

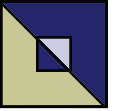
OHIO BROWNFIELD REDEVELOPMENT TOOLBOX



A Guide to Assist Small and Rural
Communities in Redeveloping
Ohio's Brownfields



Ohio Environmental Protection Agency
John Kasich, Governor
Craig W. Butler, Director



The Brownfield Redevelopment Toolbox was developed by the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) State Response Program and Brownfields Operation Task Force and adapted by Ohio Environmental Protection Agency (EPA).

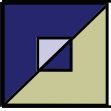


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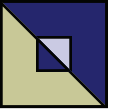
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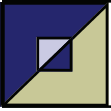
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Introduction:

What are Brownfields?

In Ohio, brownfields are defined as 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). Brownfields 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 as brownfields include: abandoned gas stations, old factory and mill complexes, foundries, junkyards, mine-scarred lands, and other under-utilized or abandoned properties.

Why is Brownfield Redevelopment Important?

Brownfield 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 brownfields reduces urban sprawl, increases the tax base, cleans up the environment, encourages urban revitalization, reduces the costs to the community associated with adding infrastructure, and creates jobs for the surrounding community. Redeveloping brownfields links economic vitality with environmental protection.

What Would Be the Advantage of Having a Brownfield Revitalization Plan For My Community?

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



JISCO, Jackson





About the Brownfield Redevelopment Toolbox

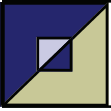
Purpose of this Toolbox

The purpose of this toolbox is to explain the brownfield redevelopment process in straightforward terms, and to provide rural and smaller city governments with a systematic, start-to-finish, guide to brownfield redevelopment. The toolbox identifies five (5) steps in the brownfield renewal process, along with a brief summary of each step, answers to a series of frequently asked questions (FAQs), lists and summaries of the state and federal tools available, and incentives local governments may want to utilize in pursuing redevelopment of a brownfield site in their community. A list of questions is presented at the end of steps 1 through 3; based on the answers, the reader is directed to the appropriate next step for that project.

How to Use this Document

This toolbox provides a framework for successful brownfield project implementation. Familiarize yourself with this toolbox prior to initiating a brownfield redevelopment project and refer to it throughout the various stages of your project. The toolbox is comprised of five steps, where each step corresponds to a step in the brownfield renewal process. Keep in mind, the brownfield 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 brownfield project.

1. For a general overview of the brownfield redevelopment process, review the narrative summary provided at the beginning of each section.
2. Next, be aware that each brownfield 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 that already has a completed environmental assessment, 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 Brownfield." 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 Brownfield Renewal Process:

The toolbox breaks the brownfield renewal process into five (5) steps:

Step 1: Site Identification and project planning

Step 2: How to determine if you have contamination on your site

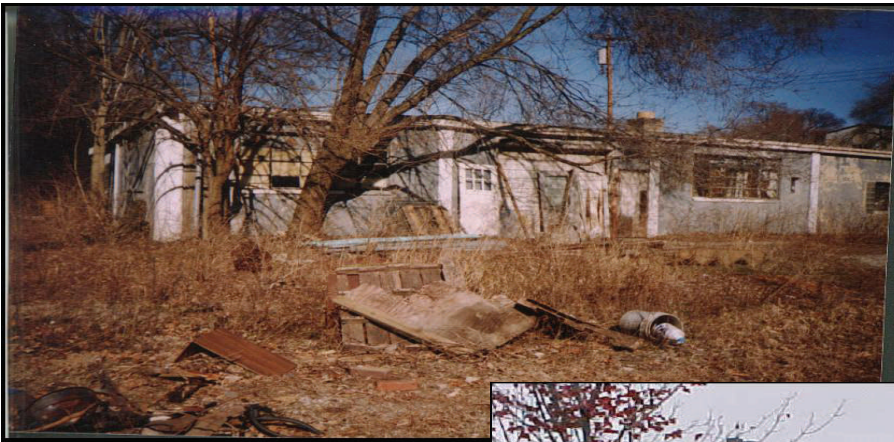
Step 3: Cleaning up your site

Step 4: How Ohio EPA can help when a site is contaminated

Step 5: The End of the Line – Redevelopment of your brownfield!

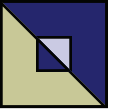
The toolbox summarizes some of the federal tools available nationwide. Each step also contains a section headed “Ohio Tools and Information”. In these sections, Ohio EPA refers to information on programs, incentives, guidance, funding and other state-specific tools available to local governments. In these sections Ohio EPA may also provide information on how a local government can best access the available federal tools and incentives. It is very important to review Ohio-specific information and work with Ohio EPA staff throughout the brownfield redevelopment process.

Finally, the toolbox contains a list of useful documents and a comprehensive glossary of brownfield-related terms and acronyms. The referenced documents and glossary provide you with additional information you can use to better understand the issues and terminology often encountered during the brownfield redevelopment process. Ohio EPA’s Voluntary Action Program (VAP) and Site Assessment and Brownfield Revitalization program (SABR) are also excellent resources.



Rookwood Commons, Hamilton Co.





Step 1: Site Identification and Project Planning

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

Experience has shown that successful brownfield 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 brownfield properties, planning ahead is extremely important.

Whether your community's goal is to develop a comprehensive revitalization plan for multiple brownfield 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 or properties, and determine how the property or properties will be redeveloped and/or marketed for redevelopment. Considering these issues early on can make a big difference in successfully meeting your community's brownfield revitalization goals. The FAQs, recommended activities, and available tools below provide information to help you understand the process and guide your community through the site identification and project planning phase.

Activities and Available Tools

If you have identified brownfield properties 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, town or village. Some questions you should consider for each brownfield property are:

- Does your community want to clean up brownfield 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 a brownfield?
- Does your community have (or want to develop) a comprehensive plan for revitalizing its brownfields?





Revitalization Team

If the answer to any or all of the above questions is yes, your community may want to consider forming a “Revitalization Team”. A Revitalization Team is typically a mix of public and private parties from your community who have an interest in fostering well-planned, successful brownfield redevelopment. The team can be as 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 Revitalization Team, it can be quite helpful to contact other local communities, private entities or professionals with previous brownfield experience. State and federal agencies have programs for brownfield assessment and cleanup. They may have lists of local government and private contacts that are well-versed in brownfield issues and would be happy to share their knowledge. Visit U.S. EPA’s brownfields homepage at: www.epa.gov/brownfields. Also visit Ohio EPA’s SABR and VAP homepages at www.epa.ohio.gov/derr/SABR/sabr.aspx and www.epa.ohio.gov/derr/volunt/volunt.aspx, respectively, or call (614) 644-2924 to speak with Ohio EPA staff.



Determining the Intended Use for Brownfield Property

The intended use of a property plays an important role in the brownfield 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 re-developed for residential use. Therefore, it is important to consider potential redevelopment plans from the outset of any brownfield project.

If the intended use is not known at the beginning of the project, the community representatives or Revitalization Team should make every attempt to identify the general type of desired development, whether industrial, commercial, or 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-Led Brownfield Activities

Federal Financial Assistance

Forming a Revitalization Team and determining the best use of your community's brownfields are important first steps but ones that do require resources. U.S. EPA offers brownfield grants on a periodic basis (usually once a year, with grant application rounds normally beginning in the fall) to assist communities with various activities related to brownfield revitalization. One of the grants U.S. EPA makes available to communities is the Brownfield Assessment Grant. This grant provides funding for property characterizations and assessments and activities to conduct planning and community involvement related to brownfield sites. This grant can also provide funding for conducting brownfield inventories (see section below). In addition to funding for assessments, grants are awarded for cleanup and establishing revolving loan funds.

More information about the Brownfield Assessment Grant can be found on U.S. EPA's Brownfield Web page at: www.epa.gov/brownfields/assessment_grants.htm.

State Financial Assistance

Financial and technical assistance are available from several Ohio agencies. Ohio EPA's VAP offers technical assistance, which provides guidance regarding assessment and cleanup options for your brownfield property. Subsidized VAP technical assistance may be available at no cost to local governments.

See www.epa.ohio.gov/portals/30/vap/docs/Technical%20Assistance.pdf or call (614) 644-2924 for more information.

Ohio EPA also offers subsidized targeted brownfield assessments (TBAs) to local governments, which can help offset some of the costs of Phase I and Phase II environmental site assessments. More information about TBAs can be found on Ohio EPA's Web page at: www.epa.ohio.gov/derr/ACRE/sifu/fieldtechasst.aspx.

Ohio EPA's Division of Environmental and Financial Assistance (DEFA) provides loans for projects that benefit local waterways and drinking supplies. The Water Pollution Control Loan Fund (WPCLF) provides financial and technical assistance for a wide variety of projects to protect or improve the quality of Ohio's rivers, streams, lakes, and other water resources. WPCLF assistance is available for qualifying activities to reduce or avoid non-point source water pollution, including brownfield cleanup.

Ohio Department of Development (ODOD) also provides various types of financial assistance to local governments that may enhance your brownfield projects. More information can be found on ODOD's web page at development.ohio.gov.

See Appendix B for detailed information about and contact information for the financial and technical assistance programs available from the state of Ohio.

Brownfield Inventories

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 brownfield inventories. Local units of government have access to historical documents that can help determine which properties meet the definition of a brownfield, and



can conduct title searches to determine ownership. The local government and its Revitalization Team will also be in a good position to know which of these brownfield 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 brownfield inventories after receiving training from the Revitalization Team or other state or local experts. You may want to enlist the help of a local volunteer service organization to maximize your brownfield inventory efforts.

You may also wish to place your brownfield on the Ohio Brownfield Inventory. Placement of your brownfield properties on this statewide inventory may help to attract developers and end users for your property.

More information about the Ohio Brownfield Inventory can be found on Ohio EPA's Ohio Brownfield Inventory Web page at: www.epa.ohio.gov/derr/SABR/brown_dtb/browndtb.aspx or by calling (614) 644-2924.

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 Appendix A for a list of planning resources.

For more information on tools and financial resources to assist you with project planning and site identification that are specific to your state, refer to Appendix B of this document.

Determining Your Next Step

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

- Has your community identified a property or properties where redevelopment is complicated by real or perceived environmental contamination, and the nature and extent of that contamination is not known?
⇒ Go to step 2, "How to determine if you have contamination"
- Has your community identified a property or properties where contamination exists and the nature and extent of that contamination has been documented?
⇒ Go to step 3, "How to determine if you need to clean up your site"
- Has your community identified a property or properties where contamination exists, documented the nature and extent of contamination, and analyzed the risks posed by that contamination?
⇒ Go to step 4, "How Ohio EPA can help when a site is contaminated"
- Has your community evaluated cleanup options for a brownfield project and selected a remedial action?
⇒ Go to step 5, "The End of the Line – Redevelopment of your Brownfields!"



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

Once you have identified potential brownfields 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 conducting an environmental site assessment, which includes a review of historical records, an inspection of the site and, quite often, collecting and analyzing soil and ground water samples.

FAQs:

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 brownfield site, 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 Inquiries rules (see the AAI FAQ below), can limit your liability under the federal Superfund law. In addition, an environmental site assessment conducted in accordance with Ohio EPA's VAP rules can be used as part of a no further action letter (NFA) when requesting a covenant not to sue (CNS) from the state. A VAP CNS, issued by Ohio EPA after a property completes a VAP cleanup, releases the owner (and anyone else with an interest in the property) from any future requirements to conduct additional investigation and cleanup on the property.

For more information about the VAP and the CNS go to step 4 of this document or see

www.epa.ohio.gov/derr/volunt/volunt.aspx.

Who performs the environmental site assessment?

Environmental site assessments are typically conducted by environmental consultants 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. To comply with VAP rules, an environmental site assessment must be conducted by a VAP certified professional (CP).

For more information on hiring an environmental consultant, access the U.S. EPA Web site at

www.epa.gov/brownfields/aai/HiringEP_Addendum_factsheet.pdf.

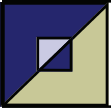
For a list of VAP CPs, see Ohio EPA's Web site at

www.epa.ohio.gov/portals/30/vap/docs/CP/rptVAPCP.pdf or call (614) 644-2924.

Who pays for the assessment?

Assessment costs are typically paid by the prospective purchaser, although under certain circumstances Ohio EPA may be able to conduct part of these assessments at no cost to the municipality under its Targeted Brownfield Assessment program. Funding for assessment may be available for properties in certain parts of Ohio from the Clean Ohio Assistance Fund. Assessment can also be paid for with a U.S. EPA Brownfield Assessment Grant. For more information about these programs, see Activities and Available Tools below.

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How much will the assessment cost?

The cost of an environmental site assessment varies according to the size and complexity of the brownfield project. In general, the cost of a Phase I site assessment ranges from approximately \$5 to \$8 thousand. A Phase II assessment generally costs between \$50 and \$150 thousand.

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 make access rights and permission to conduct an environmental assessment part of their pre-purchase agreement with a property owner.

What is meant by “all appropriate inquiries” (AAI)?

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

Prospective property owners who were never involved in any practices that might have contaminated the property (aka 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.

In addition to the CERCLA liability release, many banks and lenders require an AAI compliant Phase I environmental site assessment before they will lend money for the purchase or

cleanup of potentially contaminated property.

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

Does my state require cleanup of this property?

Assessment and cleanup of properties must be done in conformance with the requirements of both U.S. EPA and those of the state of Ohio. Ohio law only requires a brownfield site to be cleaned up if certain types of activities are occurring or have occurred at the site. For example, the site may be required to conduct cleanup under U.S. EPA's Resource Conservation and Recovery Act (RCRA) program if certain hazardous wastes were treated, stored or disposed of on the site at some point during the site's history. Ohio EPA can field questions about site history and provide you with information regarding whether or not there might be a regulatory obligation to cleanup the site. Private attorneys, specializing in environmental regulation, can also help with this type of inquiry.

Might an environmental assessment performed several years ago meet the 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 initial assessment and the actual property transfer.

Older environmental site assessment reports can be updated to reflect the current site conditions in order to meet AAI and VAP requirements.

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.

In order for a Phase I assessment to be VAP compliant, it must be performed at least in part by a VAP CP. In order for the Phase I assessment to meet AAI requirements, it must be performed by an environmental professional as defined in the AAI rule. All VAP CPs, as well as many other environmental consultants, meet the environmental professional definition.

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, lead-based paints, mold, and radon. It should be noted that a Phase I conducted in accordance with Ohio EPA's VAP rules only addresses hazardous substances and petroleum. The VAP does not have authority under statute to address nor provide liability release for contaminants such as radon, lead-based paint or mold. 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. A VAP NFA may likely be able to be issued with just a Phase I assessment if this is the case.

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 determination of 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 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 may be appropriate to involve your state program to comment on the relevance and adequacy of the effort.

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 regarding 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".

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 brownfield sites contaminated with petroleum or hazardous substances. See www.epa.gov/brownfields/assessment_grants.htm for more information.

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

Determining Your Next Step

The following questions were developed to help determine your next step in the brownfield 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 Brownfields!"
 - ⇒ 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 Brownfields!"
- Does the contamination pose a risk to human health or the environment?
 - ⇒ If yes, then cleanup will likely be necessary, so go to step 3 "Cleaning Up Your site".
 - ⇒ If no, and it does not affect the future use of the property, then go to step 5, "The End of the Line – Redevelopment of Your Brownfields!"
- 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 a deed notice 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 Ohio EPA 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 brownfield redevelopment process.

FAQs:

How do you know when a property needs to be cleaned up?

After conducting environmental assessments as described in step 2, if your sampling results exceed Ohio EPA's Voluntary Action Program cleanup levels or the risk assessment indicates that a potential risk to human health or the environment exists, 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 hire an environmental consultant to work with you to develop and implement a plan to address the contamination at your site. 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 contact Ohio EPA's VAP and ensure that any cleanup work you are planning to conduct will meet the necessary requirements. See step 4 for more information regarding Ohio EPA's primary brownfield cleanup program.

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 Ohio EPA for more information about these remediation techniques. You may also wish to seek VAP technical assistance from Ohio EPA for more detailed guidance on cleanup options for your particular property. VAP technical assistance may be available at no cost to local governments. See www.epa.ohio.gov/portals/30/vap/docs/Technical%20Assistance.pdf or call (614) 644-2924 for more information.

What types of cleanup might be necessary at brownfield sites?

Soil, sediment and ground water 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 the most stringent of standards (e.g., for residential or unrestricted use), institutional controls (ICs) may be required as part of the cleanup. ICs 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.

ICs 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

(Continued on page 18)



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and the environment as a more exhaustive cleanup. Some examples of ICs include easements, activity and use limitations, restrictive covenants, well drilling prohibitions, deed restrictions, zoning restrictions, and special building permit requirements.

In Ohio, a law known as the Uniform Environmental Covenants Act was passed in late 2004 which affect many of the cleanups overseen by Ohio EPA. This law now makes it a requirement to restrict land use and/or ground water use for certain sites where a cleanup has been conducted, but the contamination was not cleaned up to levels where it would

be safe for a person to live at the site for a long period of time. For example, if the cleanup was conducted to be safe for commercial use, land use would be restricted to commercial use under a restrictive covenant. When a restriction is required under this law, both the director of Ohio EPA and the owner of the property must approve the land use and/or ground water use restrictions and those restrictions must be legally filed on the deed to the property by the property owner.

More detailed guidance on developing these use restrictions, known as environmental covenants, when cleaning up a site in the VAP can be found at www.epa.state.oh.us/derr/vap/docs/VAP_UECA_guidance.pdf.

Activities and Available Tools

Types of cleanups for brownfield sites

The type of cleanup required at a brownfield site depends on a number of factors. These factors include location, type and amount of contamination 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 brownfield sites include the use of institutional controls (see IC FAQ above) and engineering controls. U.S. EPA has published a compendium on cleanup options that can be found at 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 development process.

Importance of determining future use of the property

Brownfield redevelopment 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 brownfield redevelopment project is, “Will a return on my investment be realized?” To determine that, you need to know what the cost of cleanup will be.

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 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.

State acknowledgement of completion of cleanup

One of the benefits of conducting a cleanup under the VAP is that in return for completing cleanup to the satisfaction of the state, you receive a release from liability, or CNS when you and your certified professional complete the cleanup. The CNS 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. For more information about how the VAP provides acknowledgement of completion of a brownfield cleanup, refer to step 4 or see www.epa.ohio.gov/derr/volunt/volunt.aspx.

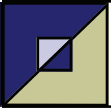
Loans and grants available for funding cleanup

One of the biggest barriers to cleanup of brownfield properties is financial resources. U.S. EPA brownfield cleanup grants are an excellent source of funding for cleanup of brownfield properties (see step 1, "Site Identification and Project Planning"). 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 Brownfields Cleanup Grant can be found on U.S. EPA's Brownfields web page at: www.epa.gov/brownfields/cleanup_grants.htm. Also see appendix A for a list of other federal or regional loan and grant programs.

Another potential source of cleanup funding may be grants or loans from the ODOD. ODOD has a brownfield revolving loan fund. This revolving loan fund allows all types of entities (including local governments, port authorities, for-profit and non-profit organizations) to borrow money to fund assessment and cleanup of brownfields at low interest rates. More information about ODOD's brownfield revolving loan fund can be found at development.ohio.gov/ud/BCRLF.htm or by calling (614) 995-2292.

For more information on tools and financial resources to assist you with project planning and site identification that are specific to Ohio, refer to appendix B of this document.



Determining Your Next Step

- Have you completed cleanup prior to redevelopment?
 - ⇒ Go to step 5 “The End of the Line – Redevelopment of your Brownfields!” for assistance in marketing or developing your brownfield 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 Brownfields!” for assistance in marketing your brownfield site.
- Do your cleanup activities require institutional controls and have they been appropriately filed and recorded according to applicable statutes and regulations?
 - ⇒ Go to step 4, which provides contacts and information specific to the requirements of Ohio EPA.
- 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 Brownfields!” for assistance in marketing your brownfield 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, which provides contacts and information specific to the requirements of Ohio EPA.



Springfield Cancer Center, Springfield





Step 4: How Ohio EPA Can Help When a Site is Contaminated

Cleanup can be conducted under a variety of programs in Ohio. Depending on whether the site falls under a regulatory requirement to conduct cleanup will often dictate which cleanup program rules or requirements must be followed. For example, sites with petroleum underground storage tanks that have leaked may be required to conduct cleanup under Ohio's Bureau of Underground Storage Tank Requirements (BUSTR). More information about the BUSTR program can be found on their Web site at www.com.ohio.gov/fire/bustMain.aspx.

Sites that have treated, stored or disposed of hazardous wastes over the years may be required to cleanup under the requirements of Ohio EPA's Division of Hazardous Waste Management (DHWM). More information can be found on DHWM's Web site at www.epa.ohio.gov/dhwm.

Many brownfield sites are not required to conduct cleanup under a specific Ohio law or requirement; however, site owners or others with interest in the site may want to clean up the site in order to address any possible environmental liability that may exist. For these sites the primary brownfield cleanup program in Ohio is Ohio EPA's VAP.

FAQs:

Who conducts the VAP cleanup?

There is flexibility as to who conducts a VAP cleanup. Any person can serve as the volunteer, which is the person(s) who takes the site through the cleanup process under the VAP. It does not necessarily have to be the owner or a party who is responsible for the contamination. If the property is cleaned up in accordance with the VAP requirements and receives a liability release or CNS from Ohio EPA, that release applies to the property and all who have interest in the property.

What sites are eligible for the VAP?

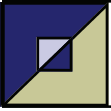
Sites not subject to other Ohio or Federal cleanup programs are eligible for the VAP. In general, if a site is not required to conduct cleanup under another federal or state cleanup program, such as the RCRA or underground storage tank program, and is not under enforcement by Ohio or U.S. EPA to conduct cleanup, the site can utilize the VAP. More specific eligibility requirements can be found in the VAP's Eligibility Rule at www.epa.ohio.gov/portals/30/SABR/docs/Rules/3745-300-02.pdf.

What is the schedule for cleanup under the VAP?

VAP is privatized so cleanup is conducted on the schedule that suits you by a licensed environmental professional you hire. The VAP regulations provide A-Z directions for investigating and cleaning up a property. The VAP licenses environmental professionals, known as Certified Professionals or CPs, who can conduct work under the program and provide Ohio EPA the final documentation that the site has been properly cleaned up (however, only Ohio EPA can issue the liability release). Therefore, volunteers can hire a CP and set their own schedule for completion of the VAP investigation and cleanup. If a CNS is desired, Ohio EPA has timeframes they must adhere to for review and issuance, or denial, of a CNS.

What type of liability release does the VAP provide?

The CNS, or liability release, runs with the property. When a CNS is issued for a site after Ohio EPA determines that all of the VAP requirements have been met and the property is protective of human health and the environment, the CNS is recorded with the deed for the property. This means the liability release runs with the land so that whoever purchases, or operates or has interest in the property in the future benefits from the CNS liability release.



Activities and Available Tools

Financial incentives and financial assistance

There are many federal and state financial incentives available for brownfield cleanup that are discussed in appendices A and B. For brownfield properties participating in the VAP, there are specific incentives available.

One incentive is grant-funded technical assistance which is available to public entities that have ownership or an interest in a property they would like to see cleaned up under the VAP. This assistance allows for review of technical documents and other assistance needed by the volunteer and CP conducting the voluntary cleanup to be performed by Ohio EPA staff free of charge. For more information about grant subsidized technical assistance in the VAP see www.epa.ohio.gov/portals/30/vap/docs/Technical%20Assistance.pdf.

Another incentive is the tax abatement every property can receive when a CNS is granted and a remedy was performed at the property. The abatement, which is issued as an order by the Ohio Tax Commissioner, covers the increase in the assessed value of the land and the increase in value of any improvements, buildings, fixtures and structures that exist at the time tax abatement is granted. The abatement lasts for 10 years.

For more information on the VAP, please see www.epa.ohio.gov/derr/volunt/volunt.aspx.



Columbus Auto Parts, Columbus





Step 5: The End of the Line – Redevelopment of Your Brownfields

By working through steps 1 through 4, you have quantified the environmental concerns at your brownfield site. You have either addressed those environmental concerns through cleanup or institutional controls, or you have documented them for a future developer to address as part of development. 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.

You may be redeveloping the property yourself instead of seeking to sell 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.

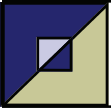
This section:

- 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 a brownfield 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 or market the site once clean up 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.



FAQs:

If my property has a deed restriction, institutional control or environmental covenant 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 a deed restriction, 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-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 Ohio EPA 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 appro-

priately 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 the state or its designees. Other documents of interest may include the AAI report, assessment reports, and documentation of remediation activities. Ohio EPA has copies of these documents in their 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 Ohio EPA 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 brownfield property to the right audience at little or no cost. One example of an effective marketing tool is a state or local brownfield inventory. Information on how to add a property in need of or undergoing assessment or cleanup to Ohio EPA's Ohio Brownfield Inventory can be found at:

www.epa.ohio.gov/derr/SABR/brown_dtb/browndtb.aspx or by calling 614-644-2924.





Activities and Available Tools

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

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

Tip for Success No. 2 – Establish clear goals

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

Tip for Success No. 3 – Identify available tools

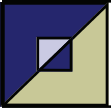
Use your redevelopment plan to identify and utilize appropriate tools throughout redevelopment.

Tip for Success No. 4 – Work to make your site(s) “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 assure success.



APPENDIX A: 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)

www.epa.gov/brownfields

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

THINK ABOUT... using assessment grants to identify and prioritize Brownfield 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.

Technical Assistance to Brownfields Communities (TAB)

cobweb.ecn.purdue.edu/~mhsrc/page_tab.htm

The TAB program has been established as part of EPA's Brownfields Initiative to help communities clean and redevelop properties that have been damaged or undervalued by environmental contamination. The purpose of these efforts is to create better jobs, increase the local tax base, improve neighborhood environments, and enhance the overall quality of life. The TAB program provides assistance to community groups, municipalities, developers and industries in the states located in EPA Region 5, which includes Ohio.

Sustainable Management Approaches and Revitalization Tools - electronic (SMARTe)

smarte.org

SMARTe is an international brownfield cleanup and redevelopment support system developed by a partnership between U.S. EPA, the German Federal Ministry of Education and Research, and the Interstate Technology Regulatory Council. SMARTe provides tools to help local governments, developers and others at every stage of brownfield assessment, cleanup and redevelopment process.

U.S. Department of Housing and Urban Development (HUD)

www.hud.gov/offices/cpd/economicdevelopment/programs/rc/resource/brwnflds.cfm

Provides block grants and competitive awards for revitalizing entitlement communities (targeted to state and local governments), offers federally-guaranteed loans for large economic development and revitalization projects, typically in entitlement communities (targeted to state and local governments), 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.

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

**Appalachian Regional Commission (ARC)**

www.arc.gov/index.do?nodeId=1765

ARC provides grants for roads and highways (targeted to state and local governments in the 13 Appalachian states), and offers planning and technical assistance to attract private investment to distressed areas to support new uses (targeted to local governments and development districts/non-profit entities in some cases).

Contact Eric Stockton
Appalachian Regional Commission
1666 Connecticut Avenue
Washington, DC 20009-1068
(202) 884-7752
estockton@arc.gov

THINK ABOUT... tapping ARC funding to meet site access, roads and similar infrastructure support needs of projects, including mine scarred lands; or helping cover planning costs at sites being reused.

U.S. Department of Agriculture (USDA)**Forest Service**

www.fs.fed.us/r9/urbanconnections

The Forest Service provides technical assistance for projects in selected areas (targeted to EPA grantee, 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 a limited number of cities, with plans to expand.)

Rural Development Agency (RDA)

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 - 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)

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 at reviving industrial areas; street, utility, port, and other infrastructure needs at project sites; site revitalization planning; site marketing.

**Small Business Administration (SBA)**

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 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)

www.nps.gov/rta/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... enhancing redevelopment projects with parks and open space amenities.

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

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... plugging 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)

www.doleta.gov

DOL offers technical assistance linked to job training and workforce development in Brownfields Showcase Communities.

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



U.S. Department of Transportation

Federal Transit Administration (DOT)

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.

Federal Highway Administration (FHWA)

www.fhwa.dot.gov/environment/bf_disc.htm

The 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 to provide transportation related access or amenities that enhance site value.

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

www.treas.gov/press/releases/po3060.htm

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; tapping into programs to expand capital access for small businesses that could locate at a redevelopment site.

Federal Housing Finance Board (FHFB)

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)

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)**

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, 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; linking site design needs at contaminated waterfront properties to end use planning.

U.S. Department of Defense (DOD)**Army Corps of Engineers**

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

Executes projects emphasizing ecosystem restoration, inland and coastal navigation, and flood and storm damage reduction that may be contaminated property-related, 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; defining Corps-eligible projects like riverbank restoration can enhance property revitalization efforts.

Office of Economic Adjustment

www.oea.gov

Provides extensive information on redevelopment of closed military base properties – models developed may be useful to other types of contaminated property community stakeholders.

Department of Energy (DOE)**Office of Energy Efficiency and Renewable Energy/Center of Excellence for Sustainable Development.**

www.smartcommunities.ncat.org

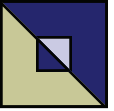
This DOE office serves as a resource center on sustainable development, including land use planning, transportation, municipal energy, green building, and sustainable businesses.

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.

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



Not-For-Profit Resources

National Association of Development Organizations (NADO)

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 and rural America. They have released a series of documents specifically addressing reclaiming such properties in rural America all of which are available on their website. Their resource guide is highly recommended reading for brownfield stakeholders and can be found at 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)

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)

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 sponsor webcasts aimed at empowering localities to revitalize their communities through the exchange of strategies, tools, and best practices for brownfield cleanup and reuse.

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



APPENDIX B: State Resources

Ohio EPA

Site Assessment and Brownfield Revitalization (SABR)

www.epa.ohio.gov/derr/SABR/sabr.aspx The SABR program serves as a first contact for local governments seeking information about brownfield assessment and cleanup. SABR staff can direct local governments, developers and property owners to the programs that best suit their situations. SABR also serves as the contact point for targeted brownfield assessments.

Voluntary Action Program (VAP)

www.epa.ohio.gov/derr/volunt/volunt.aspx

Ohio's VAP provides a mechanism for voluntary environmental assessment and cleanup leading to liability release from the state of Ohio. Projects going through the Memorandum of Agreement (MOA) track of the VAP also receive liability release from U.S. EPA. The VAP can provide technical assistance to any volunteer. Technical assistance may be available to local governments at no cost.

Division of Environmental and Financial Assistance (DEFA)

www.epa.ohio.gov/defa

DEFA administers the WPCLF, which provides financial and technical assistance for a wide variety of projects to protect or improve the quality of Ohio's rivers, streams, lakes, and other water resources. Planning, design, and construction assistance is available for both public and private applicants. DEFA also administers the Water Supply Revolving Loan Account (WSRLA), which provides financial assistance for the planning, design and construction of improvements to community water systems and non-profit non-community public water systems.

Ohio Department of Development (ODOD)

Clean Ohio Fund (COF)

clean.ohio.gov/

The Ohio Department of Development, through its Urban Development Division, is working to assist communities with their brownfield redevelopment goals. In consultation with the Ohio EPA, the Division is responsible for implementation of the \$200 million brownfield component of the Clean Ohio Fund. The Clean Ohio Fund is a family of programs developed as statewide tools for preserving greenspace and farmland, improving outdoor recreation and remediating brownfields. The Clean Ohio Revitalization Fund and the Clean Ohio Assistance Fund are the financial instruments for cleaning up environmentally contaminated, unused or underutilized former commercial or industrial property (brownfields). The goal of the Funds is to aid communities in creating wealth and economic prosperity through the revitalization of brownfield property. These goals are accomplished through projects which will not only bring an economic benefit but also environmental improvement to communities across the State.



Brownfield Revolving Loan Fund (RLF)

development.ohio.gov/ud/BCRLF.htm

The Brownfield RLF capitalized by a grant from U.S. EPA offers below-market rate loans to assist with the remediation of a brownfield property to return it to a productive economic use in the community. One million dollars of this fund is administered jointly with BUSTR, and can be used for former gas stations in addition to hazardous waste brownfield properties.

**Job Ready Sites Program (JRS)**

development.ohio.gov/edd/obd/jrs

JRS is funded by a \$2 billion public works and economic development bond package that includes \$150 million in bond proceeds to be issued from 2005-2012. These funds may be applied to brownfield sites. Contact the Ohio Department of Development Economic Development Division to find out if JRS is appropriate for your brownfield site.

Industrial Site Improvement Fund Program (ISIF)

development.ohio.gov/edd/obd/IndustrialSiteImprovementFund

The primary purpose of the ISIF program is to assist geographically and/or economically disadvantaged counties around Ohio in the expansion and modernization of buildings, remediation of environmentally contaminated property and completion of other infrastructure improvements at sites used primarily for commercial or industrial activities.

Business Incentives: Loans and Grants

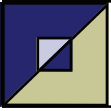
development.ohio.gov/EDD/Loans_Grants.htm

ODOD administers a number of grants, loans and bonds that can be used for cleanup, redevelopment and infrastructure costs. Generally, the following programs require a particular end-use and/or a job creation commitment: the Ohio Enterprise Bond Fund, Volume Cap Program, 166 Direct Loan, Regional 166 Direct Loan, Pioneer Rural Loan, Rural Industrial Park Loan, Urban Redevelopment Loan, Innovation Ohio Loan Fund Program, and the Research & Development Investment Loan Fund Program.

Business Incentives: Tax Credits

development.ohio.gov/EDD/Tax_Credit.htm

ODOD lists a number of tax credit programs that may apply to your brownfield project, such as those pertaining to Enterprise Zones or Community Reinvestment Areas. Some of these tax credit programs are administered by other state agencies, such as the Department of Taxation and the Department of Job and Family Services; contact information is provided to the appropriate office.

**APPENDIX C: Acronyms**

AAI	All Appropriate Inquiry
BUSTR	Bureau of Underground Storage Tank Requirements
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)
CNS	Covenant Not to Sue
DEFA	Division of Environmental and Financial Assistance
DHWM	Division of Hazardous Waste Management
EPA	Environmental Protection Agency
IC	Institutional Control
NFA	No Further Action letter
ODOD	Ohio Department of Development
RCRA	Resource Conservation and Recovery Act
SABR	Site Assessment and Brownfield Revitalization program
TBA	Targeted Brownfield Assessment
VAP	Voluntary Action Program
WPCLF	Water Pollution Control Loan Fund
WSRLA	Water Supply Revolving Loan Account

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