Brownfields Redevelopment Toolbox

Enabling Brownfields Cleanup and Redevelopment in Kansas Communities

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Prepared by the Kansas Department of Health and Environment in cooperation with the Association of State and Territorial Solid Waste Management Officials

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Toolbox for Cleanup and Redevelopment of Contaminated Sites in Small Cities and Rural Communities

Introduction

The Brownfields Redevelopment Toolbox was developed by the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) State Response and Brownfields Program Operations Task Force. This edition was prepared by the Kansas Department of Health and Environment's (KDHE's) Brownfields Program in order to supply information specific to the Kansas Brownfields Program to our small and rural communities.

Purpose of this Toolbox

This Toolbox can be used for a range of properties that have redevelopment potential but either have or are suspected of having environmental contamination (i.e., sites contaminated with solid or hazardous waste). Such properties may be addressed by a range of state response programs, including voluntary cleanup, Brownfields, drycleaning programs, underground storage tank programs, etc. Thus, the generic term "contaminated sites" or "properties" is used throughout the document. The purpose of this Toolbox is to explain the process of cleanup and redevelopment of contaminated sites in straightforward terms, and provide rural and smaller city governments, entities, or communities with a systematic, start-to-finish, guide to cleanup and redevelopment.

The Toolbox identifies five steps in the renewal process. The Toolbox provides a brief summary of each step, answers a series of Frequently Asked Questions (FAQs), and lists and summarizes available state and federal tools and incentives local governments may want to utilize in pursuing redevelopment of a contaminated site in their community. A list of questions is presented at the end of Steps 1 through 3; based on the answers, the reader/user is directed to the appropriate next step for that project.

The City of Greensburg assessed this former petroleum exploration equipment storage area as part of an initiative to remove unsafe and dilapidated structures.

How to Use This Document

This Toolbox provides a framework for successful project implementation. Prior to redeveloping a contaminated site, familiarize yourself with this Toolbox and refer to it throughout the various stages of your project. The Toolbox is comprised of five steps, where each corresponds to a step in the renewal process. Keep in mind, the contaminated site renewal process can sometimes be an iterative process and you may have to revisit certain steps. The following is a guide to navigating the Toolbox for effective completion of your project.

1. For a general overview of the process for assessment, cleanup, and redevelopment, review the narrative summary provided at the beginning of each section.

2. Next, be aware that each project is different; treat this Toolbox as a guide that must be adapted to meet the needs of your specific project, not as a one-size-fits-all approach. For example, if you are working to address a specific property where an Environmental Assessment has already been completed, you will begin the process at Step 3.

3. Follow this approach until environmental issues are resolved or until you reach Step 5, Redevelopment of Your Site. This section provides information that can assist you in addressing the issues inherent in marketing and developing a formerly contaminated property (or one where contamination has been properly and safely addressed but has not been completely eliminated.)

The Five Step Contaminated Property Renewal Process

The Toolbox breaks the renewal process into five steps:

Step 1: Site identification and project planning
Step 2: How to determine if you have contamination on your site
Step 3: Cleaning up your site
Step 4: How the Kansas Brownfields Program can help when a site is contaminated
Step 5: The end of the line – Redevelopment of your property!

The Toolbox summarizes some of the federal tools available nationwide. Each step also contains a reference to "state-specific tools and information", which is summarized in Step 4. This includes programs, incentives, guidance, funding, and other state-specific tools available to local governments. KDHE can also provide information on how a local government can best access the available federal tools and incentives. It is very important to review this information and work with the Kansas Brownfields Program staff throughout the contaminated property redevelopment process.

The City of Topeka plans to modernize a former industrial area along the Kansas River into a showcase entertainment, business, retail, and recreation district.

Finally, the Toolbox contains a list of useful documents and resources that provide you with additional information you can use to better understand the issues and terminology often encountered during the assessment, cleanup, and redevelopment process.

Step 1: Site Identification and Project Planning

This section provides guidance on how to identify contaminated properties with redevelopment potential in your community, how to develop a revitalization plan to address those properties, and how to initiate project planning.

Experience has shown that successful contaminated site redevelopment comes in many forms and that each community has its own unique opportunities and revitalization goals. Regardless of a community's size, history, and number of contaminated properties, planning ahead is extremely important.

Whether your community's goal is to develop a comprehensive revitalization plan for multiple properties, or if you plan to redevelop just one contaminated property, successful project planning must consider the resources available for environmental investigation and cleanup of the property(ies), and determine how the property(ies) will be redeveloped and/or marketed for redevelopment. Considering these issues early on can make a big difference in successfully meeting your community's revitalization goals. The FAQs, recommended activities, and available tools below provide information to help you understand the process and guide your community though the site identification and project planning phase.

Frequently Asked Questions for Step 1

What are the types of properties for which this Toolbox may be used?

The Toolbox is meant to address abandoned or underutilized properties, including but not limited to industrial and commercial facilities, where redevelopment or expansion may be complicated by possible environmental contamination (real or perceived). An example of a category of such sites are Brownfields, which are officially defined by the federal government in The Small Business Liability Relief and Brownfields Revitalization Act of January 11, 2002, ("Federal Brownfields Law") as any "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." Specific examples of sites which could qualify include: abandoned gas stations, old factory and mill complexes, foundries, junkyards, mine-scarred lands, old solid waste landfills, and other under-utilized or abandoned properties.

Why is redevelopment of these properties important?

These properties are often abandoned, with owners no longer maintaining the property or paying taxes. Abandoned properties can quickly become eyesores, and may attract vandalism and illegal dumping, which degrade the environment, depress our communities, and potentially put our health at risk. Productively reusing such properties reduces urban sprawl, increases the tax

base, cleans up the environment, encourages urban revitalization and creates jobs for the community and surrounding communities. Redeveloping these properties links economic vitality with environmental protection.

What would be the advantage of having a revitalization plan for contaminated properties in my community?

Establishing a community-led revitalization plan aids in removing environmental hazards from communities, eliminates the need to develop pristine open space and farmland, revitalizes communities by creating jobs, and returns property to productive use and to local tax rolls. An additional advantage of a community-based approach is that community members have a direct role in determining how their impacted properties can be cleaned up and redeveloped to best facilitate the community's future development plans.

Activities and Available Tools

If you have identified contaminated properties, or properties that are perceived to be contaminated in your community that you would like to do something about, you've taken the first step. So what are the next steps? This depends on what your community's plans or desires are for future development in your city or town. Some questions you should consider are:

- Does your community want to clean up these properties and market them to potential commercial, industrial or residential buyers or developers?
- Does your community want to retain some of these properties for its own use, perhaps for municipal or open-space purposes, or for affordable housing?
- Has your community been approached by potential buyers or developers who have been subsequently "turned off" because the property is contaminated or perceived as contaminated?
- Does your community have (or want to develop) a comprehensive plan for revitalizing its abandoned or underutilized properties that are contaminated or perceived that way?

Forming a Property Revitalization Team

If the answer to any or all of the above questions is yes, your community may want to consider forming a property revitalization team. Such a team is typically a mix of public and private parties from your community who have an interest in fostering well-planned, successful cleanup and redevelopment. The team can be large or small or as formal or informal as the community needs. It can be tailored to the size and complexity of one specific project, or it can guide an entire revitalization vision. It can be made up of elected officials, planners, attorneys, environmental professionals, economic development officials,

members of environmental and citizen interest groups and the like. The team can bring valuable perspectives from each member's area of expertise to help develop a mission and determine long-term and short-term goals based on the community's revitalization needs and desires.

In addition to forming a team, it can be quite helpful to contact other local communities, private entities, or professionals with previous experience addressing these properties. State and federal agencies have programs for assessment and cleanup of contaminated sites. They may have lists of local government and private contacts who are well-versed in the issues encountered at these sites and would be happy to share their knowledge. Contact information for the Kansas Brownfields Program can be found in Step 4.

Determining the Intended Use for the Property

The intended use of a property plays an important role in the revitalization process. If contamination is identified, the nature and extent of the contamination will have to be assessed. How that contamination is cleaned up, however, may be affected by the property's intended future use. For example, if the redevelopment plan calls for the construction of a light industrial facility, it may be appropriate to apply industrial investigation and cleanup standards that are less stringent than those that would be applicable to a property that is to be redeveloped for residential use. Therefore, it is important to consider potential redevelopment plans at the outset of any project.

Historic Abilene, Inc., used a Brownfields assessment as one of the initial stages in turning these historic buildings into an 1870s theme park and museum.

If the intended use is not known at the beginning of the project, the community representatives or property revitalization team should make every attempt to identify the general type of desired development, whether industrial, commercial, residential, or a mixed-use development. In the absence of that information, the most conservative cleanup assumptions would likely have to be made at every stage of the project. While this approach preserves the greatest number of options for development, this may significantly increase the time and expense of the project. These factors are discussed in greater detail in Step 3.

Financial Assistance for Community-Lead Assessment and Cleanup Activities

Forming a team and determining the best use of your community's contaminated properties are important first steps but ones that do require resources. KDHE provides both state grants and low interest loans to assist in property cleanup.

KDHE assists local municipalities, economic development groups, regional resource conservation and development offices in applying for federal grants. In this role, KDHE provides technical oversight to the applicant throughout the process.

U.S. EPA offers Brownfields grants on a periodic basis, usually once a year, with grant application rounds normally beginning in the fall. These grants provide funding for property characterizations and assessments, planning and community involvement activities, contaminated property inventories, cleanup, and to establish revolving loan funds.

Additional financial resources, to include grants from the U.S. Department of Housing and Urban Development (HUD) and other federal agencies, are listed in Appendix A of this document. Appendix A also includes brief descriptions of Brownfields Tax Incentives and other resources available for your project.

Developing an Inventory of Contaminated Properties

Historical industrial or commercial property use often resulted in environmental contamination. If your community had an industrial past and now has abandoned or underutilized industrial or commercial properties, an inventory can help you identify the number and location of such properties. Then you can begin to consider what can be done for these properties to benefit the economic health and vibrancy of the community.

Communities are often in a good position to create such inventories. Local units of government have access to historical documents that can help determine which properties should be in such an inventory, and can conduct title searches to determine ownership. The local government and its property revitalization team will also be in a good position to know which of these properties would provide the greatest redevelopment benefit to your community. This is a crucial initial step in prioritizing cleanup and redevelopment. Organizations that have local historical expertise such as senior citizen and scouting groups have helped communities successfully conduct such inventories after receiving training from the local property revitalization team or other state or local experts. You may want to enlist the help of a local volunteer service organization to maximize your inventory efforts.

Planning Resources

It is important to plan ahead as much as possible. There are many resources available to assist your community in the planning process. See Step 4 for a list of Kansas planning resources.

Morrill used the Brownfields Program to assess the site for their new fire station and community center.

For more information on tools and financial resources to at the federal level, refer to Appendix A of this document.

Determining Your Next Step

The following series of questions will help you determine the next step in the redevelopment process:

- Has your community identified a property(ies) where redevelopment is complicated by real or perceived environmental contamination, and the nature and extent of that contamination is not known?
  - If "yes", go to Step 2 “How to Determine If You have Contamination on Your Site”.

- Has your community identified a property(ies) where contamination exists and the nature and extent of that contamination has been documented?
  - Go to Step 3 “Cleaning Up Your Site”.

- Has your community identified a property(ies) where contamination exists, documented the nature and extent of contamination, and analyzed the risks posed by that contamination?
  - Go to Step 4 “How the Kansas Brownfields Program Can Help When a Site Is Contaminated”.

- Has your community evaluated cleanup options for a contaminated property project and selected a remedial action?
  - Go to Step 5 “The End of the Line – Redevelopment of Your Property!”.

A former illegal dumping site in Independence is now a popular skateboarding park.

Step 2: How to Determine If You Have Contamination on Your Site

Once you have identified potentially contaminated property that your community would like to redevelop, the next step is to determine whether there actually are any environmental conditions present that may affect future use and redevelopment. This will assist you in determining what liability the community may have and possibly the cost it might bear if it chooses to take ownership and begin a cleanup.

Making a determination of whether a property is contaminated or not is accomplished by an environmental site assessment conducted by an environmental professional, which includes a review of historical records, an inspection of the site and, quite often, collecting and analyzing soil and ground water samples.

Frequently Asked Questions for Step 2

What is an environmental site assessment?

Environmental site assessments are typically conducted in phases, and are used to determine whether a site is contaminated or not. A Phase I environmental assessment is a review of all the records and knowledge associated with the property's historical record to see if there is the potential for the presence of contamination. If the Phase I indicates there is a potential for contamination, then the assessment of the site proceeds to the next phase. A Phase II involves sampling of the site and will help determine: the extent of contamination, the types and probable sources of contamination, the level of risk to humans and the environment associated with the contamination, and whether the contamination needs to be cleaned up.

Why should I do an environmental site assessment?

As with any large investment, you want to know what kind of additional costs you will incur before you finalize the purchase. In the case of a site with redevelopment potential, you want to find out if the site is contaminated and, if so, how much it is likely to cost to clean it up before you buy it. An environmental site assessment can accomplish that task and, if it meets the requirements of the All Appropriate Inquiry (AAI) rules (see the AAI FAQ below), limit your liability under the federal Superfund law. In addition, the Kansas Brownfields Program also provides a similar release of liability under state law. Many banks require an environmental site assessment as a condition for a mortgage.

Who performs the environmental site assessment?

Environmental site assessments are typically conducted by environmental professionals trained and experienced in the areas of environmental investigation and cleanup. Federal regulations require that AAI investigations be carried out by qualified environmental professionals who meet certain minimum requirements. The Kansas Brownfields Coordinator will have suggestions regarding when or if it is necessary to hire an environmental consultant.

Who pays for the assessment?

Assessment costs are typically paid for by the prospective purchaser, although KDHE or U.S. EPA may be able to conduct these assessments at no cost to the municipality under their Brownfields Targeted Assessment program. For more information about this program see *Activities and Available Tools* below.

Can I do an environmental site assessment before I own the property?

Yes, if you have permission and access rights from the owner of the property. Municipalities and developers often include access rights and permission to conduct an environmental assessment as part of their pre-purchase agreement with a property owner.

What is meant by "All Appropriate Inquiry" (AAI)?

All Appropriate Inquiry, or AAI as it is commonly known, is an environmental site assessment that meets the requirements of U.S. EPA's All Appropriate Inquiry rule (40 CFR 312). Following the requirements of AAI in a pre-purchase environmental site assessment gives a prospective purchaser liability protection from CERCLA (a.k.a., Superfund) for those environmental issues that are identified by the AAI assessment.

Prospective property owners who were never involved in any practices that might have contaminated the property (a.k.a., innocent landowners) as well as owners of contiguous properties are eligible for protection from CERCLA, if AAI is conducted prior to purchasing a property. In addition, to maintain protection from CERCLA liability, property owners must comply with certain "continuing obligations" provided in the statute.

For more information on the AAI rule, access the U.S. EPA web site at http://www.epa.gov/swerosps/bf/regneg.htm.

Does KDHE require cleanup of this property?

Assessment and cleanup of properties must be done in conformance with the requirements of federal and state statutes. Please see Section 4 of this Toolbox, and check with the Kansas Brownfields Coordinator.

Will an environmental assessment performed several years ago meet the new AAI requirements?

No. Information from older Phase I reports may be used as a resource, but the 2002 Federal Brownfields Act requires that a Phase I assessment used to meet the requirements of AAI must be completed within a year prior to taking ownership of the property. This is to ensure that the current environmental status of the property is known at the time the property is transferred. In addition, certain aspects of the AAI assessment must be completed within 180 days prior to the property transfer (i.e., the on-site investigation, the records search, the interviews, and the search for environmental cleanup liens). This protects the buyer from inadvertently accepting liability for contamination that may have occurred between the time the initial assessment was conducted and when the property actually transfers.

Activities and Available Tools

Phase I Environmental Assessments

A Phase I environmental site assessment requires that an appropriately qualified environmental professional review existing records concerning the site, research the operational history of the site, and conduct a site visit and interviews to determine if the potential exists for contamination at the site.

Phase I site assessments are used to identify existing or past signs of potential contamination at a property. Contamination can consist of hazardous substances and petroleum products as well as asbestos, and lead-based paints.

This historic building was full of old appliances, broken machinery, and junk. An environmental site assessment ensured that the materials could be disposed of in accordance with state and federal regulations.

If the Phase I assessment does not indicate a significant potential for environmental risk due to contamination at the site, then further investigation or cleanup may not be needed. You should consult the Kansas Brownfields Program for verification.

If the assessment is inconclusive or identifies potential contamination that poses environmental risk, further environmental assessment may be needed. Soil, sediment, soil vapor, and/or ground water sampling may be required to determine whether the property is contaminated and if it needs to be cleaned up before it can be redeveloped.

Sampling for contamination and determining the need for cleanup at the property is conducted under the Phase II assessment.

Phase II Assessments: Sampling and Risk Assessment

A Phase II environmental site assessment is a detailed evaluation of environmental conditions at a property. This evaluation relies on the collection and analysis of soil, sediment, soil vapor and/or ground water samples, and other measurements taken at the site to confirm and quantify the presence of environmental contamination at the property. Before and after conducting the sampling activity, it is important to contact KDHE's Brownfields Coordinator to ensure the sampling is conducted in accordance with KDHE's standard operating procedures.

A Phase II Environmental Site Assessment collects soil and groundwater samples from various areas on and near the targeted property. These samples are sent to an environmental laboratory to be analyzed for volatile organic chemicals, metals, petroleum compounds, and other contaminants of concern.

If contamination is confirmed and the levels of contaminants are known, an assessment of risks to human health and the environment may be conducted to determine how people and/or the environment could be affected. Once a risk assessment has been conducted or a comparison is made to state or federal cleanup standards, a decision can be made as to whether or not the property poses an unacceptable environmental or health risk. If unacceptable risk is determined to exist at the site, a plan can be developed to clean up the property and reduce risks to humans and the environment.

The Phase II site assessment is designed to evaluate the degree of contamination and health or environmental risk posed by exposure to such contamination. It may not provide sufficient information to estimate the exact quantity of wastes to be addressed or the costs of cleanup. Additional work may be needed which is discussed in Step 3 of this document, "Cleaning Up Your Site".

Brownfields Targeted Assessments

KDHE or U.S. EPA regional offices may be able to assess sites under a program called Brownfields Targeted Assessment. At the request of a municipality or non-profit, KDHE can perform an assessment and assist in the planning process for redevelopment of qualifying sites. These assessments are done at ***no cost*** to the requesting community at sites where there is a clear public benefit, and the community did not cause the contamination. See http://www.kdheks.gov/brownfields/ for more information, or contact KDHE's Brownfields Coordinator.

KDHE assists local municipalities, economic development groups, regional resource conservation and development offices in applying for federal grants. In this role, KDHE provides technical oversight to the applicant throughout the process.

U.S. EPA Assessment Grants

Grants of up to $200,000 are available to municipalities and quasi-governmental entities that bear no responsibility for causing the contamination at a site. These competitive grants are available on an annual basis for planning and assessment of sites contaminated with petroleum or hazardous substances. More information can be found at www.epa.gov/brownfields/assessment_grants.htm.

For more information on KDHE tools and financial resources to assist you with project planning and site identification, refer to Step 4 of this document. For information on assistance available from the federal government, refer to Appendix A.

Determining Your Next Step

The following questions were developed to help determine your next step in the contaminated property redevelopment process:

- Did my environmental site assessment reveal any potential contamination or other recognized environmental conditions on this property?
  - If no, go to Step 5, "The End of the Line – Redevelopment of Your Property!".
  - If yes, and you want to clean up the property before marketing it for redevelopment, go to Step 3, "Cleaning Up Your Site".
  - If yes, but you do not want to clean up the property prior to marketing it for redevelopment, go to Step 5, "The End of the Line – Redevelopment of Your Property!".

- Does the contamination pose a risk to human health or the environment?
  - If yes, then cleanup will likely be necessary, so proceed to Step 3 "Cleaning Up Your Site".
  - If no, and it does not affect the future use of the property, then proceed to Step 5, "The End of the Line – Redevelopment of Your Property!".

- Does the contamination require cleanup or other corrective measures in order to protect human health or the environment, or can the contamination be addressed through an Environmental Use Control (EUC) or other similar mechanism?
  - Go to Step 3, "Cleaning Up Your Site".

- What financial or human resources are available to address this project?
  - Go to Step 4, "How the Kansas Brownfields Program Can Help When a Site Is Contaminated".

Step 3: Cleaning Up Your Site

The results of your Phase II assessment may indicate that contamination on the property exceeds state and/or federal screening or cleanup standards. Cleanup may be necessary to either prevent exposure by future users of the site to contamination or to stop a release of contamination into the environment. This Step is intended to provide general information on cleanup and its role in the contaminated property redevelopment process.

Frequently Asked Questions for Step 3

How do you know when a property needs to be cleaned up?
If, after conducting an environmental assessment as described in Step 2, your sampling results exceed KDHE's cleanup standards, it is likely that some form of cleanup is necessary.

Who do I need to consult to get help with cleaning up the site?
If you haven't done so already, you should contact KDHE and ensure that any cleanup work you are planning to conduct will fulfill state requirements. Additionally, it may be necessary to hire an environmental attorney who is familiar with state and federal laws to assist you in dealing with the legal issues relative to the cleanup process. Finally, you should also hire an environmental consultant to work with you to develop and implement a plan to address the contamination at your site. See Step 4 for more information regarding KDHE's cleanup requirements.

How much will the cleanup cost?
The more information you have about the types and amount of contamination on your property, the easier it will be to estimate the cost to clean it up. In addition, determining future intended use for the property may allow you to tailor the cleanup and reduce the costs.

Incorporating cleanup activities into the general construction process or using innovative architectural designs can help reduce costs. For example, it may be possible to reduce the amount of contaminated soil needing to be excavated and disposed of by constructing buildings over less-contaminated areas, and/or paving areas of higher contamination to reduce exposure.

In addition, cost-effective remediation techniques designed to address contamination under buildings and in ground water have been developed, and may be appropriate for your project. You may want to contact the Kansas Brownfields Coordinator as they can provide you with more information about these remediation techniques.

What types of cleanup might be necessary at contaminated sites?

Soil, sediment, ground water, and indoor air may need to be cleaned up at a contaminated site. Techniques have been developed to address contamination in each of these media. The type of cleanup selected is based on situation-specific considerations such as type of contamination, amount of contamination, depth to ground water, and extent of risk to human health or the environment. Additional cleanup might be necessary during the demolition phase to address issues such as asbestos or lead-based paint.

What are institutional controls?

In cases where the cleanup does not remove or address all of the contamination at the property to unrestricted land use), Environmental Use Controls (EUCs) may be required as part of the cleanup. EUCs are legally enforceable restrictions, conditions, or controls that limit or prevent the use of the property, ground water, or surface water so that future exposure to contamination can be prevented or minimized.

EUCs are intended to reside in the property chain of title records and to be discovered when property ownership changes. By making future owners and others aware of the location of contamination, a less stringent cleanup option may be implemented that is just as protective of humans and the environment as a more "complete" cleanup. Some examples of EUCs include easements, activity and use limitations, restrictive covenants, well drilling prohibitions, deed restrictions, zoning restrictions, and special building permit requirements.

In Kansas, the property owner is the only person who can place such instruments in the chain of title.

Activities and Available Tools

Types of Cleanups for Contaminated Sites

The type of cleanup required at a site depends on a number of factors. These factors include location, type and amount of contaminant(s) present, how widespread and deep the contamination is, and the intended future use.

The most common types of cleanups include removal or treatment of contaminated soil, capping and/or covering the contaminated area, and cleaning up ground water. However, additional methods for mitigating risks at contaminated sites include the use of EUCs (see FAQ above) and engineering controls. U.S. EPA has published a compendium on cleanup options that can be found at http://www.epa.gov/tio/download/misc/roadmap3edition.pdf.

Engineering controls are constructed parts of a cleanup that act to cover (i.e., "cap") or limit exposure to residual contamination at the property. Engineering controls include soil, asphalt, or concrete cover systems over residual contamination, and the use of fences. In some cases, contamination at depth can be "capped" by a newly constructed building or roadway.

Because the amount of cleanup needed can be highly dependent on future use, it is very important to thoroughly assess the property in the early planning stages of your project. The assessment information may allow you to design appropriate but cost effective cleanup options that can be incorporated into the redevelopment process.

Importance of determining future use of the property

The redevelopment of a contaminated property is essentially a real estate transaction, and any real estate transaction is affected by location, location, location. A key question that must be answered for every property redevelopment project is, "Will a return on my investment be realized?" To determine that, you need to know the cost of cleanup.

Removing underground storage tanks is a common cleanup activity.

What constitutes a successful and protective cleanup has evolved over the past several decades from an expensive "remove it all" approach, regardless of how low the actual risks to humans and the environment might be, to a more measured, risk-based approach where low levels of contamination can be left on site if properly controlled. The risk-based approach recognizes that any cleanup must be protective of human health and the environment, but cleanup need only go as far as necessary to make the site safe for its intended use. For example, cleaning up a site to single family residential use exposure levels is unnecessary if the property is to be used as a warehouse or convenience store. The reverse is also true. You wouldn't want a less stringent cleanup that is appropriate for an industrial use to occur where homes were to be built.

So, the intended future use of a site can determine the extent of cleanup that will be required. It is just as true that the extent of cleanup, and the presence or absence of an Environmental Use Control (EUC), can determine the future use of a site. Sometimes the intended use of a site is known from the beginning and the cleanup is tailored for that use. In other cases, available funding limits the extent of cleanup, which may then dictate more

limited options for future use. Knowing the intended future use can significantly affect the cleanup both in scope and cost. You should consult with KDHE to determine which cleanup standard should be applied to your site.

KDHE Acknowledgement of Completion of Cleanup

One of the benefits of conducting a cleanup under a Kansas State Response Program is that in return for completing cleanup to KDHE's satisfaction, you may receive a release from liability or state approval when you complete the cleanup. KDHE can provide written acknowledgement of this in the form of a No Further Action letter. This may be used to demonstrate to prospective purchasers, future users of the site, lenders, the local community, and other interested parties that contamination issues have been resolved and the site is safe for reuse.

Loans and Grants available for Funding Cleanup

One of the biggest barriers to cleanup of contaminated properties is financial resources. A potential source of cleanup funding is grants or loans from KDHE or state and local economic development agencies. KDHE has both grants and loans available that can assist you in funding property cleanup.

Two $25,000 cleanup grants are awarded per year to address properties in need of small remedial action. These grants are administered in conjunction with the Voluntary Cleanup and Property Redevelopment Program. Another source of funding is KDHE's Brownfields Cleanup Revolving Loan Fund (BCRLGF), intended to provide a combination of grant funding and low interest loans to clean up Brownfields properties that are publicly owned, or owned by not-for-profit organizations.

For more information on tools, programs, and financial resources available from KDHE to assist you with project planning and site identification, refer to Step 4.

U.S. EPA Brownfields cleanup grants are another source of funding for cleanup of qualifying properties. Since the grants are highly competitive and applications are only accepted once a year, your project should have some flexibility built in for these constraints. More information about the U. S. EPA's Brownfields Cleanup Grant can be found on their Brownfields website at: http://www.epa.gov/brownfields/cleanup_grants.htm. Also see Appendix A for a list of other federal or regional loan and grant programs.

Determining Your Next Step

- Have you completed cleanup prior to redevelopment?
    - Go to Step 5, "The End of the Line – Redevelopment of Your Property!" for assistance in marketing or developing your site.

- Have you identified but not addressed all environmental concerns at the property, and do not intend to clean up the property prior to selling it?

- Go to Step 5, “The End of the Line – Redevelopment of Your Property!” for assistance in marketing your site.

- Do your cleanup activities require institutional controls and have they been appropriately filed and recorded according to applicable statute and regulation?
  - Go to Step 4, “How the Kansas Brownfields Program Can Help When a Site is Contaminated” for state resources for cleaning up your site.

- If you know who the purchaser of the property will be, have you conveyed the content and responsibilities of the institutional controls to them?
  - Go to Step 5, “The End of the Line – Redevelopment of Your Property!” for assistance in marketing your site.

- If your site requires long-term maintenance, have you made plans to fund and carry out those obligations or made arrangements for others to do it on your behalf?
  - Go to Step 4, “How the Kansas Brownfields Program Can Help When a Site is Contaminated” for state resources for cleaning up your site.

The City of Desoto turned this unregulated dump site into a boat ramp….

….and is now building a riverfront park.

Step 4: How the Kansas Brownfields Program Can Help When a Site Is Contaminated

KDHE has received grant funding from U. S. EPA to conduct Brownfields Targeted Assessments (BTAs) at the request of local units of government, land clearance authorities, regional councils, redevelopment agencies, tribal organizations, not-for-profit organizations, and other quasi-governmental agencies across the state.

Kansas Brownfields Program Goals:

- To ensure that contaminated properties are appropriately assessed, cleaned up, and reused
- To return abandoned, idled, and underused properties to sustainable reuses and prevent the creation of new Brownfields and consumption of "Greenfield" lands
- To preserve and enhance greenspace for public recreational and cultural use

Can the Kansas Brownfields Program Help With Your Redevelopment Project?

Every city and county in both rural and urban areas have abandoned, underutilized and potentially contaminated properties. The Kansas Brownfields Program is available to assist with investigation, cleanup, and redevelopment.

Rural areas also benefit from KDHE's Brownfields Program. These containers were left over from a former aerial spraying operation near Lyons.

The Kansas Brownfields Program includes:

- Technical Assistance to Communities
- Brownfields Targeted Assessments (BTAs) including Phase I and Phase II Environmental Assessments, at no cost to applicants.
- Brownfields Cleanup Grants
- Revolving Loan Funds
- Brownfields Tax Incentives

KDHE's program targets properties that: are abandoned or publicly owned, have low to moderate contamination, include issues of environmental justice, suffer from the stigma of liability, have municipality support, or have a prospective purchaser willing to buy and pay for necessary cleanup of the property.

How Does the Application Process Work?

A BTA is an excellent opportunity for you to begin the Brownfields assessment process. KDHE's goal is to assist you in putting abandoned properties into productive reuse and to promote sustainable development/growth.

Priority is given to properties that already have a proposed end use, which may allow flexibility and facilitate quicker cleanup and redevelopment. Properties with complete redevelopment plans or with a prospective purchaser currently under consideration will also be given preference. Applications providing the best evidence of a true need with community support have the best chance of being selected. BTA applications are accepted year round and are generally awarded on a first come, first served basis.

Who is Eligible to Apply to the Kansas Brownfields Program?

Any unit of government (city, town, county, municipality, not-for-profit organization, etc.) may submit a property for assessment.

What Type of Properties Are Eligible?

All types of properties may receive an assessment, with some exceptions. KDHE's primary focus is on industrial and commercial properties; however, residential areas may be considered under special circumstances. Properties already subject to enforcement action associated with environmental contamination are not eligible (Superfund sites, etc.), although you may petition for an exception.

Who Reviews the BTA Applications?

Both KDHE and U. S. EPA review the applications. Applications from all units of government, regardless of size or geographical location, will be given equal consideration. Your application should be clear and concise, follow the requested criteria, and provide sufficient detail. KDHE will use the criteria in the application to assign a priority to each accepted property.

A new water metering station in Derby, at the site of a former salvage yard.

To review the Kansas Brownfields Program BTA Application Form please visit http://www.kdheks.gov/brownfields/download/bta_app_pk.pdf

How Are Applicants Notified?

KDHE will send a confirmation letter to each approved applicant within three weeks of receiving the application. A meeting or teleconference will be held with the applicant to determine the scope of the project and the respective responsibilities of each party. KDHE actively works with you to meet your community's needs. Applicants who are not selected are also notified in writing. All applications are kept on file for later consideration.

What Services May You Need to Provide?

Federal funds are currently used to pay for BTAs; however, KDHE may ask you to provide "in-kind" services such as surveying the property, assisting KDHE in the proper disposal of

soil and ground water generated during the assessment. and gaining access to neighboring properties if needed.

How Long Will the Assessment Take Once the Application Is Approved by KDHE?

Assessment activities generally begin within 30 days after the application is approved. The assessment process, including both Phase I and Phase II assessments, takes approximately three to four months from the date the application is received until the report is submitted to the EPA for approval. Time frames may be expedited depending on the workload and other issues.

What Funding is Available Through KDHE for Brownfields Assessments and Remediation?

There are both grants and loans available for Brownfields sites that qualify.

State Brownfields Cleanup Grants:

The Kansas Brownfields Program offers two $25,000 cleanup grants per year to address properties in need of small remedial action (i.e. limited soil excavations, ground water monitoring, placement of an Environmental Use Control on a property, etc.). All applicants wishing to utilize Kansas Brownfields Cleanup grant funding must also apply for KDHE's Voluntary Cleanup and Property Redevelopment Program (VCPRP). Check below for more information about KDHE's VCPRP Program.

Brownfields Cleanup Revolving Loan and Grant Fund (BCRLGF) Program:

KDHE has been awarded a $1,000,000 grant from EPA to fund a BCRLGF to clean up Brownfields properties that are publicly owned property, as well as properties owned by not-for-profit organizations. The purpose of the BCRLGF program is to facilitate the reuse and/or redevelopment of contaminated properties by making low interest loans and grants available for financing environmental cleanups. A limited amount of this grant is also available to provide subgrants to communities that qualify for this funding.

What Types of Activities Can Be Funded through the BCRLGF?

Only properties where there has been an actual release or substantial threat of release of a hazardous substance in the environment are eligible for BCRLGF funding. These funds may be used for:

- Installation of drainage controls
- Construction of fences, warning signs, or other security or site control precautions
- Stabilization of berms, dikes or impoundments or drainage or closing lagoons
- Encapsulation of contaminated soils
- Using chemicals and other materials to retard the spread of the release or mitigate its effects
- Excavation, consolidation, or removal of highly contaminated soils from drainage or other areas

- Removal of drums, barrels, tanks, or other bulk containers that contain or may contain hazardous substances, pollutants, or contaminants
- Containment, treatment, disposal, or incineration of hazardous materials
- Provision of alternative water supply where necessary immediately to reduce exposure to contaminated household water and continuing until such time as local authorities can satisfy the need for a permanent remedy
- Site monitoring activities, including sampling and analysis, that are reasonable and necessary during the cleanup process, including determination of the effectiveness of a cleanup
- Costs associated with meeting public participation, worker health and safety, and interagency coordination requirements

What Types of Activities Can NOT Be Funded through the BCRLGF?

- Site assessment, identification, and characterization
- Cleanup of naturally occurring substances
- Monitoring and data collection necessary to apply for environmental permits under other Federal and State laws
- Development activities that are not removal actions (construction or demolition of facilities, marketing of property, job training)

Types of properties not eligible to receive BCRLGF funding:

- Properties listed or proposed for listing on the National Priories List
- Properties at which a removal action must be taken within six months
- Properties in which a federal or state agency is planning or conducting a response or enforcement action

Clean up and restoration of this historic building beautifies downtown Garnett.

All applicants wishing to utilize BCRLGF funding will be required to apply for KDHE's Voluntary Cleanup and Property Redevelopment Program.

What Happens After the Brownfields Assessments Have Been Completed?

Upon completion of Phase II activities KDHE completes a Brownfields Assessment Decision form. If no contamination is found then the decision form will indicate that further remedial actions are not necessary. If any contamination is found, there are numerous programs within KDHE that can address the cleanup.

Voluntary Cleanup and Property Redevelopment Program (VCPRP):

Under the VCPRP responsible parties, developers, and buyers who perform successful cleanups of contaminated properties within established criteria will be granted a "No Further Action" determination, satisfying your community's need for protection from potential future liabilities. Adjacent property owners who did not contribute to the contamination would also receive protection from KDHE.

A streamlined process is utilized to address these sites in an expeditious manner to encourage the redevelopment of such properties. This program is voluntary and is designed to allow industry and businesses to bring forth sites that need attention so their properties are appropriately addressed in a timely manner through a local/state partnership.

For more information on the VCPRP please contact staff at (785) 291-3244 or visit their website at: http://www.kdheks.gov/remedial/vcp/index.html.

Site Remediation Unit:

The Site Remediation Unit is responsible for administrating the State Cooperative Program, through which KDHE works cooperatively with industry, municipalities, private citizens, and other parties to investigate and remediate contaminated sites. The program provides professional and objective technical oversight of environmental investigation and remedial activities to provide quality assurance and quality control.

The program endeavors to provide safe drinking water supplies to private water wells and public water supplies that are contaminated or threatened by environmental contamination. Participation within the program protects potentially responsible parties from potential Superfund listing and involvement with the U.S. EPA. The State Cooperative Program complements the VCPRP, overseeing contaminated sites ineligible for the VCPRP by statute due to the presence of an imminent threat to human health or the environment. The State Cooperative Program also addresses sites with recalcitrant responsible parties through the use of enforceable consent and unilateral administrative orders.

For more information on the State Cooperative Program, please contact staff at (785) 296-1673 or visit their website at http://www.kdheks.gov/remedial/scu/index.html.

Environmental Use Control (EUC):

An EUC is a legal mechanism for applying restrictions, prohibitions, and conditions on land use for a property with contaminant concentrations below non-residential, but above residential standards. EUCs allow for the development and productive use of a contaminated property where cleanup to levels allowing unrestricted use is not economically or technically feasible. An EUC can be voluntarily applied to a property by the landowner, and can protect the landowner relief from environmental liabilities, making the property more attractive to redevelopment or prospective buyers. EUCs also protect the seller of a property by informing future landowners of the use restrictions necessary to mitigate the environmental liability concerns associated with a property.

EUCs are necessary when contamination remaining on the property after cleanup prohibits unrestricted use of the property. EUCs prohibit activities that would re-expose the public or the environment to these contaminants. For example, an EUC may prohibit using ground water beneath a property as drinking water, or require the maintenance of an engineered cap. Violation of conditions established through an EUC could create an unacceptable risk.

In most cases, an EUC will not prevent the redevelopment of a property. If you already know the use to which the property will be put, the EUC may be created specifically to support that redevelopment.

EUCs can be used to address environmental concerns if a property is enrolled in a KDHE environmental program, the department has approved use of EUCs at the property, and the cleanup objectives are based on any of the following:

- Non-residential land use
- Protective structures (i.e., engineered barriers such as caps, berms, surface controls, etc.)
- Prohibiting activities on the property (i.e., no water wells, excavation, trenching, etc.)
- Any combination of the above

Some conditions imposed by EUCs could be to:

- Restrict future land use to industrial/commercial purposes
- Prohibit installation of drinking water wells on the property
- Limit or prohibit digging or other types of excavation activities on the property
- Require erosion controls on the property
- Limit the type of vegetation to be grown on a subject property
- Require maintenance of a protective structure or other engineered barrier

EUCs serve to prevent exposure to remaining contaminants, but are site-specific and depend on multiple factors. These factors may include:

- Amount and type of contamination left on the property
- Location of contamination in relation to other land uses
- Potential migration pathways or routes of exposure
- Geology of the site

For more information on the EUC program contact staff at (785) 296-1673 or visit the EUC website at http://www.kdheks.gov/remedial/euc/index.html.

Kansas Storage Tank Program

The Kansas Storage Tank Section addresses contamination related to underground storage tank releases. The Storage Tank Section is responsible for enforcing federal and state storage tank regulations and provides oversight and direction for investigation and remediation of storage tank releases. The site remediation may be funded by the

responsible party, through reimbursement from the state Petroleum Storage Tank Reimbursement Fund, or from the federal LUST Trust Fund.

If you have questions or need copies of the application form please contact KDHE's Storage Tank Section at (785) 296-1678 or visit their website at: http://www.kdheks.gov/tanks/.

Kansas Drycleaning Trust Fund Program

The Kansas Drycleaning Trust Fund Program addresses contamination related to retail drycleaning operations. The Kansas Drycleaning Trust Fund was established by the Kansas Drycleaner Environmental Response Act in 1995. Money in the Drycleaning Facility Release Trust Fund is expended for direct costs for administration and enforcement of the Kansas Drycleaner Environmental Response Act and provides project leadership for corrective action usually contracted to an environmental consultant.

If you have questions or please contact KDHE's **Kansas Drycleaning Program** at (785) 296-6370 or visit their website at: http://www.kdheks.gov/dryclean/index.html.

Kansas Agricultural Remediation Reimbursement Program

The Kansas Agricultural Remediation Reimbursement Program was put in place in 2000 to help owners of contaminated properties used for agricultural purposes recover cleanup costs. The remediation fund was created by assessing an annual fee on pesticide products, pesticide dealers, grain storage, fertilizer products, and custom blenders.

Costs eligible for reimbursement include consultant fees; soil and ground water sampling and analytical costs; contaminated soil removal; and ground water remediation costs. Ineligible costs include attorney's fees, loss of income, and the replacement costs of spilled agricultural chemicals.

If you have questions or need copies of the application form and a set of regulations, please contact the Kansas Agricultural Remediation Program Administrator at (785) 440-0356.

Concordia's historic train depot has been converted into the National Orphan Train Museum and Research Center.

Where Can My Community Get Additional Assistance With the Brownfields Process?

The Technical Assistance to Brownfields (TAB) program at Kansas State University provides assistance to local Brownfields program managers and communities. The program is primarily funded by EPA and assistance to communities is usually free. K-State assistance is provided on a "first come" basis to the extent that staff and funds are available, and assistance is tailored to meet the needs of each community's Brownfields program. Professional staff at K-State provides technical review and research services and assist with community outreach and education efforts. You can visit the TAB website at http://www.engg.ksu.edu/CHSR/outreach/tab/.

Eureka's new library has a glorious stained-glass window.

Step 5: The End of the Line – Redevelopment of Your Property!

By working through Steps 1 through 4, you have quantified the environmental concerns at your site. You have either addressed those environmental concerns through cleanup or EUCs, have documented them for a future developer to address as part of development, or perhaps no contamination was discovered. Assessment is complete; actions were taken, or plans were developed for resolving unacceptable environmental risks. The property is ready for redevelopment.

Now that you have resolved the initial challenges associated with the environmental aspects of the site, you can turn your attention to the final steps. You may be marketing your now-clean property, trying to ensure a good return on your investment, and doing your best to attract the right developer. You will be facing the challenges inherent in any development project, such as providing appropriate infrastructure, but you also need to convince future buyers and occupants that the site is safe for their use.

Derby's Brownfields site after redevelopment into an aquatic park.

You may be redeveloping the property yourself instead of seeking to sell it to a developer. In this case, return on investment is not necessarily a primary driver, but you will still need to address infrastructure. You will also need to convince future occupants or users that the site is safe for their reuse.

On the other hand, you may have decided not to clean up the property yourself, but instead to market it for simultaneous cleanup and redevelopment. This is most likely to be successful when contamination at the property has been quantified and final cleanup costs can be determined with certainty.

This section:

- Provides information on federal and state financial and technical resources that may be available to help with planning and financing redevelopment
- Provides advice on managing the issues inherent in developing a property with contamination
- Details the activities involved in marketing such a site

Depending on your plans for redeveloping the property, a variety of federal and regional resources may be available to you. With answers in mind to the questions below, consider the FAQs listed below and the resources described in Appendix A.

- Do you plan to redevelop the site, or to sell/market the site once cleanup has been completed, and allow the buyer to redevelop the site?
- Will a public or private entity redevelop the site?
- Is the intended use a public or private use?
- Did you start this entire process with a planned, known reuse for the site, or are you still developing your reuse plans?
- Is your site in the heart of a bustling urban center or in a rural setting?
- What infrastructure exists at the site?
- Will the reuse be residential, commercial, industrial or open space?

Now select the tools that appear most applicable, and work with your local and state economic development specialists to move from planning into redevelopment.

Frequently Asked Questions for Step 5

If my property has an environmental use control incorporated into the environmental risk management plan, how will this impact the marketing and redevelopment of the site?

If your site is safe for reuse but has an EUC, developers and occupants will need to be made aware that in certain areas some uses are either prohibited (i.e., growing vegetables is not permitted) or require special consideration (i.e. excavation below 6 feet requires a soil management plan). Developers will need this information to formulate the best plan for reuse of the property. Potential owners or occupants need this information so that they can safely use the property and so they can fulfill any ongoing obligations associated with the deed restriction. These obligations are site and state-specific and may include periodic review and reporting of site conditions, operation of a remediation system, or payment of an annual fee. You should check with the Kansas Brownfields Program to determine whether any such ongoing obligations apply to your site.

What information generated during assessment and cleanup work will developers, lenders, and potential occupants request during the development stage, and how should the information be presented?

At a minimum, most developers, lenders, and potential occupants will want to be assured that the site has been appropriately cleaned up and closed out of the state and/or federal cleanup programs. They may also be interested in reviewing the closeout report and having a copy of the site closure letter received from KDHE. Other documents of interest may include the AAI report, assessment reports, and documentation of remediation activities. KDHE retains copies of these documents in its files for the public to review. You may also want to set up an information repository in a local library to facilitate review.

What role, if any, will local, state, or federal environmental staff have during the redevelopment phase?

You should ask this question as you access specific resources to assist you with redevelopment. The answer is highly dependent on site specifics, state law, and the type of federal or local resources that have been accessed to assist in redevelopment. You should also check with KDHE's cleanup program to determine whether redevelopment of the property may trigger any further state involvement.

How should I market this property?

There are many tools available that can allow you to market your cleaned up property to the right audience at little or no cost. One example of an effective marketing tool is KDHE's Redevelop Kansas website at http://www.redevelopks.org.

Redevelop Kansas is a computerized inventory of properties. Adding your property to this inventory can be done at no cost to you and quickly puts your property "out on the market".

Before…

…After

Activities and Available Tools

Tip for Success No. 1 – Establish and maintain a well-rounded contaminated property Revitalization Team

If your Team does not already include local, state, or federal economic development agency staff, look to the resources described in Step 4, and contact the economic development agencies best suited to help with your project.

Tip for Success No. 2 – Establish clear goals

Work with your Team to develop appropriate locally supported redevelopment goals for your site.

Tip for Success No. 3 – Identify available tools

Use your redevelopment goals/plan to identify and utilize appropriate tools throughout redevelopment.

Tip for Success No. 4 – Work to make your site "shovel ready"

Based on the redevelopment goals for the site, in partnership with the economic development staff, identify and utilize the tools that will make your site 'shovel-ready' for development. A shovel-ready site is one where as many regulatory hoops as possible have been cleared in advance of redevelopment. This is a critical step if you plan to market the property for sale prior to redevelopment because you will clear regulatory hurdles for the purchasing developer.

Tip for Success No. 5 – Market your site

Market your redevelopment project. Local and state economic development staff can be particularly well-versed in strategies and available avenues for marketing. Coordinating with these representatives will help ensure success.

Citizens and visitors in Chanute enjoy the new four-screen movie theater.

Appendix A: Additional Resources

Federal Resources

Please note that the resources referenced below are often implemented at the regional, state and local levels, so it is important to include regional, state and local economic development specialists in your Revitalization Team.

U. S. Environmental Protection Agency Brownfields Program (U.S. EPA)

http://www.epa.gov/brownfields/

U.S. EPA provides grants to fund assessments and cleanups of Brownfields sites. Grants are also made to capitalize revolving loan funds to clean up Brownfields sites or fund job training programs.

THINK ABOUT…using assessment grants to identify and prioritize Brownfields sites for redevelopment or quantifying the degree of cleanup needed to get the site "business ready". Cleanup grants often need to be pooled with other cleanup funds unless the cleanup is minor. Non-profits such as urban renewal authorities are eligible recipients of cleanup grants.

National Association of Development Organizations (NADO)

http://www.nado.org/rf/innocenters/brown.php

Since 2001 NADO has been dedicated to assisting regional development organizations across the country. Through their Research Foundation they have sought to raise awareness and examine issues related to contaminated property revitalization and redevelopment in small metropolitan areas and rural America. They have released a series of documents, all of which are available on their website, that specifically address reclaiming such properties in rural America. Their resource guide is highly recommended reading for Brownfields stakeholders and can be found at http://www.nado.org/pubs/rguide04.pdf.

THINK ABOUT…using NADO to identify potential resources specifically targeted to smaller municipalities and rural communities.

International City/County Management Association (ICMA)

http://www.icma.org/main/topic.asp?tpid=19&hsid=10

Since 1914 ICMA has offered a wide range of services to its members and the local government community. The organization is a recognized publisher of information resources ranging from textbooks and survey data to topical newsletters and e-publications. ICMA provides publications, data, information, technical assistance, and training and professional development to thousands of city, town, and county experts and other individuals on a variety of issues including redevelopment of contaminated properties.

THINK ABOUT…using ICMA resource documents to gain additional knowledge on addressing and redeveloping contaminated properties.

National Association of Local Government Environmental Professionals (NALGEP)
http://www.nalgep.org/issues/brownfields/
NALGEP represents local government personnel responsible for ensuring environmental compliance and developing and implementing environmental policies and programs. Their Brownfields Community Network frequently sponsors webcasts aimed at empowering localities to revitalize their communities through the exchange of strategies, tools, and best practices for Brownfields cleanup and reuse.

THINK ABOUT...using NALGEP resources as a forum for exchanging lessons learned and expanding your community's knowledge base on a variety of redevelopment issues.

U.S. Department of Housing and Urban Development (HUD)
http://www.hud.gov/offices/cpd/economicdevelopment/programs/rc/resource/brwnflds.cfm
HUD provides block grants and competitive awards (targeted to state and local governments) for revitalizing entitlement communities, offers federally-guaranteed loans for large economic development and revitalization projects, typically in entitlement communities, provides priority status for certain federal programs and grants for HUD-designated Empowerment Zone or Enterprise Communities (targeted to 80 local governments with low-income or distressed areas), and provides options for meeting safe and affordable housing needs in developed areas.

The six applicable HUD programs listed below provide resources for the renewal of economically distressed areas sites.

- Community Development Block Grant Program
- Section 108 Loan Guarantee Program
- Brownfields Economic Development Initiative
- HOME Investment Partnership Program
- Empowerment Zones and Enterprise Communities Initiative
- Lead-Based Paint Hazard Control Grant Program

U.S. Department of Agriculture (USDA)
Forest Service
http://www.fs.fed.us
The Forest Service provides technical assistance for projects in selected areas (targeted to EPA grantees, local governments, federal Empowerment Communities, and Enterprise Zones) and offers technical and financial assistance for sustainable redevelopment and reuse projects (targeted to state and local governments and community-based groups in Atlanta, Seattle, New York, Chicago, San Francisco, Los Angeles, Denver, Las Vegas, East St. Louis, South Florida (four county area), Philadelphia, Boston, and Buffalo).

Rural Development Agency (RDA)

http://www.rurdev.usda.gov

USDA provides grant, loan, and loan guarantee assistance for a variety of business, commercial, and industrial projects in small towns and rural areas; supports the installation and improvement of critical infrastructure needed to support economic development; and helps finance the construction of key public facilities such as sewer systems, firehouses, etc., that can support property revitalization efforts.

THINK ABOUT...using USDA/RDA resources to meet various project needs within the context of small town or rural needs --real estate acquisition, cleanup, demolition, working capital, water and sewer system improvements, and supportive community facilities.

U.S. Department of Commerce Economic Development Administration (EDA)

http://www.eda.gov/Research/Brownfields.xml

EDA funds infrastructure enhancements in designated redevelopment areas or economic development centers that serve industry and commerce, provides planning grants, and offers revolving loan funds and loan guarantees to stimulate private investments.

THINK ABOUT...using EDA to address cleanup and site preparation needs in reviving industrial areas; street, utility, port, and other infrastructure needs at project sites; site revitalization planning and site marketing.

Small Business Administration (SBA)

http://www.sba.gov

SBA provides information and other non-financial technical assistance for redevelopment efforts, offers loan guarantees to support small businesses, and assists in developing management and marketing skills.

THINK ABOUT...using SBA loan guarantees to attract capital to small businesses once sites are clean; using CDCs to help underwrite and finance building expansions or renovations; using informational resources available to help with loan documentation and packaging.

U.S. Department of the Interior National Park Service (DOI)

http://www.nps.gov/rtca/whatwedo/recent_innovations/wwd_ri_groundwork.html

DOI provides technical assistance for planning, assessment, and conservation in urban areas; assists in acquisition of surplus federal lands; and offers technical assistance for community revitalization.

THINK ABOUT...using DOI to enhance redevelopment projects with parks and open space amenities.

U.S. Department of Justice (DOJ) Weed and Seed Program

http://www.ojp.gov/ccdo/ws/welcome.html

DOJ's Brownfields Special Emphasis Initiative gives communities unsuccessful in seeking EPA funding a "second chance" to carry out initiatives aimed at site preparation and

development and community outreach and participation (targeted to Weed and Seed program grantees); advises and assists with the use of EPA Brownfields funds to clean up meth labs; and assists in crime prevention and improving the community climate through neighborhood restoration and crime prevention.

THINK ABOUT...using DOJ to plug key community involvement, reuse planning, cleanup, and project development financing gaps when other funding sources fall through; using community outreach services to address site and neighborhood safety issues that can stigmatize contaminated sites.

U.S. Department of Labor (DOL)

http://www.doleta.gov
DOL offers technical assistance linked to job training and workforce development in Brownfields Showcase Communities.

THINK ABOUT...using DOL training and workforce development services as a cash flow offset incentive to companies locating at Brownfields sites.

U.S. Department of Transportation Federal Transit Administration (DOT)

http://www.fta.dot.gov/funding/grants_financing_263.html
DOT provides grants for transit capital and maintenance projects; offers discretionary capital grants for new fixed guideway transit lines, bus-related facilities, and new buses and rail vehicles; funds transportation and land-use planning; and promotes delivery of safe and effective public and private transportation in non-urban areas.

THINK ABOUT...enhancing site marketability with transit access; planning for and cleaning up sites used for transportation purposes; identifying contaminated sites for stations, lots, and other transit purposes.

U.S. Department of Transportation Federal Highway Administration (FHWA)

http://www.fhwa.dot.gov/environment/bf_disc.htm
FHWA provides funds that can be used to support eligible roadway and transit enhancement projects related to property redevelopment, targeted to state and local governments and metropolitan planning organizations.

THINK ABOUT...using FHWA resources to cover some cleanup, planning and/or development costs, freeing up resources for other purposes; reconfiguring or modernizing roads or other transportation infrastructure to make them more complementary to site reuse opportunities; or providing transportation related access or amenities that enhance site value.

U.S. Department of Treasury Oversight of various tax incentives

http://www.treas.gov/press/releases/po3060.htm
The Department of Treasury offers tax incentives to leverage private investment in contaminated property cleanup and redevelopment targeted to private sector entities.

THINK ABOUT...promoting the cash flow advantages of tax incentives, promoting the financial and public relations advantages of participating in contaminated property redevelopment to lenders, and tapping into programs to expand capital access for small businesses that could locate at a redevelopment site.

Federal Housing Finance Board (FHFB)

http://www.fhfb.gov/Default.aspx?Page=44&Top=3

FHFB funds community-oriented mortgage lending for targeted economic development funding. Funds are targeted towards a variety of site users and can be accessed through banks. FHFB subsidizes interest rates and loans to increase the supply of affordable housing and funds the purchase of taxable and tax-exempt bonds to support redevelopment.

THINK ABOUT...using FHFB to attract more lenders to specific cleanup and redevelopment projects.

General Services Administration (GSA)

http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_OVERVIEW&contentId=10033&noc=T

GSA works with communities to determine how underused or surplus federal properties can support revitalization.

THINK ABOUT...incorporating former federal facilities into larger projects to take advantage of site assessment resources.

National Oceanic and Atmospheric Administration (NOAA)

http://brownfields.noaa.gov/htmls/about/siteindex.html

NOAA provides technical and financial assistance for coastal resource protection and management, funds workshops in Showcase Communities on contaminated property redevelopment-related coastal management issues, and coordinates a new "Portfields" initiative (initially targeted to port areas in New Bedford, MA; Tampa, FL; and Bellingham, WA).

THINK ABOUT...planning for a revitalized waterfront and restoring coastal resources, linking port revitalization needs with broader economic development purposes, and linking site design needs at contaminated waterfront properties to end use planning.

U.S. Department of Defense Army Corps of Engineers (USACE)

http://hq.environmental.usace.army.mil/programs/brownfields/brownfields.html

USACE executes projects emphasizing ecosystem restoration, inland and coastal navigation, and flood and storm damage reduction that may be contaminated property-related, and provides technical support on a cost-reimbursable basis to federal agencies for assessment and cleanup activities.

THINK ABOUT...requesting assistance from the Corps for project planning in waterfront situations and defining Corps-eligible projects like riverbank restoration that can enhance property revitalization efforts.

U. S. Department of Defense (DOD)
Office of Economic Adjustment
http://www.oea.gov/
DOD provides extensive information on redevelopment of closed military base properties. Models developed through base redevelopment efforts may be useful to other types of contaminated property and community stakeholders.

Office of Energy Efficiency and Renewable Energy/Center of Excellence for Sustainable Development
http://www.smartcommunities.ncat.org/
This DOE office serves as a resource center on sustainable development, including land use planning, transportation, municipal energy, green building, and sustainable businesses.

Office of Building Technology, State and Community Programs (BTS)
www.eren.doe.gov
BTS works with government, industry, and communities to integrate energy technologies and practices to make buildings more efficient and communities more livable. The resources available through BTS can help ensure that contaminated property cleanups are connected to energy efficiency and sustainable redevelopment.

Other Financial Mechanisms for Assessment, Cleanup, and Redevelopment of Contaminated Property

Tax Increment Financing: A Brief Overview

One approach to financing the cleanup and redevelopment of contaminated properties is the creation of a tax increment financing (TIF) district. TIF is a financing technique wherein bonds are issued to fund redevelopment and the bondholders are repaid through the new or incremental tax revenues generated by new construction/development. Usually, urban renewal authorities and downtown development authorities have the ability to create a TIF district.

For example, suppose a municipality creates a TIF district to facilitate redevelopment of several adjacent properties, including aging and vacant industrial buildings and former rail yards. Once the properties within the TIF district are redeveloped and put back into productive use, property values will increase, resulting in increased tax revenues. Property tax revenues from the TIF district are split into two revenue streams:

1. The first stream (base) is equal to the "As-Is" property tax revenues without redevelopment and goes to the same city, county, school district, and other taxing entities (the base is allowed to increase with the market over time).

2. The second stream (increment) is the net increase in property taxes resulting solely from new development. The increment can be used to fund the redevelopment through Tax Increment Financing, which diverts the increment revenues to pay for annual debt service on construction bonds.

Energy and Mineral Severance Taxes: A Brief Overview

Energy and mineral severance taxes are excise taxes on natural resources "severed" from the earth. They are measured by the quantity or value of the resource removed or produced. In the majority of states, the taxes are applied to specific industries such as coal or iron mining and natural gas or oil production. They are usually payable by the severer or producer, although in a few states payment is made by the first purchaser. When production rates of minerals and energy are high these funds can grow to significant amounts.

Appendix B: Kansas Brownfields Program Accomplishments

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Environmental Use Control and Brownfields Programs

Joint Effort Facilitates Redevelopment of Brownfields Property

Background:
The Kansas Department of Health and Environment (KDHE) conducted Phase I and II Brownfields Targeted Assessments (BTAs) at a property owned by the City of Chanute, Kansas. The primary BTA objective was to evaluate environmental conditions and potential risks through intrusive (Phase II) sampling activities, based on results of the previously performed non-intrusive (Phase I) environmental assessment.

The subject property occupies approximately 0.4-acres and had previously been utilized as a municipal parking lot. The City intended to redevelop the BTA property into a four-plex movie theater.

Phase I and Phase II activities:
Based on the Phase I BTA Report several on- and off-site Recognized Environmental Conditions (RECs) were identified for the Proposed Movie Theater BTA Property. Based on historical information, an on-site REC consisting of a former service station was located along the southwestern portion of the site. Two off-site RECs were identified adjacent to the site; a former filling station located adjacent west across South Evergreen Street, and a former auto repair facility located adjacent north across the alley.

Phase II activities were conducted to assess the extent of on-site petroleum and petroleum-associated impacts to soil and ground water through intrusive sampling and laboratory analyses.

Former City Owned Parking Lot Prior to Redevelopment

The Newly Redeveloped 4-plex Movie Theater

Soil and ground water were evaluated by comparing laboratory data to Tier 2 KDHE Risk-Based Standards (RSK) provided in Appendix A of the Risk-Based Standards for Kansas Manual. Although the subject property is located in a primarily commercial setting, data collected during the BTA was compared to RSK levels for both residential and non-residential scenarios.

Total Petroleum Hydrocarbon (TPH) concentrations in the soil samples collected from two soil borings were above the residential RSK value, but below the non-residential RSK value. Ground water from one sample location exhibited Volatile Organic Compound (VOC) concentrations above the applicable residential RSK values but below non-residential RSK values.

Based on data collected during the Phase II BTA, no significant environmental impacts were identified at the property. It was recommended that the applicant consider placing an Environmental Use Control on the property restricting residential land use and future ground water use.

Redevelopment:
An Environmental Use Control was placed on the property restricting land and ground water use in October 2006. Redevelopment of the BTA property into a movie theater was complete in March 2007.

Prepared by the Kansas Department of Health and Environment, Bureau of Environmental Remediation, Remedial Section. March 2, 2007.

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Brownfields Redevelopment Program

Derby Aquatic Park

Background:
The Derby Aquatic Center was accepted into the Kansas Department of Health and Environment's (KDHE) Brownsfields Redevelopment Program March 18, 2003. An application for a Brownfields Targeted Assessment (BTA) was prepared by the City of Derby and submitted to KDHE, on March 10, 2003. The BTA property was an agricultural field until approximately 1999. Since 1999, the property has been vacant. Except for a storm water detention pond, the property had not been developed. The objective of this BTA was to research and compile information related to existing and historical land use at the property and adjacent properties so the uncertainties associated with environmental impacts would be minimized and/or identified prior to redevelopment.

Community/Financial Assistance:
Interest for the Aquatic Center was generated by SOAC, Supporters of the Aquatic Center, a grass root citizen interest group. A consultant donated a design for the Aquatic Center free of charge. The citizens of Derby then voted to approve a ½ cent sales tax increase to finance the Aquatic Center construction.

Vacant lot prior to redevelopment

Phase I BTA Assessment:
No specific source areas were identified during Phase I activities at the site. The Phase I was conducted to determine if any historical activities occurred at the site that may have caused contamination. Information collected during the Phase I research activities did not reveal a history of hazardous substance usage at the property.

The newly developed Derby Aquatic Center

Based on this information collected during the BTA investigation, further investigative activities at the property were not warranted.

Redevelopment:
The City of Derby has redeveloped the property as an aquatic park. The park consists of three pools including a "zero entry" pool, a lap/diving pool and a waterslide plunge basin. A 30-foot high water slide and a "lazy river" float area were also constructed. One building was built on the site. This building houses the concession stand, bathhouse, pavilion events building and filter building. Paved parking areas are located to the north and east of the aquatic center. The stormwater detention basin located on site remained.

The newly developed Derby Aquatic Center

Prepared by the Kansas Department of Health and Environment, Bureau of Environmental Remediation, Remedial Section. June 9, 2005.

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section
VCP/Brownfields

Joint Effort Facilitates Redevelopment of Brownfields Property

Background:
Leavenworth made an application to the Voluntary Cleanup and Property Redevelopment Program (VCPRP) in response to Kansas Department of Health and Environment (KDHE) Brownfields Targeted Assessment (BTA) findings of petroleum contamination ranging up to 96,000 mg/kg of the Heritage Court property. BTA activities were performed to address environmental concerns associated with historical land use redevelopment consideration. Prior to 1988, the subject property has had an extensive industrial history, specifically stove manufacturing and steel manufacturing/fabrication, dating back to the mid 1800s.

Solution:
Voluntary Cleanup Plan activities consisted of excavation and offsite disposal of petroleum-impacted soil. Soil removal occurred in two specific areas, Excavation 1 and Excavation 2, to mitigate the soil contamination characterized.

Contaminated soil excavation and removal.

Approximately 345 cubic yards of petroleum-impacted soil were removed from Excavation 1 and Excavation 2. Impacted soils were removed and treated off-site. Post removal soil data sampling indicated removal actions effectively addressed the petroleum contamination. Therefore a No Further Action determination was issued for the property. Redevelopment occurred after the NFA decision and the property is now a carousel museum.

Excavated drum before taken off-site

Benefits:

- **345 cubic yards of petroleum-impacted soil removed.**
- **Property redeveloped into riverfront carousel museum.**

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Brownfield Redevelopment Program

El Dorado Theatre

Background:

The El Dorado Theatre was accepted into the Kansas Department of Health and Environment's (KDHE) Brownfields Redevelopment Program on November 10, 2002. An application for a Brownfields Targeted Assessment (BTA) was prepared by the City of El Dorado and submitted to KDHE, November 7, 2003. The BTA property consisted of a parking lot approximately one acre in size. The City proposed the property to be redeveloped as a theatre. The property consisted of an asphalt parking lot, a groomed grassy area, and a demonstration garden maintained by the Kansas State University Research and Extension Center. The objective of this BTA was to research and compile information and data related to existing and historical land use at the BTA property and adjacent properties so the uncertainties associated with environmental impacts would be identified and/or minimized prior to redevelopment.

Community/Financial Assistance:

The City was required to perform Phase I activities for the lending institution. The City also obtained a Comprehensive Development Loan from the Kansas Department of Commerce. The Economic Restructuring Committee-Part of the El Dorado Main Street Youth Commission and the El Dorado Inc., South Main Grant Committee were involved with the site reuse planning.

Abandoned parking lot.

Central Six, the newly developed movie theatre.

Phase I:

Phase I activities including historical research, indicated that the BTA property included vacant land as part of the Walnut River Channel and a parking lot. During the site reconnaissance (part of Phase I activities) of the BTA property existing utilities were located including water, sewer, electric, gas and telephone. Two monitoring wells associated with the El Dorado Maintenance Shop were identified during the site reconnaissance. KDHE recommended to the City that the monitoring wells be sampled and analyzed through KDHE's Underground Storage Tank program. The wells were sampled in February 2003 for BTEX contamination. Both wells were at or near non-detection. The results of the BTA did not identify the presence of environmental conditions of concern at the property. KDHE's Brownfields Targeted Assessment indicated no further action was necessary at the property and informed the city of the findings in April 2003.

Redevelopment:

The City formed a lease agreement between B&B Theatres and the City and 'Central Six', a six-screened movie theatre opened in November 2003.

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Brownfields Redevelopment Program

Wichita River Walk

Background:

The East River Walk Site in Wichita was accepted into the Kansas Department of Health and Environment's (KDHE) Brownfields Redevelopment Program on September 14, 2004. An application for a Brownfields Targeted Assessment (BTA) was prepared by the City of Wichita and submitted to KDHE on September 13, 2004. The property is comprised of approximately 33 acres within the city limits of Wichita. Historical property uses at the BTA Property include printing companies, retail gasoline stations, auto mechanic/auto body shops, and numerous large industrial facilities. The objective of the BTA was to research and compile information and data related to existing and historical land use at the property and adjacent properties so the uncertainties associated with environmental impacts would be identified and/or minimized prior to redevelopment. The property is located from Waterman Street south to beneath the Kellogg Avenue bridge and from Main Street west to the Arkansas River. The city intended to sell the property for redevelopment.

Photograph of Construction Activities.

Phase I and II BTA Assessments

Information collected during Phase II activities at the property indicated the presence of polynuclear aeromatic hydrocarbons (PAHs) present in soil at the site.

Boat Museum located along River Walk Corridor.

Since the contamination identified at sample locations was within the boundaries of the Gilbert and Mosley site, the contamination was addressed through the City of Wichita's current Consent Order with KDHE.

Redevelopment

The City of Wichita along with private business owners redeveloped this property into a mix of retail, entertainment, residential, and recreational uses.

Recently Constructed Gander Mountain Sporting Goods Store.

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Brownfield Redevelopment Program

Tal's Drive-In Property

Background:
In October 2001, Coffeyville USD 445 (school district) submitted an application for KDHE to perform a Brownfields Targeted Assessment (BTA) of city-owned property, which had formerly been utilized as a drive-in theater. The property was proposed as the new location of a community wide elementary school. Because the former drive-in property was located adjacent to the Sherwin-Williams Facility, a Resource Conservation and Recovery Act (RCRA) Corrective Action site, there was some concern regarding potential impacts from the Sherwin-Williams site to the former drive-in property. During the planning stages for the new school, the school district approached KDHE, EPA, and Sherwin-Williams to explore the possibility of building a new school within the contaminated area outside of the facility property and utilize a portion of Sherwin-Williams' property for parking and recreational purposes for the school.

To determine if the property had been impacted, KDHE's BTA investigation consisted of a combined Phase I and Phase II environmental assessment.

Investigation:
Brownfields Phase II sampling was conducted by KDHE in November 2001 and field screening indicated minimal lead impact. BTA data indicated localized lead impacts slightly above the KDHE residential standard. Based on these findings, the Brownfields Assessment Decision recommended soil removal and/or soil encapsulation to mitigate exposure risks.

Tal's Drive-In property prior to redevelopment.

Cleanup:
Soil removal, off-site disposal, and site restoration activities occurred in late 2002. KDHE, EPA, Coffeyville School District, Sherwin-Williams, and the City of Coffeyville worked together to resolve environmental issues related to the lead soil contamination. After the extent of contamination was determined, Sherwin-Williams Company completed remediation of the school property prior to construction activities.

Just east of the new school, Sherwin-Williams Company placed an engineered cap over approximately seven acres of their facility for use as a parking lot and baseball and soccer fields. This recreational area will be used by the school district and City of Coffeyville.

Redevelopment:
The Community Elementary School (CES) opened August 23, 2004. The 144,800 square foot facility consists of a competition gym, multipurpose/cafeteria, district central kitchen, media center, ~900 square feet classrooms, with a student capacity of 950. The Sherwin Williams-City Park collaboration provides additional school parking/hard surface play area, two little league baseball and three soccer fields, and a high school practice soccer field. A dedication ceremony was held for the project on October 9, 2004.

Funding:
The Community Elementary School is the first and only school constructed using city (community) sales tax (~48%) and the only school built using major community funding (~25%, Coffeyville City Surplus Electric Funds) to match state aid (~24%) from the Kansas Community and local district community funding (~3%). With the help of KDHE and EPA contacts, $233,000 of FEMA money was secured to construct three storm shelters designed to meet high FEMA standards.

A computer generated image of the completed project.

Prepared by the Kansas Department of Health and Environment, Bureau of Environmental Remediation, Remedial Section. October 7, 2004.

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Brownfield Redevelopment Program

Youth Extended Services

Background:
The Youth Extended Services (Y.E.S.) BTA Site in McLouth was accepted into the Kansas Department of Health and Environment's (KDHE) Brownfields Redevelopment Program in March 2002. The property had historically been used as a concrete batch plant, lumber yard, and railroad depot. In addition, the property contained a grain elevator and several rail lines transversed east/west the central portion of the Y.E.S. BTA Site. The western third of the property was densely wooded, the remaining two-thirds of the property was covered in grass, shrubs and scattered trees. The objective of the BTA was to research/compile information related to existing as well as historical land use at the property and adjacent properties so the uncertainties associated with environmental impacts would be minimized and/or identified prior to redevelopment.

Community/Financial Assistance
Funding for the construction and landscaping was provided by the USDA Rural Development Program, SRS, The United Methodist Health Ministry Fund, and public donations.

Vacant lot prior to redevelopment

Phase I and Phase II BTA Assessment
Based on the former operations at the site, several surficial soil samples were collected and analyzed for volatile organic compounds (VOCs), pesticides, semi-volatile organic compounds, metals, and PCBs.

Redevelopment under construction

Sampling results did not reveal contamination above KDHE RSK levels for a residential scenario. KDHE's Brownfields Targeted Assessment indicated no further action was necessary at the property and informed the Youth Extended Services of the findings in April 2002.

Redevelopment
The non-for-profit organization, Youth Extended Services, redeveloped the Y.E.S. BTA Site as a childcare center, which includes a single-story building, play areas, and parking lot.

Y.E.S., the newly developed childcare center

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Brownfields Redevelopment Program

De Soto Boat Ramp

Background:

Inspired by the possibility of a dream becoming a reality, Lana McPherson detailed her community's desires for a Kansas River access ramp and city park during the exercise portion of the KDHE's Brownfields Workshop in Leavenworth, Kansas, on July 13, 2005.

McPherson (City Clerk and Chair of the Sesquicentennial Celebration Committee for the City of De Soto, Kansas) previously had performed a community survey that indicated a strong desire to "get back on the river" as part of the community's 2007 sesquicentennial celebration. The city purchased two adjacent properties along the river for a future city park, setting the stage to incorporate a river access ramp and showcase both the ramp and the park as the centerpiece of the 2007 sesquicentennial.

McPherson submitted an application to KDHE on July 27th to have Brownfields Targeted Assessments (BTAs) conducted on the riverside properties located northwest of the city. KDHE's BTA program is funded through a federal grant and provides funding for Phase I and Phase II environmental assessments for redevelopment projects.

Former Sand-Dredging Facilty on the Western Most Property

Phase I and Phase II BTA Assessment:

By early October 2005, Phase I BTAs were completed at both properties. Phase I assessments did not identify any environmental concerns on the western property, where a sand-dredging facility had operated for several years. Based on these findings, the city began design and construction of the boat access ramp on the south side of the Kansas River.

Unregulated Dumping Site Located on the Eastern Property

A Recognized Environmental Condition (REC) was identified for the eastern property due to historical and unregulated use as a public dump site. A Phase II BTA was completed and approved in mid-March 2006 by KDHE in time for the public celebration of the boat ramp completion on the western property.

Based on data collected during the Phase II BTA, there were no significant environmental impacts identified at the eastern property and, therefore, no additional environmental response was necessary. However, KDHE recommended that fill and dump areas present on the property be removed to eliminate potential safety hazards to workers building the city park and future recreational users. The city should coordinate with the KDHE Bureau of Waste Management to allow for safe redevelopment of the eastern portion for recreational use.

Boat Ramp Located on Western Property in Final Stages

Prepared by the Kansas Department of Health and Environment, Bureau of Environmental Remediation, Remedial Section. May 25, 2006.

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Brownfield Redevelopment Program

Independence Skate Park

Background:

The Independence Skate Park was accepted into the Kansas Department of Health and Environment's (KDHE) Brownfields Redevelopment Program on July 14, 2003. An application for a Brownfields Targeted Assessment (BTA) was prepared by the City of Independence and submitted to KDHE on July 10, 2003. The BTA property consisted of a densely wooded vacant lot approximately 9.2 acres in size. The City wanted this property to be redeveloped as a skate park. The abandoned property was a blighted influence adjacent to the city ballpark and close to many residents with young children. The objective of this BTA was to research and compile information and data related to existing and historical land use at the BTA property and adjacent properties so the uncertainties associated with environmental impacts would be identified and/or minimized prior to redevelopment.

Community/Financial Assistance:

The City Commission developed a task force of interested citizens to help design, locate, and implement rules and regulations for the proposed skate park. The task force consists of nine volunteers and a skate park designer. The BTA property was obtained by the City through a joint donation by several individual owners. Following the Phase I and Phase II Assessments, the Skateboard Taskforce had planned to apply for recreational grants from other agencies to help fund the construction of the skate park.

Evidence of illegal dumping on the BTA property.

Phase I:

Phase I activities indicated that the BTA property was historically utilized as an asphalt and concrete paving construction company, leaving construction equipment and debris. In addition, illegal dumping had occurred on the property. Based on Phase I results, Phase II activities were initiated to evaluate soil and ground water quality.

Phase II:

During Phase II activities (intrusive sampling) 31 soil samples and two ground water samples were collected from ten locations. The samples were analyzed for volatile organic compounds, total petroleum hydrocarbons, nitrate, pesticides and RCRA metals. Analytical results from these samples did not indicate significant environmental contamination at the property. One ground water sample indicated arsenic, chromium, and lead concentrations slightly above Kansas Tier 2 Risk-Based Levels; however, because the collected samples were not filtered for dissolved metals, the elevated metal detections were attributed to sediments in the sample. Further, one additional adjacent (side-gradient) ground water location did not indicate detectable metal concentrations.

KDHE's BTA Assessment Decision indicated no further action was necessary at the site and informed the city of the decision in November 2003. City crews and equipment were utilized for the clearing of debris and vegetation on the property. As of June 2004, the City of Independence is in the planning and design stage for the construction of the skate park. The 100'x150' concrete pad for the skate park is planned to be completed by fall 2004.

Prepared by the Kansas Department of Health and Environment, Bureau of Environmental Remediation, Remedial Section. July 6, 2004.

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