628-9891.

## ***For more information:***

For health-related questions regarding vapor intrusion, please contact:

Missouri Department of Health and Senior Services, Health and Risk Assessment Program (573) 751-6102

Additional information about vapor intrusion is available at the following Web sites:

- U.S. Environmental Protection Agency—[www.epa.gov/epawaste/hazard/correctiveaction/eis/vapor.htm](http://www.epa.gov/epawaste/hazard/correctiveaction/eis/vapor.htm)
- Interstate Technology and Regulatory Council—[www.itrcweb.org/guidancedocument.asp?TID=49](http://www.itrcweb.org/guidancedocument.asp?TID=49)

Additional information on indoor air quality is available at the following Web sites:

- DHSS—[www.dhss.mo.gov/IndoorAir](http://www.dhss.mo.gov/IndoorAir)
- U.S. Environmental Protection Agency—[www.epa.gov/iaq](http://www.epa.gov/iaq)



GSA will record progress toward community involvement goals in Appendix 8.1.



GSA may add samples of community involvement communications occurring after the publication of this Community Involvement Plan to Appendix 9.1.