EPA
United States
Environmental Protection
Agency

REVITALIZATION-READY

A Guide to Revitalizing Land in Your Community

SUMMARY OF THE REVITALIZATION-READY GUIDE

The Revitalization-Ready Guide (Ready Guide) provides a general process for evaluating a brownfield property and identifying actions needed to bring it back to productive reuse. The Revitalization-Ready Workbook is provided as a companion to the Ready Guide to document, support and facilitate the decision-making process for the redevelopment of underutilized and/or abandoned properties that may be contaminated. The Revitalization Workbook Manual is also provided to identify the questions associated with tabs in the Workbook and provide guidance on entering data into each worksheet.

This guide incorporates all the concepts and processes outlined in the Process for Risk Evaluation, Property Analysis and Reuse Decisions (PREPARED) Guide and expands on the PREPARED Workbook to provide communities and non-government organizations with the information and tools to evaluate development opportunities and attract developers. It streamlines the approach outlined on the PREPARED Workbook, updates the regulatory discussions to include recent regulatory and policy changes, and incorporates fact sheets and guidance developed since the PREPARED Workbook was published. The Ready Guide was developed in conjunction with Environmental Protection Agency (EPA) contractors having expertise in both private-sector and public-sector redevelopment projects involving brownfield properties. It represents some of the potential methodologies that might be used.

Each community should apply its own judgment in deciding how the Ready Guide can help its city or town and what is appropriate for the specific needs and purposes. Further, while much of the emphasis in this guide will be on issues stemming from a property's environmental conditions, other factors commonly associated with real estate development projects that will need to be taken into account are discussed. Below are other important limitations and disclaimers that apply to the use of this guide.

DISCLAIMERS

General Disclaimer: This document describes a general approach that can be used to evaluate information and guide decisions regarding potential options for facilitating reuse of properties. It does not address all information, factors or considerations that may be relevant. The word "should" and other similar terms used in this document are intended as general recommendations or suggestions that might be generally applicable or appropriate and should not be taken as providing legal, technical, financial or other advice regarding a specific situation or set of circumstances. EPA does not offer any guarantees or warranties for or relating to the acquisition of or other involvement in a contaminated or formerly contaminated property.

This document may be revised at any time without public notice.

Disclaimer Regarding Statutory Provisions and Regulations: This document describes and summarizes statutory provisions, regulatory requirements and policies. It is not a substitute for these provisions, regulations or policies, nor is it a regulation itself. In the event of a conflict between the discussion in this document and any statute, regulation or policy, this document would not be controlling and cannot be relied upon to contradict or argue against any EPA position taken administratively or in court. It does not impose legally binding requirements on EPA or the regulated community and might not apply to a particular situation based upon the specific circumstances. This document does not modify or supersede any existing EPA guidance document or affect the Agency's enforcement discretion in any way.

Website or Product Endorsement Disclaimer: References in this document to any non-federal product, service or enterprise do not constitute an endorsement or recommendation by EPA. This document also provides links to non-EPA websites and documents that contain additional information that may be useful or interesting and are consistent with the general purpose of this document. References to these websites and documents, or to any specific commercial product, process, service, manufacturer or company, do not constitute an endorsement or recommendation by EPA. EPA is not responsible for the content of these non-EPA websites or documents and cannot attest to the accuracy of these websites or documents.

Revitalization-Ready

A Guide to Revitalizing Land in Your Community

Table of Contents

1 Introducing the Guide to Revitalizing Land in Your Community

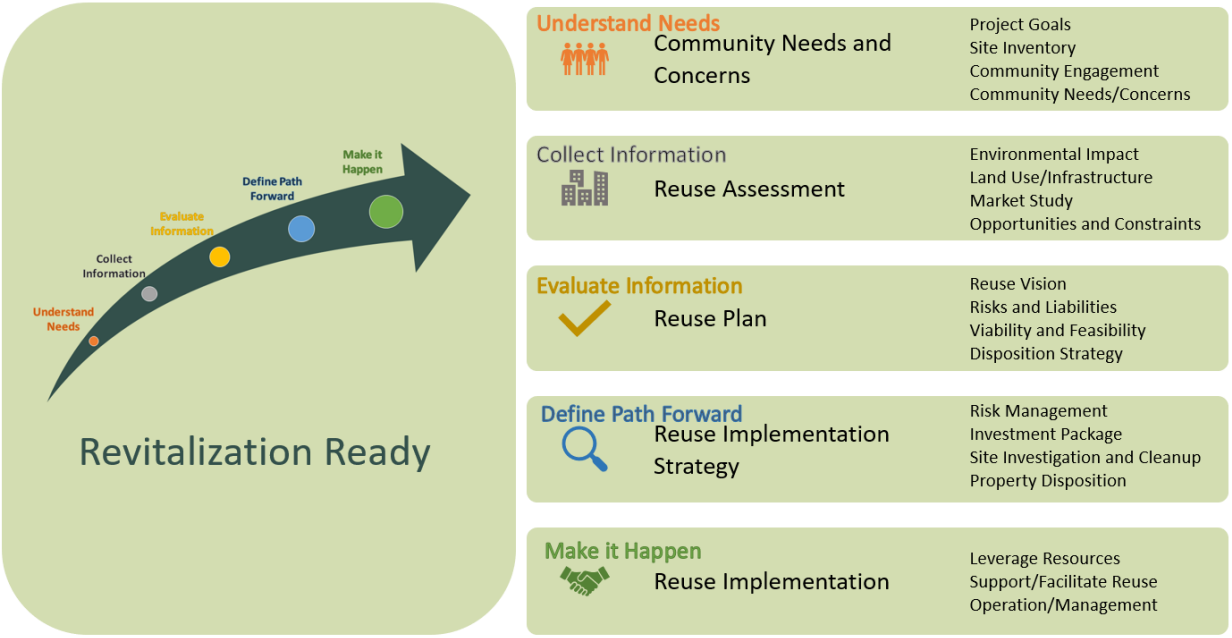
1.1 Overview

The Ready Guide is designed to help your community redevelop the contaminated, potentially contaminated, idle and underused properties in your city or town. It describes how you can initiate and lead the redevelopment process by understanding your community's needs, collecting and evaluating information, and defining the path forward to make the redevelopment happen.

Your community's decision to move forward on a redevelopment project will be based on answers to the following core questions:

- Will the selected project meet your community's needs – social, public health, environmental and economic goals?
- Is the project financially viable and realistic?
- Are the risks acceptable?
- Are the necessary resources available?

The Ready process is mapped out as five sections in this guide. Working through each section will help your community address the questions above and evaluate various property redevelopment options.



The Guide:

- Provides a general process for evaluating a brownfield property to return it to a productive reuse.
- Discusses key steps in the process of redeveloping a contaminated, potentially contaminated, idle or underused property.
- Addresses key questions and other factors that should generally be considered in implementing each step.
- Summarizes relevant background information and provides references to other sources of information.
- Provides **a Workbook** that can help guide and support the evaluation and decision-making process for a specific project.

The Guide also provides guidance for local governments interested in facilitating the cleanup and reuse of brownfields, other contaminated properties, and idled and underutilized properties. As used in this guide, the term "local government" includes local, regional and county governments; tribes; and quasi-governmental organizations. The guide information and actions can be used by states, tribes and non-governmental organizations (such as nonprofits), keeping in mind that federal and state laws provide certain liability protections and authorities that may be available only to "local government" entities.

Understanding the term "brownfield property"

This guide uses the term "brownfield" to refer to a property:

- that is abandoned, idled or underutilized and possibly contaminated;
- where contamination is suspected or is known to exist; and
- where the cleanup strategy includes safely managing residual contamination (such as maintaining a protective cover system or cap, deed restrictions).

EPA defines a brownfield as "property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."

The potential actions generally available to your community, local governments and other redevelopment entities are referred to in this guide as property disposition strategies. Several property disposition strategies are explained in this guide. These strategies may include acquisition approaches and non-acquisition approaches (e.g., transferring tax liens).

1.2 Background

This guide aims to give communities a foundational understanding of the land revitalization process, including key questions to ask when decision-makers want to identify where expert assistance might be needed and improve communication with those experts. It will not, however, make anyone an expert or avoid the need to obtain competent legal, financial or technical advice.

In an effort to ensure community vitality, a strong tax base, and the health and safety of residents, your community may face the prospect of acquiring - or taking other actions - to facilitate reuse of one or more brownfield properties.

Brownfield properties are often difficult to redevelop due to concerns regarding the environmental conditions and potential liability. In cases where contamination complicates the reuse of a property, local governments or development authorities can play a pivotal role in transforming these properties into community assets. This often becomes more important when economic slowdowns put downward pressure on real estate markets.

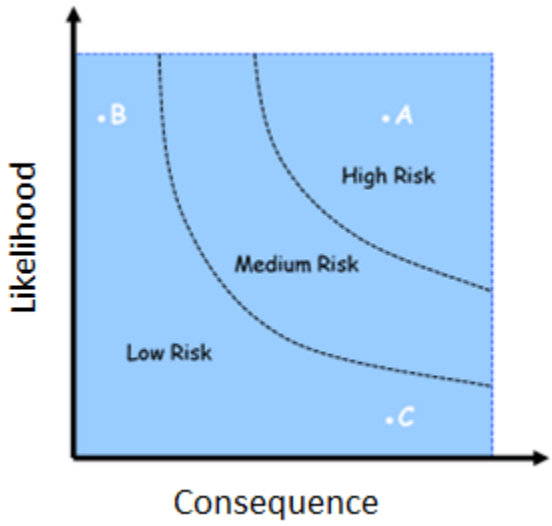
In many communities across the country, contaminated properties representing every stage in the cleanup process are being successfully reused as the result of local government involvement. This includes Superfund sites and other properties with serious environmental issues. Generally, a strong and realistic site redevelopment plan helps increase environmental protection at the site.

> Local governments or development authorities can play a pivotal role in transforming these properties into community assets.

Nevertheless, it is common for a community to struggle with potential legal liability and other complications associated with the environmental conditions of a brownfield property. This is particularly true of smaller cities or towns and nonprofits that often operate with limited in-house staff and budgets. Outside legal counsel and specialized consultants can provide essential expertise, but generally serve only in an advisory capacity. Ultimately, the burden of deciding on a course of action usually rests with local government officials or the redevelopment entity.

1.3 About Risk Management

A decision-making process generally involves an evaluation of risk. A basic premise of this guide is that project risks involving brownfield properties, like most risks, cannot be entirely eliminated — only managed.



Managing risks requires a fundamental understanding of the risks that may exist, the likelihood of those risks occurring, and the potential consequences if those risks are realized. It also involves prioritizing those risks and taking steps to contain the most significant risks within acceptable limits.

What is deemed acceptable will depend on a number of factors, such as the development entity's basic goals for the brownfield property and its general sensitivity to risk. This is a determination that must be made by local government and other officials based on the needs of the local community.

The discussion of risk in this guide includes financial risk, civil/environmental liability, and the need to balance community concerns. Generally, these risk categories are interrelated and should be considered together in evaluating a property disposition strategy. While it can be more complicated to consider several risk components at the same time, the solutions that result from comprehensive consideration of risks are generally more robust and often more financially sound.

> The solutions that result from comprehensive consideration of risks are generally more robust and often more financially sound.

Risk management is typically conducted in an iterative, staged manner. Once risks are identified, potential ways to manage these risks are considered, and the risks are reassessed.

For brownfield properties, risk management can involve traditional tools such as insurance products and indemnification agreements, state and federal settlement agreements or statutory liability protections, or other approaches such as gathering additional data, delaying acquisition until the cleanup is close to complete, or using a different method of property acquisition.

1.4 About Property Redevelopment

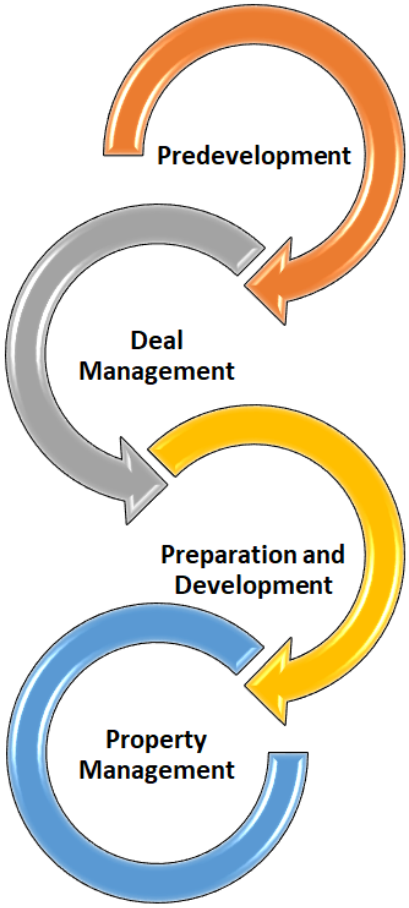
Redevelopment projects can vary greatly in their complexity and scope; however, from a developer's perspective, the commercial redevelopment process can generally be simplified into four general components:

- **Predevelopment** – Predevelopment activities often involve identifying and assessing potential reuses, conducting due diligence, obtaining access to the property to conduct environmental and other assessments of the property, and identifying potential costs and sources of funding.

- **Deal Management** – The deal is secured after the predevelopment activities have generated enough information for the developer or investor to make its decision to purchase or take control of the property and continue with the project. This typically includes negotiating contracts, obtaining financing, establishing cleanup plans, acquiring the property, and navigating the local planning process.

- **Property Preparation and Development** – Preparing and developing the property includes obtaining construction and environmental approvals, coordinating cleanup and construction activities, securing tenants, and completing the redevelopment. The developer or investor also chooses to sell or lease the property.

- **Property Management** – If the developer or investor does not sell the property, it will be responsible for several tasks involving property management long-term. These tasks may include managing the financial aspects, commercial operations, tenant issues, community relations, and any long-term environmental issues, such as operation and maintenance of any cleanup systems and components associated with the property.



Early in the process of evaluating whether to proceed with plans for the redevelopment of a property, a developer will typically attempt to weed out a project with poor or marginal investment potential and identify deal-breakers that could eliminate the project from further consideration if not addressed. These deal-breakers often result from significant data gaps and uncertainties that introduce unacceptable risk into the project.

The developer then goes through the process of refining the project evaluation to determine whether the potential benefits and return on investment from the project can justify spending the additional resources to resolve these risks and to further refine the evaluation. Oftentimes, the answer will be no, which can be an acceptable outcome. A successful reuse evaluation process is one that leads to a sound decision even if the result is that the project is ultimately abandoned. A similar approach is applied to the evaluation of potential property disposition strategies. There are, however, some fundamental differences in how private developers and local governments might conduct the reuse evaluation process.

For example, local governments may have a variety of property disposition strategies available (see Chapter 4), while developers are most often focused on property acquisition scenarios. As a result, local governments may need to perform a comparative analysis of the costs, risks and benefits of multiple property disposition strategies.

A successful reuse evaluation process is one that leads to a sound decision even if the result is that the project is ultimately abandoned.

Unlike private development projects that can be evaluated based on clear, quantifiable metrics (e.g., the return on investment), a redevelopment entity's project goals also may be based on more subjective considerations such as public safety or the need to make the surrounding area more livable. Government entities may have more flexibility to wait for a longer period of time before realizing a positive return on investment from a redevelopment project.

EPA's Anatomy of Brownfields Redevelopment provides an overview of the commercial brownfields redevelopment process. Additionally, EPA has developed the Superfund Redevelopment Mapper to help communities affected by Superfund sites reclaim and return land to safe and beneficial use. This web-based mapping tool helps stakeholders explore potential reuse opportunities by providing users with Superfund site locations and data layer options that highlight site features and site surroundings. The information in the tool can help stakeholders make informed business decisions about land reuse that align with community needs and priorities.

1.5 Let's Get Started

Review the five sections of this Guide:

- ✓ **Community Needs and Concerns** – helps you understand which property uses can best serve the broader social and economic interests of the surrounding community *(see Chapter 2)*.

- ✓ **Reuse Assessment** – helps you identify which attributes or characteristics are redevelopment strengths or weaknesses when you collect property-specific information. Summarizing these key findings helps you develop a realistic reuse plan with a greater opportunity for success *(see Chapter 3)*.

- ✓ **Reuse Plan** – helps you use the key findings and other reuse assessment information to look at a range of desired redevelopment scenarios and build a realistic vision for the reuse of the property *(see Chapter 4)*.

- ✓ **Reuse Implementation Strategy** – outlines the approach for how you will obtain regulatory approvals, determine property disposition, evaluate liability assumption or transfer, and implement the redevelopment plan *(see Chapter 5)*.

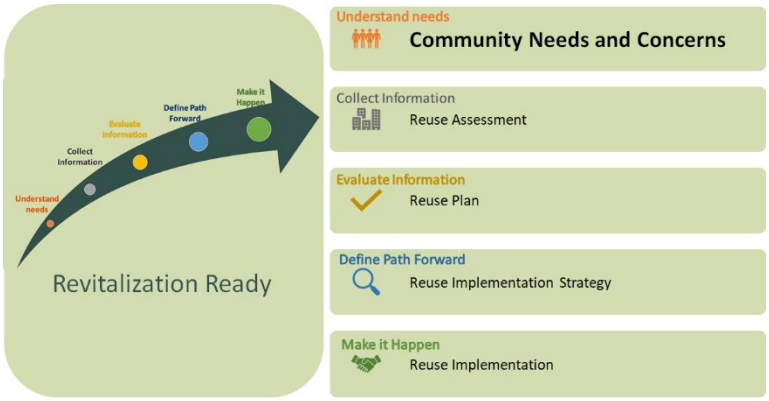
- ✓ **Reuse Implementation** – identifies the key issues that can help or hinder the success of your property reuse *(see Chapter 6)*.

Use the Workbook to help you apply the concepts to a specific project,

Follow the links to useful EPA guidance documents, and

Review the regulatory information in Appendix B.

2 COMMUNITY NEEDS AND CONCERNS



Reuse of brownfield properties may provide an opportunity to improve a community through uses that address community concerns and incorporate community needs.

The community needs and concerns process helps identify property uses that can best serve the broader social and economic interests of the surrounding community.

Uses not identified in a project's market study often become apparent through dialogue with the community.

Identifying community needs and concerns provides an understanding of the physical, social, economic and environmental context of neighborhoods adjacent to a brownfield property through the eyes of individuals who live there. It is a two-way process to gather information and enhance decision-making. The process is designed to strengthen the connectedness and increase the capacity of the community by encouraging the residents of the neighborhood to get involved in the process. Stakeholder involvement is crucial to creating a knowledge bridge between the project team and the neighborhoods.

2.1 KEY PRINCIPLES OF COMMUNITY ENGAGEMENT

Under an EPA grant, Groundwork USA provides brownfield communities with a range of community engagement approaches that support equitable and environmentally-just redevelopment. Learn how you can incorporate these approaches into a brownfield cleanup and reuse project.

Successful community engagement often is the result of the local government's (or other development entity's) and developer's willingness to work with community stakeholders to recognize and integrate specific community objectives into a redevelopment project. These objectives frequently involve issues of health and safety, job creation, affordable housing, and community character and identity. The principles discussed below are a guide for laying the foundation for a collaborative relationship with all stakeholders in a project.

2.1.1 Define the Study Area

The study area defines the community affected by a redevelopment project. It is typically the area immediately surrounding the property (or properties) to be evaluated but may extend to a broader community based on potential impacts of the redevelopment and input received during the engagement process. The study area should be initially defined to guide the initiation of the engagement process and revised based on input during the engagement process.

Defining the study area requires an understanding of the potential direct or indirect impacts by a redevelopment. The boundaries of the study area can often be determined by physical barriers such as

highways, surface water, open spaces; central areas or centers of activities such as institutions, community centers, places of worship; block or neighborhood boundaries; and demographic, economic, and social characteristics, depending upon the nature of affected community or the specific property being evaluated. The study area boundaries should be mapped to provide a visual representation of the area.

2.1.2 Gather Information/Data about the Study Area

Prior to the first meeting, gather information and data about the study area -- primarily the area immediately adjacent to the property. This information can provide a basic understanding of the area and provide a basis for initial discussions and decisions. It is important to consider that reality may be different than perception. Organizing this information in a visual format, such as a presentation on a map of the area, will provide perspective on the area. Information that should be considered includes:

- Crime – A review of 911 calls and police and fire incident reports can provide information on the issues that are important to the neighborhood and what is truly happening in the community.
- Property condition – A parcel-by-parcel survey of the area can provide a basic understanding of the condition and status of properties in the community. This information can be collected by a walkthrough of the area and from information maintained by local or county property records. Information to consider includes:
    - Occupancy – vacant parcel (no structures), occupied structure, unoccupied structure.
    - Owner – name, contact information.
    - Property tax status – current, delinquent and delinquency amount.
    - Occupancy status – owner occupied, rental.
    - Property condition – maintained, overgrown, trash/junk, abandoned vehicles.
    - Structure type - residential, institutional, hospital, school, commercial.
    - Structure condition - maintained, fire damage, boarded up and secure, damage to structure.
    - Street and sidewalk condition.

Key Principles of Community

- ✓ Define the study area.
- ✓ Gather information/data about the study area.
- ✓ Engage the community early and throughout the process.
- ✓ Envision the project as a long-term investment in the area.
- ✓ Ensure that meetings are accessible and accommodate a community's needs.
- ✓ Engage stakeholders in the neighborhoods.
- ✓ Ensure that a community has the information and resources to participate in a meaningful way.
- ✓ Establish a transparent and credible process, and provide timely follow-up.
- ✓ Establish realistic expectations for project goals and community participation.

2.1.3 Engage the Community Early and Throughout the Process

Early engagement demonstrates that community input is valued and not just an effort to gain acceptance for the project after key decisions have been made. It also reduces project costs and delays by helping to identify community concerns and issues before the project moves too far forward. Involving community stakeholders throughout the redevelopment process helps build consensus for success project outcomes. (See Section 2.2 for a discussion of stakeholders.)

2.1.4 Envision the Project as a Long-Term Investment in the Area

The local government or other development entity should consider how a specific project might be part of a broader, integrated area-wide strategy for eliminating environmental and economic barriers, and supporting a community's long-term health and vitality. When the redevelopment project is approached as a way to help revitalize a neighborhood rather than simply reuse a particular property, it is more likely to be successful at garnering and retaining community support. An area-wide revitalization strategy signals a commitment to the future welfare of the community. Area-wide planning also provides opportunities for integrating large-scale infrastructure systems (e.g., transportation and utility systems) and creating other synergies and efficiencies. In addition, developers and investors will often be more likely to invest in a particular property if it is part of a larger revitalization effort designed to transform an economically stagnant or deteriorating area. Local governments and developers can further demonstrate their commitment to the local community by providing opportunities for local businesses and residents to obtain work related to the reuse project. Such local job creation also helps to build community support for the project.

2.1.5 Ensure that Meetings are Accessible and Accommodate a Community's Needs

When planning stakeholder meetings, the goal must be to provide equal and fair access to all by eliminating barriers to community participation to ensure meetings are accessible and accommodate the community's needs. The actual measures taken should be tailored to the individual community's needs. Consider factors such as appropriate notice, the time of day, the availability of public transportation and childcare, access for the disabled, and the need for translators for non-English speakers. Community-based groups are often closely aligned with certain sectors of the community and can help in mobilizing community members to participate in the stakeholder process. Making extra efforts to reach out to the community and encourage participation sends an important message that is likely to influence public perception even before the first meeting is held. At these meetings, present the data you have gathered for discussion. This helps steer meetings away from individual agendas and opinions, and gives attendees factual information about the neighborhood. The data presented should reflect the realities of the neighborhood. The data also should provide an opportunity to discuss what the data mean to those who live there.

2.1.6 Engage Stakeholders in the Neighborhoods

In addition to meetings, walk the study area and speak to/survey individuals who live area. Walk with residents and have them tell you about the neighborhood. This can help you obtain a first-hand account of what individuals in the area consider to be challenges, as well as assets of a neighborhood. It also will help identify natural leaders of the community.

2.1.7 Ensure that a Community Has the Information and Resources to Participate in a Meaningful Way

Consensus-building functions best when all the parties involved have a basic grounding in the issues and topics being discussed. Taking the time to provide stakeholders with the information necessary to better understand the key topics and issues will generally lead to more informed and productive discussions.

For stakeholder education efforts to be effective, the information must be from a source that is viewed as trusted and neutral. This information should be appropriate for the intended audience and should be presented in a way that is not condescending to any group of stakeholders. In addition, the information and resources available to stakeholder groups should be commensurate with the complexity of the topics and issues being considered.

2.1.8 Establish a Transparent and Credible Process, and Provide Timely Follow-Up

While it may not always be possible to arrive at a clear consensus on a given issue or set of issues, it is important that the processes for soliciting input and making decisions be transparent, credible and understood. The data you have gathered will be helpful in driving decision-making and goal-setting with those involved. What are the priorities of this neighborhood based on the data? This model is data-driven and neighborhood-led.

When issuing decisions, local governments should be sure to communicate to the community how input was utilized. If community input is not incorporated into the redevelopment plans, the local government should explain why. A local government or developer also should consider informing all stakeholders of important decisions first so that stakeholders do not feel blindsided upon learning of those decisions through the media.

Other efforts to ensure transparency could include providing a note-taker at stakeholder meetings to document what was discussed and to serve as a reference point in future discussions. After the meeting, notes or minutes should be circulated and reviewed for accuracy. Timely and straightforward responses to any questions raised will help clear up potentially minor misunderstandings before they escalate into major conflict.

2.1.9 Establish Realistic Expectations for Project Goals and Community Participation

The project goals — whether they originate from the local government or the community — must be realistic and ultimately achievable. It is important to identify any constraints that might shape the project goals and vision, and communicate them as early as possible in the community engagement process. Studies that are typically conducted for this purpose, such as a market study and opportunities and constraints analysis, can inform the final development plan. Among the other constraints that may need to be considered are regulatory requirements and available local government resources. In some cases, the ability to influence the nature and timing of a redevelopment also might be limited if, for example, the property is likely to remain in private hands.

These underlying realities and competing trade-offs will provide the context in which final decisions will be made. They also will help identify opportunities where flexibility to accommodate reasonable community needs and concerns might be possible — and minimize the frustration and distraction of pursuing those that are not. (See Section 2.4 for a discussion of establishing project goals.)

*Documentation – Summarize community information (refer to Community and Demographics tabs in the **Revitalization-Ready Workbook**.)*

References:

EPA: Community Actions that Drive Brownfields Redevelopment

Groundwork USA: Best Practices for Meaningful Community Engagement Tip Sheet

2.2 STAKEHOLDERS

The successful reuse of a brownfield property requires the involvement and commitment of a diverse group of stakeholders. Various voices that need to be heard include those who:

- are or may be affected by the project;
- need to be aware and kept informed about the evaluation and decision-making process;
- can contribute information, resources or expertise; and
- whose consent or approval is important to the success of the project.

Stakeholders may be involved throughout the project development process or brought in periodically to support certain project aspects.

2.2.1 Critical Players in Brownfields Redevelopment

Involving stakeholders who can support and drive the reuse planning process and the ultimate redevelopment of the property is critical to the project's success. The number and background of stakeholders will vary based on the community and the project. Stakeholders that typically can be critical players in the redevelopment of a brownfield property include:

- Property owners.
- Developer/developer team.
- Equity investor (a fund or a wealthy investor).
- Potential buyers.
- Public sector stakeholders, including local or regional governments, neighborhood or community groups, nonprofit organizations, foundations.
- Private sector stakeholders, including investors, lenders, developers, insurers.
- State and federal regulators.
- Other parties, including environmental and legal support.

2.2.2 Brownfields Advisory Group

At the onset of the reuse evaluation process, consideration should be given to identifying an initial group of key stakeholders that are committed to the development and implementation of a successful reuse strategy. This stakeholder group may be relied upon to sponsor and move the project forward. The brownfields advisory group is a project management team tasked with facilitating and managing the reuse evaluation process, as well as overseeing the implementation strategy. Typical advisory group tasks include:

- Bring diverse groups together looking for potential synergies.
- Communicate and coordinate with stakeholders.
- Provide essential internal and external expertise (technical, legal, financial).
- Facilitate and manage the reuse evaluation process.
- Commit (some but not all) financial and other resources to the process.
- Set key goals and carry out key strategies.
- Generate and maintain synergy to keep the project moving forward.

Common brownfields advisory group candidates include representatives from the local government, community foundations, local and regional economic development agencies, a developer, and neighborhood and community associations.

*Documentation: Develop your brownfields advisory group roster, including contact information (refer to the Stakeholder tab in the **Revitalization-Ready Workbook**).*

2.2.3 Stakeholder Committee

When developing reuse strategies for a large property or a large number of properties, many communities find broader representation from a stakeholder committee is needed.

A stakeholder committee provides the expertise and human resources needed for the brownfields advisory group to conduct the reuse evaluation. The committee consists of stakeholders with a diverse range of knowledge and expertise who are willing to meet on a regular basis throughout the reuse evaluation process and implementation of the reuse strategy. The committee provides advice and expertise to the brownfields advisory group in areas such as economic/financial issues, technical issues, and legal and regulatory policies, as well as social and political issues related to the evaluation and implementation of the reuse strategy. Examples of stakeholder committee members include representatives from local and regional government agencies, business associations, community nonprofit organizations, educational institutions, and neighborhood associations, as well as local consultants, engineers, real estate professionals, and state and federal regulatory agencies.

*Documentation – Develop your stakeholder roster and contact information (refer to the Stakeholder tab in the **Revitalization-Ready Workbook**).*

2.3 Community Needs and Concerns

Community needs are gaps between the services and resources that currently exist in the community. Identifying community needs and concerns will help your community understand which reuse opportunities will address the gaps.

Take time to identify the social, health, physical, economic and environmental needs of the affected community and neighborhood. Engage various community organizations such as youth groups, educators, business organizations, churches and nonprofit organizations, as well as individual residents and local business owners. These organizations can assist local government officials in gaining perspectives on community health, environmental hazards and the social challenges affecting the residents impacted by the brownfield property and surrounding neighborhoods. Community needs and concerns may be identified by considering these needs:

2.3.1 Social

- Do individuals in a neighborhood reach out and help one another, or are individuals socially isolated?
    - Can they find a ride somewhere if they need one?
    - Can they borrow a needed tool?

    - Who in the neighborhood would they call in case of an emergency?
- Is the community experiencing blight, crime, vagrancy, reduced social capital or loss of community connectedness due to vacant, abandoned and brownfield properties?
- Is there a lack of services in the community due to the existence of abandoned and blighted properties?

2.3.2 Health

- What proportion of the community members are elderly, young, people of color, or low-income?
- What community health information exists (such as a community health improvement plan or other health agency-led assessments)?
- What are the specific public health challenges faced by residents within the reuse area, and what are their underlying causes? For example, is the community suffering from a high incidence of diabetes, heart disease, cancer, asthma or drug addiction?
- What environmental or health risks are present in the area?
- Does the community have documented health disparities?
- Is there a lack of health centers or other resources?
- Is the community considered a food desert?

Gather health assessment information from local health departments and if possible, have these broken down by zip codes or census tract areas (the smaller the unit, the better). Work with health partners to determine the underlying causes of community conditions. These could be lack of access to fresh fruit and vegetables, lead-contaminated housing or water, or poor condition of housing stock.

2.3.3 Physical

- Does the community have a general concern about physical infrastructure such as roads, condition of the sidewalks, utilities, condition of buildings, dead trees, or inadequate night lighting?
- Is there a lack of open and green space in the community?
- Is the physical condition of the property or area targeted for redevelopment causing safety concerns (abandoned and derelict structures, open foundations, compromised infrastructure)?
- Are there lots that are overgrown or not mowed, or sites for illegal dumping, tires and trash?

2.3.4 Economic

- What are the economic stressors the community is facing, such as lack of jobs, high unemployment, distressed local government budget that leads to subpar local services, or high rates of poverty?
- Has the lack of development created a reduced tax base?
- Have decreased private property values led to reduced social services to the surrounding community?
- Has there been a disruption of major economic activities, such as closing of businesses due to the pandemic?

2.3.5 Environmental

- Are there concerns regarding air quality, water pollution and presence of hazardous waste sites?
- Are there biological, physical and chemical effects resulting from site contamination, groundwater impacts, surface runoff migration of contaminants, or waste dumped on the site?

Collecting or linking baseline health and environmental measures will identify unmet community needs and concerns, and inform redevelopment planning options. For example, health monitoring or health impact assessments can show that limited access to health care services or a lack of sidewalks, recreational opportunities or food access can negatively affect the community. In this case, community representatives likely will voice needs for increased health care services, green space, parks, trails and fresh grocers during the development of project goals and objectives for site reuse.

References:

Centers for Disease Control and Prevention (CDC): Community Needs Assessment

EPA: Plan for Brownfields Redevelopment Success: Community Health Assessment

2.4 Establish Project Goals

It is essential that your community dedicate substantial, thoughtful effort to develop clear project goals. These goals will directly affect all aspects of the project strategy. Spending time early on to carefully frame the goals will ensure resources are used effectively and efficiently.

At a minimum, project goals should consider the following questions:

- What is the community's desired outcome of the redevelopment?
- How important is the redevelopment to the affected neighborhoods?
- How time-critical is the redevelopment?

Along with the project goals, the community vision (described below in Section 2.4.3) helps frame the development of a goals and objectives statement.

The first step in the project evaluation process is to clearly articulate both the community's and the project developer's goals and objectives for the project. This is accomplished by completing the following steps:

- Develop property inventory.
- Identify important community considerations.
- Describe the community's and the developer's general vision for the property.
- Craft the shared goals and objectives for the project.

2.4.1 Develop Property Inventory

Start by developing an inventory of the property or properties that are being considered for reuse. In some cases, a property may be a consolidation of multiple parcels with different owners. The purpose of this inventory is to document basic information about the property.

For purposes of the evaluation, a property is defined as one or more contiguous parcels of land. It is important to identify each parcel. Necessary data include property name, address, current owner, tax map parcel number, parcel size, appraised value, current zoning, existing structures on property, brief description of past uses, potential future use, and environmental status and tax delinquency information.

*Documentation – Develop your property inventory (refer to the Property Inventory tab in the **Revitalization-Ready Workbook**).*

2.4.2 Identify Important Community Considerations

Identify considerations that are important to the successful development and implementation of the reuse strategy: social, public health, physical and economic. Issues important to the project can include:

- Community needs and concerns.
- Budget constraints.
- Future use constraints.
- Impacts the property may have on larger development plans in the area.
- Potential "deal-breakers" or issues that would stop the project.
- Pre-existing issues that would rule out or impede certain outcomes.
- Needs and interests of the community where the project is located.

2.4.3 Describe the General Vision for the Property

The purpose of the vision is to understand potential or preferred redevelopment scenarios for a brownfield site based on stakeholder expectations. Early on in the process, identify and summarize the expectations and reasons for reuse of the property. This general vision will form the basis for the evaluation of potential reuse opportunities during the reuse planning process (see Section 4.3).

2.4.4 Craft the Goals and Objectives Statement

The goals and objectives statement for the property will describe the purpose and anticipated outcomes for the project. The statement should be as specific as possible to help stakeholders understand the project, the reasons for the redevelopment, and the reasons for the local government's (or other development entity's) involvement.

- Review the expectations for redevelopment, including the reasons for the redevelopment, potential benefits, importance and critical timing, and priorities.
- Develop a few sentences or short paragraphs that describe the goals and objectives for the property and the local government's participation in the reuse of the property. Base this text on what is known about the property, the considerations related to the property, and the expectations for the property.
- Communicate the goals and objectives to the stakeholder committee, elected officials and the public. Build a consistent message around the project and most importantly, its benefits.

2.4.5 Review and Adjust Project Goals and Objectives, as Needed

The process of redeveloping a brownfield property is an iterative one; therefore, it is important to recognize that the project goals and objectives may change based on facts discovered during the evaluation process. During the reuse evaluation process, the goals and objectives of all stakeholders should be reviewed and revised. Subsequent revisions and the reasons for revisions to the goals and objectives should be documented. This provides an opportunity to communicate changes in goals and set appropriate expectations.

*Documentation – Develop your goals (refer to the Goals tab in the **Revitalization-Ready Workbook**).*

3 REUSE ASSESSMENT

Reuse Assessment

A reuse assessment should include a review of the property location; the property's environmental condition; the surrounding community, size, and condition of buildings and other significant structures; available utilities; infrastructure and property access (e.g., roads, rail, bridges, waterways); environmental features that might limit developable space or otherwise restrict usage (e.g., wetlands, natural features, surface water, flood plains); and other relevant factors.

The reuse assessment identifies and evaluates attributes and characteristics about the property and summarizes key findings that will help develop a realistic reuse plan for a property with a greater opportunity for success. It also provides the information needed to determine the optimum role for the local government in the reuse and redevelopment process. The reuse assessment compiles information resulting from:

- Due Diligence – Identifying attributes and characteristics of the property.
    - Environmental Due Diligence – Assessing the environmental condition and regulatory issues affecting the use of the property (see Section 3.1.1).
    - Real Estate Due Diligence – Identifying available infrastructure, accessibility, easements, zoning and other characteristics to support reuse of the property see Section 3.1.2).
- Environmental Condition Impact Analysis – Assessing the impact of the environmental condition on potential reuse of a property (see Section 3.2).
- Land Use Assessment – Identifying land use options consistent with the surrounding area, local planning and zoning, and viable uses of the property (see Section 3.3).
- Infrastructure Assessment – Evaluating available infrastructure (access, transportation, utilities) and infrastructure needs to support reuse (see Section 3.4).
- Market Study - Providing insight into potential reuse options (residential, commercial, retail, industrial). It looks at information such as population, demographics and market demand (see Section 3.5).
- Opportunities and Constraints Analysis - Identifying attributes and characteristics of the property (environmental condition, available infrastructure, accessibility, easements, zoning) that provide positive or negative impacts to one or more possible uses of the property (see Section 3.6).
- Feasibility Analysis – Evaluating the economic viability of potential reuse options. This typically involves a preliminary financial analysis of a potential reuse (see Section 4.6).

Depending on the in-house capability of the local government, outside expertise may be needed to conduct or interpret the information developed during the reuse assessment. The reuse assessment also can provide insight on information gaps, which can help inform the due diligence process. Further, it can

be important in establishing what is likely to be the highest and best use of the property from both the developer's and the local government's perspectives and in determining its market value.

Information management is an important component of the reuse assessment process. Information collected during the reuse assessment should be organized and documented in a manner that:

- supports decision-making;
- is easily retrieved;
- can be presented to and understood by stakeholders and potential developers; and
- includes spatial information and graphic illustrations of key property features and the
- surrounding area (see Section 3.1.2.5).

Reference:

EPA: Plan for Brownfields Redevelopment Success: Site Reuse Assessment

3.1 Due Diligence

A fundamental component of the reuse assessment is due diligence. Due diligence is conducted to obtain and verify available information regarding the property attributes and characteristics, physical and environmental condition, ownership, and other information relevant to its potential reuse and redevelopment. Due diligence is an essential step in evaluating a property regardless of the local government's involvement in a property transaction or the property redevelopment.

The discussion of due diligence is separated into environmental due diligence and real estate (or property) due diligence. Environmental due diligence is conducted to evaluate the environmental condition of the property and to meet the requirements for all appropriate inquiries (AAI) as defined in Section 101(35)(B) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, otherwise known as the federal Superfund law). Real estate due diligence is conducted to identify attributes and characteristics about a property that affect the ability to transfer or reuse a property, such as zoning, potential liens, encroachments and building conditions.

Due Diligence

Environmental due diligence is conducted to evaluate the environmental condition of the property and to meet the requirements for all appropriate inquiries (AAI).

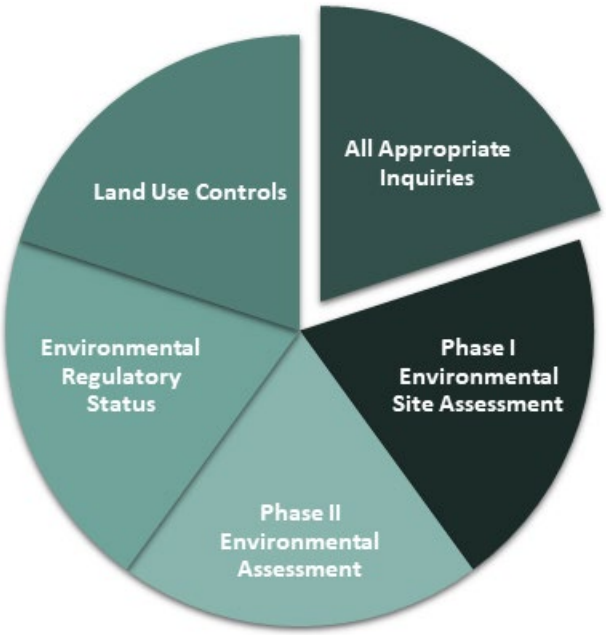
Real estate due diligence is conducted to identify attributes and characteristics about a property that affect the ability to transfer or reuse a property.

Due diligence is typically conducted by a number of different entities:

- An environmental professional conducts environmental due diligence (sometimes referred to as a Phase I environmental site assessment) to identify potential releases of hazardous substances and petroleum products at the property, as well as other environmental conditions, including mold, radon, and asbestos.
- Real estate professionals or attorneys may be engaged to conduct title searches, property value assessments and other real estate-related issues.
- Engineers may be needed to evaluate buildings and other physical conditions potentially affecting reuse of the property.

3.1.1 Environmental Due Diligence

Environmental due diligence is conducted to gather specific information about the environmental condition of a property. An environmental investigation is necessary to identify the presence or potential presence of hazardous substances or petroleum in environmental media (e.g., soil, groundwater, surface water, sediment) and in building materials. It should include:



- Documentation of the storage and handling of hazardous substances and petroleum products and other activities on the property that are or may be the source of releases of hazardous substances and petroleum products to environmental media.
- Environmental investigation and remedial actions previously conducted or planned on the property, and their status.
- The regulatory status (e.g., per applicable regulatory programs such as the Resource Conservation Recovery Act [RCRA], underground storage tanks [USTs] programs, state voluntary cleanup programs; local, state or federal oversight agency; administrative or other consent orders impacting the property; permits) of the property and activities on the property.
- Parties responsible for investigating and conducting remedial action on the property (responsible parties).
- Restrictions resulting from the environmental condition and environmental restrictions associated with any remedial action conducted on the property (institutional controls and engineering controls).

The environmental due diligence process typically begins with a Phase I environment site assessment (Phase I ESA). In many cases, the Phase I ESA also is conducted to meet the requirements for all appropriate inquiries established under CERCLA and set out in EPA regulations. AAI regulations outline specific pre-acquisition requirements for prospective property owners, including individuals and local governments, to qualify for protection from environmental liability under CERCLA as an innocent landowner, bona fide prospective purchaser (see Section 4.4.1.1.2 for discussion of bona fide prospective purchaser), or a contiguous property owner. Even if a local government is not anticipating liability under CERCLA, conducting environmental due diligence in accordance with AAI requirements can offer protection from other potential

Make sure to verify that the Phase I ESA conducted for a property meets the requirements for AAI regulations. AAI need to be performed prior to taking title to the property if an entity wants to take advantage of CERCLA liability protections.

liabilities and often informs risk management decisions (discussed in greater detail in Appendix A). For example, a prospective purchaser can qualify as a bona fide prospective purchaser (which includes all appropriate inquiries) because a third party can sue under CERCLA to recover costs even if EPA has not identified the property as a Superfund site. For this reason, make sure to verify that the Phase I ESA conducted for a property meets the requirements for AAI established in CERCLA and set out in EPA regulations. The all appropriate inquiries regulations recognize a Phase I ESA conducted in accordance with ASTM Phase I ESA standards as compliant with AAI requirements (see Section 3.1.1.2).

A Phase I ESA, and the generally accepted business practice for doing so, is most often conducted in accordance with the ASTM E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Based on the results of a Phase I ESA, additional investigation commonly referred to as a Phase II ESA may be necessary to better understand the type and extent of any potential releases to environmental media at the property. The following sections describe Phase I and II ESAs and all appropriate inquiries, and provide additional information on conducting environmental due diligence. Section 3.6 discusses how the information collected during the due diligence process is used to identify redevelopment obstacles and how such information may aid in the evaluation of the local government's involvement in the redevelopment of the property.

3.1.1.1 Phase I Environmental Site Assessment

What recognized environmental conditions are present on the property?

Generally, the Phase I ESA does not involve the collection of samples for chemical analysis (although some states may require such at this stage); rather, the Phase I ESA involves a visual inspection of the property, review of historical information, interviews with individuals familiar with the property, and review of regulatory files. The purpose of the Phase I ESA is to identify recognized environmental conditions (or conditions indicative of releases or threatened releases of hazardous substances) on a property. When conducting a Phase I ESA (or all appropriate inquiries), information also may be collected to identify and characterize public health issues (e.g., trash, rodents) and safety issues (e.g., broken windows, damaged fencing) that may require action on the part of the current property owner or local government. A Phase I ESA (and all appropriate inquiries) must be overseen or supervised by an environmental professional. (See Section 3.1.1.2 and EPA's Brownfields All Appropriate Inquiries webpage for additional information on a Phase I ESA and all appropriate inquiries.)

If a local government is evaluating a property for which a Phase I ESA was previously conducted, the Phase I ESA should be reviewed and updated to ensure that the most current information on the environmental condition of the property is included in the Phase I ESA report. Further, if an existing Phase I ESA is to be used to meet all appropriate inquiries requirements, the previous Phase I ESA must be reviewed and updated if the Phase I ESA is older than one year at the time of property acquisition (see Section 3.1.1.2). In addition, certain aspects of a Phase I ESA (i.e., interviews, lien searches, on-site inspection, and records review) must be updated if the tasks were conducted more than 180 days prior to the acquisition date of the property.

The Phase I ESA also may include visual inspections or records reviews for other potential environmental issues that may go beyond the general scope of the ASTM Phase I ESA standards. These additional potential issues, such as mold, radon, and asbestos, may be important to the future use, disposition or redevelopment of the property. An evaluation of the presence of any of the conditions listed below should be considered as part of a Phase I ESA when evaluating the reuse of a property:

- Asbestos-containing building materials, polychlorinated biphenyl (PCB)-containing transformers or ballasts, lead-based paint.
- Potable drinking water (where supplied by wells).
- Mold.
- Radon.
- Wetlands.
- Threatened and endangered species.
- Earthquake hazard.
- Vapor intrusion (i.e., volatile contaminants entering the air space of a building from underlying soils or groundwater).

What is a Recognized Environmental Condition?

A recognized environmental condition (REC) as defined in ASTM 1527-13 means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products under conditions in compliance with laws (e.g., permitted discharges).

Under this definition, a recognized environmental condition could relate not only to spills, releases or other unauthorized disposal of hazardous substances or petroleum products, but also to permitted or otherwise authorized discharges or disposal activities.

3.1.1.2 All Appropriate Inquiries

Does the Phase I ESA meet all appropriate inquiries requirements?

Meeting the requirements for AAI is necessary to potentially qualify for certain CERCLA liability protections. EPA published a final rule establishing standards and practices for conducting all appropriate inquiries that became effective on November 1, 2006. The AAI final rule, as amended, recognizes ASTM E1527-13 and ASTM E2247-16 - Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland and Rural Property as compliant with the requirements for all appropriate inquiries.

AAI must be overseen or supervised by an environmental professional. Under the AAI rule, an environmental professional is defined as someone who possesses sufficient specific education, training and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases of hazardous substances on, at, in, or to a property, sufficient to meet the objectives and performance factors of the AAI rule. (Note: The ASTM E1527-13 and E2247-16 standards reference the definition contained in EPA's AAI final rule [40 CFR § 312.10]).

All appropriate inquiries must be conducted or updated within one year before the date on which the property is acquired (i.e., the date on which the new owner takes title to the property). Certain aspects of the AAI investigation must be conducted within 180 days prior to the date the property is acquired.

These aspects include interviews; recorded environmental lien searches; federal, tribal, state and local government record reviews; visual inspections; and the environmental professional declarations. They must be updated prior to the property acquisition.

Required activities and other considerations in AAI include, but are not limited to:

- Definition of an environmental professional – Qualifications for and certification by environmental professionals performing due diligence work.
- Interviews – Interviews with past and present owners, operators and occupants of the facility to gather information about hazardous substances on the property.
- Historical sources of information – Previous activities and land uses since first development available from reviews of chain of title documents, aerial photographs, building department records, land use records, and other sources.
- Search for environmental cleanup liens – Searches for recorded environmental cleanup liens filed under federal, state or local law.
- Review of government records – Review of federal, state and local government records (e.g., waste disposal records, underground storage tank records, and hazardous waste handling, generation, treatment, disposal, and spill records).
- Visual inspections – Identification of likely environmental conditions associated with the use, handling, storage or disposal of hazardous substances or petroleum products on the land (e.g., surface staining, distressed vegetation, trash, disposal areas, and aboveground or underground tanks) or structures (e.g., hazardous substances or petroleum stored or used within buildings or other structures).
- Observations of adjoining properties - A walkthrough of the area surrounding the property to observe activities, conditions and land use associated with adjoining properties.
- Specialized knowledge or experience – Taking into account the prospective purchaser's knowledge about the property and adjoining properties.
- Purchase price – Consideration of the relationship of the purchase price to the value of the property if the property was not contaminated.
- Knowledge of property – Commonly known or reasonably identified information about the property.
- Potential for hazardous substances – The degree of obviousness of the presence of hazardous substances and the ability to detect hazardous substances at the property.

An important part of the AAI investigation is the visual inspection of the property. This requires access to the property and its buildings and other structures. In cases where access cannot be obtained after all good faith efforts are employed, the AAI rule provides for a limited exemption to the visual inspection requirement that requires the environmental professional to:

- visually inspect the property by another method (e.g., aerial imagery) or from an alternate vantage point (e.g., walking the property line);
- document efforts taken to gain access to the property;
- document the use of other sources of information to determine the existence of potential environmental contamination; and

- express an opinion about the significance of the failure to conduct a visual inspection or the ability of the environmental professional to identify conditions indicative of releases or threatened releases.

References:

ASTM: ASTM E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process

ASTM: ASTM E2247-16 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property

EPA: Brownfields All Appropriate Inquiries

EPA: EPA Brownfields Grants, CERCLA Liability, and All Appropriate Inquiries

EPA: All Appropriate Inquiries: Reporting Requirements Checklist for Assessment Grant Recipients

3.1.1.3 Phase II Environmental Site Assessment

Is additional assessment needed to investigate recognized environmental conditions?

The Phase II ESA is an investigation that requires collection and analysis of environmental and other media samples (e.g., soil, groundwater, electrical equipment, insulation). The Phase II ESA will generally require that an access agreement is in place with the current property owner (if one exists) or other action to gain the access needed to collect the samples.

The Phase II ESA is intended to determine if a release of a hazardous substance or petroleum product is present in an area where an environmental condition was identified. The focus of the Phase II ESA is to investigate recognized environmental conditions to determine the type and extent of any release to environmental media that has occurred. The ASTM E1903-19 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process provides guidelines for conducting a Phase II ESA. The scope of a Phase II ESA will be specific to the property and to the environmental condition subject to further consideration.

The scope for a Phase II ESA should be developed in consultation with an environmental professional or other individual qualified in environmental investigations and should include:

- Identification of the environmental or other media to be sampled.
- Number of samples to be collected.
- Analytical method to be used or specific hazardous substances and petroleum products to be evaluated.
- Target levels (e.g., state or federal standards, action levels or screening levels) above which potential further action is warranted.

The Phase II ESA may need to be conducted in several phases based on the extent of the identified environmental conditions and financial considerations of the local government or responsible entity. For example, where there is a significant amount of additional investigation to be conducted, the local government may want to prioritize specific actions for the Phase II ESA to first address the environmental conditions that will have the most impact on project objectives. The results of the initial

Phase II ESA will then help in determining what additional investigation may be needed. Subsequent investigations may be needed to resolve other issues, such as determining the extent and severity of a release.

Reference:

ASTM: ASTM E1903-19 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process

3.1.1.4 Environmental Regulatory Status

What federal and state cleanup statutes are likely to apply to the property?

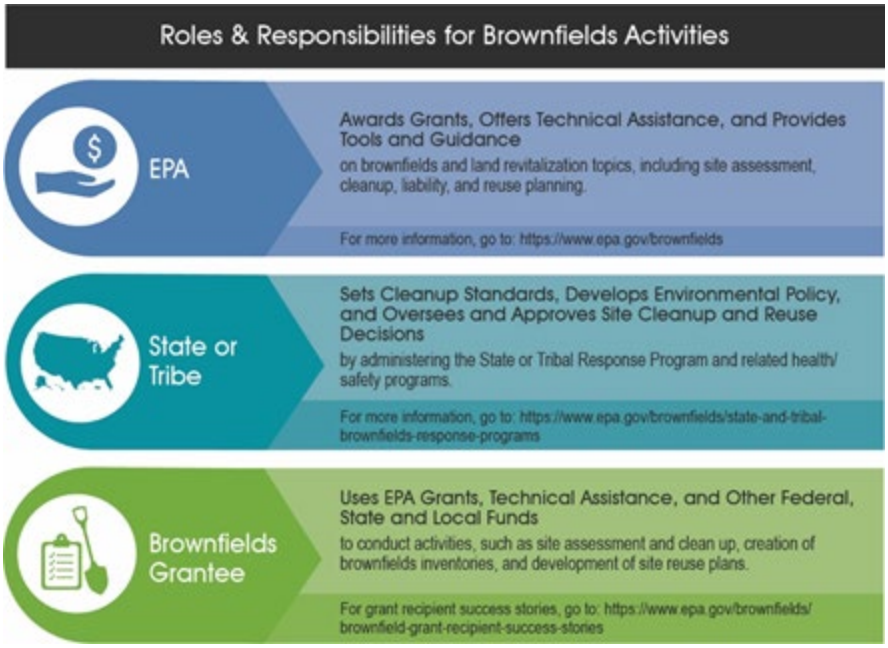
Determining the regulatory status of the property is an important objective of environmental due diligence. Issues of environmental liability, regulatory process and other considerations relevant to redevelopment efforts are all dependent on which federal, state and local environmental laws could apply based on the environmental conditions, operating practices and other factors. Proper coordination with the regulatory programs having jurisdiction over the property's cleanup also depends on having this information. Relevant regulatory programs are discussed in more detail in Section 4.4.1

Federal statutes that are commonly associated with the investigation and cleanup of a brownfield property are:

- Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), commonly known as Superfund.
- Resource Conservation and Recovery Act (RCRA) (Subtitles C, D and I), Resource Conservation and Recovery Act (RCRA) Overview.
- Toxic Substance Control Act (TSCA), Policy and Guidance for Polychlorinated Biphenyl (PCBs)
- Clean Air Act (CAA), Overview of the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP).

There are a number of other federal environmental statutes that also may be relevant to a redevelopment project. For example, the management of runoff from the property could be regulated by the Clean Water Act, and any impacts on source water for public water supplies by the Safe Drinking Water Act. Identifying the applicability of these and other statutes also should be a part of the environmental due diligence process.

It is important to identify the regulatory agency that is responsible for overseeing the cleanup of the property. The cleanup of brownfields generally is overseen by state voluntary cleanup programs (VCPs).



Other properties, such as Superfund sites or sites contaminated with PCBs, must be cleaned up in accordance with federal (EPA) standards. In the case of properties regulated under some federal statutes, such as RCRA, implementation and enforcement of the relevant cleanup program may be delegated by EPA to the state. In such cases, EPA authorizes the state environmental agency to oversee and enforce corrective action or cleanup requirements, in lieu of the federal program. State environmental agencies should be consulted regarding the applicability of state or federal cleanup requirements to any particular property. This is particularly the case for underground storage tanks (USTs) regulated under state UST programs and many brownfield sites that may be eligible for cleanup under state voluntary cleanup programs. Many of the state voluntary cleanup coordinators can facilitate and coordinate compliance with overlapping federal and state requirements.

The federal Brownfields Program is authorized under CERCLA to provide funding for the assessment and cleanup of certain brownfield properties so that the properties can be restored to a beneficial reuse. The program provides funds to assess and clean up brownfields and to enhance state and tribal response programs.

3.1.1.5 Land Use Controls

Are there land use controls implemented or identified for the property?

Land use controls may consist of institutional controls or engineering controls used alone or in combination to ensure protection of human health and the environment. Institutional controls are non-engineered administrative or legal controls that minimize the potential human exposure to contamination by restricting the activities or use of a property or the use of a resource such as groundwater. Institutional controls are generally divided into four categories:

- Proprietary controls (e.g., easement, real covenant, statutory covenant).
- Government controls (e.g., zoning, building permit, land use ordinance).
- Enforcement and permit tools (e.g., consent decree, permit, order).
- Informational devices (e.g., deed notice, government advisory, state registry).

Engineering controls are physical or engineered measures. Engineering controls will vary from property to property, depending on the contaminants found and the type of media impacted. Common engineering controls include:

- Asphalt, concrete or clean fill caps to create a cover to address issues such as surface water infiltration or direct contact with contaminated soil.
- Engineered caps along with leachate collection systems associated with closed impoundments and landfills.
- Active or passive vapor mitigation systems used to minimize potential migration of volatile vapors for subsurface soil or groundwater to indoor air.
- Groundwater barriers or systems used to limit or prevent groundwater migration.

What are Land Use Controls?

Land use controls may consist of institutional controls or engineering controls used alone or in combination to ensure protection of human health and the environment.

Institutional controls are non-engineered administrative or legal controls that minimize the potential human exposure to contamination by restricting the activities or use of a property or the use of a resource such as groundwater.

Engineering controls are physical or engineered measures such as fences, caps or treatment systems designed to limit direct contact with contaminated areas or control migration of contaminants through environmental media.

Other terms, such as activity and use limitations, are sometimes used to describe these types of controls. Institutional controls and engineering controls must be maintained, monitored and evaluated for as long as unacceptable risks are present at a property. Land use controls are an integral part of the overall cleanup; failure to comply with land use controls can result in endangering human health or the environment, and cause the party responsible for maintaining the land use controls to incur costs to repair any resulting damage, face lawsuits from injured parties, or even jeopardize eligibility for liability protections under CERCLA and other environmental statutes.

If land use controls already exist, it is important that the local government understands the obligations they impose and how they might be viewed by future owners, developers and property users. In some situations, EPA or the state may be willing to modify existing land use controls to facilitate the appropriate reuse of the property providing the cleanup will not be compromised. Where land use controls are being considered by the regulatory agencies but have not been finalized, there may be opportunities for local governments to weigh in on the final form they will take. Vague, confusing or unnecessarily restrictive or inflexible land use controls also can create significant obstacles to property reuse.

Regardless of whether they own or lease the property, local governments often play a key role in implementing, monitoring and enforcing certain land use controls, particularly those that they have the legal authority to implement (e.g., zoning restrictions, building or excavation permits, well construction permits). Local governments also can work proactively with developers, prospective buyers and tenants,

and other parties to ensure that land use control requirements are understood and properly integrated into the planning and future reuse of the property.

References:

EPA: Superfund: Institutional Controls

EPA: Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites

EPA: Engineering Controls on Brownfields Information Guide: How They Work with Institutional Controls; the Most Common Types Used; and an Introduction to Costs

*Documentation – Summarize the environmental status of the property (see the Environmental tab in the **Revitalization-Ready Workbook**)).*

3.1.2 Real Estate Due Diligence

Real estate due diligence is conducted to understand the administrative requirements and physical conditions that might affect the reuse of a property and determine whether or not the vision for a property is achievable. The reuse assessment requires information regarding the property attributes and conditions and other information relevant to its suitability for a potential reuse, including:

- Property value.
- Ownership.
- Parcel boundaries.
- Encumbrances on the property.
- Property features.
- Development codes, policies, and relevant plans and planning studies.
- Previous development plans.

An American Land Title Association (ALTA) survey can be a helpful tool to support real estate due diligence. The ALTA survey is a detailed land parcel map showing boundaries, existing improvements of the property, utilities, encumbrances such as easements and other features such as the location of flood zones.

3.1.2.1 Property Value

What is the market value of the property?

The local government needs to have a sense of the current market value of the property that reflects its physical and environmental condition. This evaluation should consider current property tax assessments, as well as historical sale values in the area. If there are appraisals, especially recent ones,

these are useful in determining the appropriate current and future values of the property given potential reuse scenarios.

Real Estate/Environmental Value Pyramid

The value of the property may need to be adjusted to include additional costs associated with the environmental condition of the property and cleanup requirements that may transfer with the property. Knowledge of these costs can be factored into the purchase price if the local government intends to acquire the property or can enhance the property's marketability if the goal is to facilitate redevelopment by a third party. Properties where the cost of cleanup exceeds the market value (i.e., upside down properties) typically will require financial assistance or other incentives from a local government for the property to be of interest to the real estate community.

If a local government intends to acquire the property by exercising eminent domain, it should determine if state law allows adjustment of the purchase price to reflect cleanup costs. Otherwise, the local government may be forced to pay considerably more for the property than its actual discounted value. A May 2008 report by the Northeast-Midwest Institute provides a summary of how different states address this issue (see Mothballed Sites and Local Government Acquisition: How State Liability Protections, Eminent Domain Reforms, and Cost Recovery Authority Can Spur Local Government Action to Acquire and Redevelop Difficult Brownfields Sites)

3.1.2.2 Ownership

What is the ownership status?

A local government's involvement will depend not only on who holds title to the property, but also on the owner's intentions regarding the ownership or disposition of the property. In addition, the local government should assess the owner's willingness (or unwillingness) to work cooperatively with the local government. In many cases, abandoned, mothballed or underutilized properties may present a liability for the property owner. Such situations may create opportunities for local governments to discuss a collaborative arrangement that will provide an incentive for the current owner to sell or otherwise dispose of the property. (See Section 4.8.1 for a discussion of some risk management considerations associated with the ownership status.) A working relationship with the owner can facilitate property access for conducting environmental assessments and can potentially avoid adversarial actions.

3.1.2.3 Parcel Boundaries

What tax parcels make up the development area?

A property or area being considered for redevelopment may consist of multiple tax parcels. Identify the parcel boundaries, assessor or parcel identification number, parcel address and other information that may be important to the transfer or reuse of the property. In some cases, the potential reuse may involve multiple properties. For purpose of the evaluation, a property is defined as one or more contiguous parcels of land. It is important to identify each parcel making up a property so that subsequent evaluation includes information for each parcel. Identify any discrepancies between property surveys and assessor parcel/tax records.

Information on tax parcels can generally be obtained from the city or county auditor or assessor. These agencies typically have a web-based real estate property search or mapping application that can provide the parcel, ownership and tax information.

Locating Property Records

Parcel information can be obtained online using mapping or database search tools or by contacting the county assessor's office.

The parcel information typically includes ownership, parcel identifiers, acreage, tax status, and other relevant information.

Large properties may consist of multiple parcels generally owned by the same individual or entity.

3.1.2.4 Encumbrances on the Property

Are there encumbrances on the property that will affect potential reuse?

Encumbrances can include liens, easements, deed restrictions and other limitations that can restrict the ability to transfer title to the property or impact the ability to reuse a property for a desired purpose. Encumbrances on the property can be detected through a title search and review of a land survey such as an ALTA survey.

3.1.2.4.1 Liens

Although title issues are not unique to brownfield properties, it is not uncommon to find that a brownfield property is abandoned or that owners declared bankruptcy or dissolved corporations that held title to the property. The prospect of complicated and time-consuming efforts to resolve these ownership issues can be a deal-breaker for many potential developers that might otherwise be interested in the property. Through foreclosure and other means, local governments may be able to obtain clear title and remove this potential impediment.

The types of liens that might encumber the property include those associated with mortgage, contractor or commercial services; federal, state and local tax delinquencies; and federal and state environmental response actions (i.e., environmental cleanup liens). If EPA or the state expended resources at a property as the result of environmental investigations, cleanup or other response actions, liens often are recorded on the property to establish that the state or EPA is due compensation, and if the lien is perfected, the relevant agency sues to recover these costs.

For example, CERCLA provides for two types of liens on properties where EPA conducted remedial or removal response actions:

- The first type of lien is for all costs for which EPA expended resources and for which the property owner is liable.
- The second type of lien, "the windfall lien," is on a property purchased by a non-liable bona fide prospective purchaser, where EPA has unrecovered response costs at the property, and EPA's response action increases the fair market value of the property.

Depending on the circumstances surrounding the acquisition transaction, local governments or other entities acquiring the property may be subject to these liens.

Because federal and state governments may not have necessarily perfected liens on certain properties, it may be important to contact EPA and state regulatory agencies to inquire about the potential for these liens and about a process for resolving outstanding liens.

3.1.2.4.2 Easements

An easement is an agreement recorded with the deed for the property between the property owner and a third party that provides a legal right for the third party to use or enter a property. There can be a number of different easements associated with a property. The potential impacts on a property reuse will depend on the location of easements on the property and the type of easement. Easements can include:

- Utility easements that provide for the installation and maintenance of underground utilities such as sewer or water lines or aboveground utilities such as electricity, telecommunications and cable. They also can include easements for electric substations, transformers, pump stations and other surface structures.
- Private use easements that include the installation, maintenance and use of a driveway to an adjacent property; installation and maintenance of a private sewer line or other utility connection to an adjacent property; or installation and maintenance of pipelines such as a petroleum pipeline.
- Access easements that provide access on and across a property to access easement areas.
- Conservation easements that permanently limit uses (e.g., limits on the amount and type of development) of the property or portions of the property in order to preserve natural features or agricultural potential.

The terms of easement documents should be reviewed to identify the specific impacts on the property and the use of the property.

3.1.2.4.3 Restrictive Covenants

A restrictive covenant can restrict the use of a property. It is typically listed in the deed and will apply to current and future owners of the property. Restrictive covenants can include environmental land use controls (see Section 3.1.1.5) or other land use controls placed on a property by previous owners. The terms of a restrictive covenant should be reviewed to identify the specific impacts on the property and the use of the property.

3.1.2.5 Property Features

What features of the property affect the potential reuse of the property?

An important part of real estate due diligence with respect to potential reuse of a property is identifying and understanding the features of a property that may affect the potential reuse of the property, including the total cost of any reuse. Physical features of a property can drive the market demand for specific types of reuse and impact the market value of the property. The following features of a property should be evaluated:

3.1.2.5.1 Improvements

Buildings or structures, including any remaining foundations, on the property should be evaluated to determine if they are structurally sound and usable or of value to a potential developer. These could include former office buildings, industrial buildings used for manufacturing, docks on navigable waterways, water towers, electrical substations and other improvements that could be incorporated into a potential reuse.

3.1.2.5.2 Access

Access to the property will be an important consideration for many reuses. Access to the property by vehicle, public transportation and pedestrians should be considered. The evaluation should include a description of:

- the roads (e.g., multi-lane, primary road, secondary road) that provide access to the site for workers, customers or visitors, and suppliers, including the frontage road or primary access road for the property and the location, distance and route to major or interstate highways;
- the availability of commercial rail and water access, and information related to location, capacity and condition of the facility;
- public transportation (e.g., bus and light rail) that may be available to the property, including locations of stops with respect to the property; and
- the potential pedestrian access to the property, including sidewalks and road crossings.

3.1.2.5.3 Utilities

The evaluation should include the identification of utilities present on the property or accessible to the property. Information for each utility should include, at a minimum, the availability to the property, supplier and the capacity. Utilities include natural gas, electric, sanitary sewer, storm sewer, potable water, telecommunications and fiberoptic/high-speed internet.

3.1.2.5.4 Topography

The topography of a property affects the land area available for redevelopment, and influences runoff and flooding hazards, as well as land available for development. Significant increases or decreases in surface elevation should be identified, as well as significant slopes (e.g., greater than 15 percent).

3.1.2.5.5 Historical or Archaeologically Sensitive Structures or Areas

If the property has historical significance or if during due diligence a potential historical or archaeological feature is identified, the historic or archaeological feature should be identified and evaluated to determine its impact on the reuse of the property. This may require engaging the services of a qualified

historian or archaeologist to review background information, seek information from knowledgeable parties, and conduct additional studies as necessary.

3.1.2.5.6 Property Shape

Site reuse configuration is determined in part by property shape. Property that is exceptionally narrow, shallow, or unusually-shaped may affect its reuse.

3.1.2.5.7 Flood Plain

Properties in areas adjacent to or in low lying areas near a river or stream may be prone to flooding during significant rain events. These properties may be within 100-year or 500-year flood zone areas. Properties should be evaluated to determine if some or all of the property is within a 100- or 500-year flood zone. It also is important to consider the potential impacts of climate change within the context of the property and determine how those changes may affect the ability to maintain both a safe remedy and safe reuse of the site. State and local building codes should be reviewed for regulatory requirements related to development in a flood plain. Federal, tribal, state, and local regulations could affect the ability to construct a structure or the design of the structure.

Reference:

FEMA: FEMA Flood Map Service Center

3.1.2.5.8 Wetlands

Development in wetlands areas may be limited by conservation easements and state or federal regulations. The property should be evaluated for the presence of state or federal designated wetlands. Wetlands are defined as areas where water covers the soil or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season (see EPA: What Is a Wetland?). As a result, in some cases, areas of a property that may not be designated as a wetland but meet the above definition may need to be evaluated to determine if the area may be classified as a wetland. Identification of wetlands should be considered as part of the scope of a Phase I ESA.

Most activities that directly affect wetlands are regulated. State (and in some cases federal) regulations should be evaluated for limitations or requirements that address activities and development in the area of wetlands, including requirements for buffer areas around a wetland. In general, activities that would disturb wetlands would require a permit from one or more state or federal agencies.

*Documentation – Summarize the property characteristics (refer to Property Characteristics tab in the **Revitalization-Ready Workbook**).*

References:

EPA: Wetlands Protection and Restoration

EPA: Wetlands Regulations

3.1.2.5.9 Endangered Species or Protected Habitats

The property should be evaluated to determine if there are endangered species or protected habitats on the property. Areas of a property where endangered species or protected habitats have been identified may need to be excluded from development activities. Identification of endangered species or protected habitats should be considered as part of the scope of a Phase I ESA.

3.1.2.6 Development Codes, Policies, and Relevant Plans and Planning Studies

What is the current zoning of the property and its relationship to local master plans and other planning studies?

Zoning and other local ordinances, building and other development-related codes, and local plans and studies play an important role in the potential uses of a property, as well as the establishment of cleanup goals under federal and state cleanup regulations. Exposure models used by EPA and state governments to assess human health risks from contamination are based on assumptions about reasonably anticipated future land uses. From an environmental condition perspective, EPA and the state will typically consider zoning and master plans along with other relevant factors in making future land use assumptions, particularly in conjunction with models used to establish risk-based cleanup standards.

Development codes and policies, including zoning ordinances and maps, development regulations and processes, design guidelines, form-based code and historic areas, should be reviewed, and applicable codes and polices identified. Plans and studies, including comprehensive plans, sub-area/special district plans, parks and trails plans, streetscape design standards, current traffic studies, and other plans and studies, should be reviewed, and relevant plans and planning studies identified.

3.1.2.7 Previous Development Plans

Are there previous development plans for the property?

Previous plans for reuse and redevelopment of the property, even if they were never implemented, can provide useful information on prior or existing property conditions, such as utility infrastructure, structural integrity of buildings, wetland delineations, and physical obstacles to construction. In addition, they may suggest potential redevelopment opportunities that would have undergone some level of financial and market analyses at the time. Although this information should not be used as the sole source of historical information on a property (especially if it is somewhat outdated), it could be useful in providing preliminary information (especially if property access is not available) and help focus future information gathering efforts.

*Documentation – Summarize the land use characteristics (refer to Land Use Characteristics tab in the **Revitalization-Ready Workbook**).*

3.2 Environmental Condition Impact Analysis

What is the status of cleanup on the property?

The environmental condition impact analysis considers how the environmental condition and activities to address the environmental condition could affect, or be affected by, redevelopment. It also is used to

identify significant data gaps that may result in potential deal-breakers that could eliminate the project from further consideration by potential developers if not addressed, or drive uncertainties that introduce unacceptable risk into a transaction.

The analysis of the environmental condition is driven, in a large part, by the status of the cleanup activities to address the environmental condition. Without a completed environmental investigation, it will be harder to determine reuse alternatives, develop a vision for the property, engage a developer and transfer the property (see Section 3.2.1). At a minimum, a completed environmental investigation provides an understanding of areas of the property that are affected by hazardous substances or petroleum and in need of remedial action before reuse of the property can be accomplished.

In cases where the intent is to transfer the property to a third party for development, having a remedial action work plan (see Section 3.2.2) in place that defines the actions needed, restrictions that may be placed on the property, and long-term operation, maintenance, or monitoring required, is essential to transfer of the property. The goal is to create synergy by integrating the redevelopment and cleanup to optimize the use of the property and to minimize costs and unacceptable project risks.

3.2.1 Environmental Investigation

Environmental investigations typically go beyond the scope of traditional Phase I and Phase II ESAs and are intended to:

- Characterize the nature and distribution of hazardous substances and petroleum products in environmental media.
- Evaluate the potential fate and transport of hazardous substances and petroleum products in environmental media.
- Assess risks to human health and the environment, and determine the need for cleanup action.
- Develop a conceptual site model to identify potential cleanup actions.

Environmental investigations are generally conducted to comply with specific federal or state environmental statutes and associated regulatory cleanup programs (e.g., RCRA, CERCLA, USTs, state voluntary cleanup programs). As a result, the scope and extent of the environmental investigation may be driven by the requirements of those statutes and programs.

Environmental investigations typically involve the collection of soil, sediment, groundwater and surface water samples through, for example, the installation of soil borings and monitoring wells. The data collected are used to support the environmental risk assessment and the selection and design of cleanup actions. Depending on the size of the property and potential distribution of hazardous substances and petroleum products in environmental media, the environmental investigation may be conducted in multiple phases.

If the intended reuse of the property is known, the environmental investigation can often be tailored to reflect those uses. This can not only streamline the environmental investigation, thereby reducing costs and minimizing delays, but also help ensure that the cleanup will be protective for those intended uses.

3.2.2 Remedial Action

Remedial, or cleanup, actions generally are designed to reduce or eliminate potential exposures to hazardous substances or petroleum products in environmental media. Remedial actions can range from

relatively aggressive approaches such as soil removal and groundwater extraction and treatment to less aggressive approaches such as monitored natural attenuation (where lines of evidence show that protective cleanup levels will be achieved over a reasonable time frame), passive vapor barriers, and institutional controls (e.g., environmental covenants, land use restrictions) that complement other remedial actions involving engineering controls. Often, a combination of remedial action approaches is used. Remedial actions are generally conducted to comply with specific federal or state regulatory cleanup statutes and programs (e.g., RCRA, CERCLA, USTs, state voluntary cleanup programs).

In many cases, elements of the remedial action can be integrated into the reuse plan, speeding up the remedial action and saving costs. For example, building slabs and parking areas can effectively cap contaminants if their design is coordinated with the remedial action requirements.

Local governments should carefully consider how property reuse plans will affect remedial actions, as well as how remedial actions will affect property reuse plans. Reuse plans should be compatible with remedial actions. Necessary remedial actions will sometimes introduce physical obstacles (e.g., groundwater extraction wells, treatment structures) and other constraints that limit the use of all or portions of the property while the cleanup actions are underway or in place.

Discussing reuse plans with the party responsible for carrying out the remedial action can help identify potential conflicts between the redevelopment and remedial actions. Discussions should be focused on avoiding or mitigating conflicts without compromising the ability of the remedial action to protect human health and the environment or introducing unjustifiable costs. In many cases, elements of the remedial action can be integrated into the reuse plan, speeding up the remedial action and saving costs. For example, building slabs and parking areas can effectively cap contaminants if their design is coordinated with the remedial action requirements.

*Documentation – Summarize the environmental status (refer to Environmental tab in the **Revitalization-Ready Workbook**).*

3.3 Land Use Assessment

The current land use may indicate quite a bit about the property's redevelopment potential. The evaluation of land use for the property should consider surrounding land use, zoning, local or regional land use plans, land use controls, and physical features, as well as the environmental condition, potential remedial action and related restrictions.

For example, land use controls may specifically exclude residential-type development on a property. In some cases, states may not allow certain waste to be placed in on-site landfills or capped with protective covers if they are located within flood plains. This may result in the waste being moved to other on-site locations, potentially occupying land intended for redevelopment purposes, or being sent at greater expense to an off-site facility.

Wetlands and other water bodies can introduce ecological receptors that can influence cleanup. Even existing roads and access routes that may be suitable for the planned redevelopment may not be adequate for hauling large volumes of contaminated soil off-site or bringing clean fill onto the property. All of these can drive up redevelopment costs or create significant obstacles to property reuse.

Reference:

EPA: Plan for Brownfields Redevelopment Success: Land Use Assessment

3.4 Infrastructure Assessment

The infrastructure assessment reviews the infrastructure available to the property to develop an understanding of the condition, capacity and location of the infrastructure, and to identify needs (e.g., enhancement, upgrades or expansion) to support reuse. The infrastructure assessment should look at both public and private infrastructure systems that may be available or needed to support a potential reuse.

3.4.1 Utilities

The availability and capacity of utilities can be an important consideration in the location of many commercial and industrial activities. Access to reliable high-speed internet, water, natural gas and electricity can be significant attractions to commercial and industrial users. Availability of utilities is important not only for commercial and industrial users, but also for all economic stability in an area and the overall real estate market forecasts for a location.

3.4.2 Roads

Current transportation patterns and proposed changes to those patterns are critical components of an infrastructure assessment. Traffic patterns determine the travel paths for the population and thus the areas that will receive the highest concentration of potential client activity. Traffic patterns are especially important for tenants whose business requires a high amount of foot traffic and visibility. A location along a major roadway can represent a much higher demand for commercial and light industrial uses. Proximity to interstate highways and major truck routes or access to rail or water for receiving or shipping of materials can represent a much higher demand for industrial uses such as manufacturing or warehousing. Traffic patterns also could be a key source of air pollution for overburdened communities. Consideration should also be given to the potential impacts on air quality in the area and potential opportunities to mitigate air pollution from traffic.

3.4.3 Other Transportation

The location, capacity, condition and connectivity of rail can represent a much higher demand for industrial users that need rail service to receive or ship materials. Similarly, docking, loading/unloading facilities, channel and dock area water depth, and location of roads and rail can be important to certain industrial user. Mass transit (e.g., bus service, light rail) may be important to residential development or to employee or customer access to businesses.

*Documentation – Summarize the land use characteristics (refer to Land Use Characteristics tab in the **Revitalization-Ready Workbook**).*

Reference:

EPA: Plan for Brownfields Redevelopment Success: Infrastructure Evaluation

3.5 Market Study

A market study is conducted to evaluate the economic viability of potential redevelopment options. It is an analysis of socioeconomic, industry sector and market information.

Socioeconomic information includes information about the area population, unemployment, median household income, poverty, education and median home value/rent. Industry sector information includes common markets, technologies and worker skills. Market information includes information about type of market (e.g., industrial; office/commercial; retail/restaurant/hotel), overall market climate, building demand/vacancy, lease rates and building costs.

Understanding the market will provide insights into the potential reuse for a property, as well as the land use, infrastructure and property features needed to support potential reuses. It also will help the community determine if the current zoning is outdated relative to the current market.

*Documentation – Summarize the market information (refer to Market Assessment tab in the **Revitalization-Ready Workbook**).*

Reference:

EPA: Plan for Brownfields Redevelopment Success: Market Study

3.6 Opportunities and Constraints Analysis

What are the obstacles that may impact the successful implementation of each potential reuse and property disposition strategy?

Opportunities and constraints are attributes and characteristics of the property that positively or negatively impact one or more possible uses of a property. They are associated with a particular reuse strategy and the potential reuse envisioned for a property. It is important to have a comprehensive understanding of the opportunities and constraints to potential reuse of the property in order to effectively evaluate a particular reuse strategy.

The opportunities and constraints analysis involves an evaluation of the property attributes and characteristics to develop strategies to incorporate the opportunities into the reuse strategy and develop actions to address the constraints.

Opportunities and constraints analysis looks at the information gathered in the reuse assessment and determines how redevelopment will be supported or constrained based on four key components:

- Site Characteristics Analysis: documents the property features and physical conditions identified during the real estate due diligence that might affect the reuse of a property, such as landscape (e.g., wetlands, floodplain, surface water, topography); buildings and structures; and deeded rights (e.g., legal easements, restricted uses, water rights).
- Environmental Condition Impact Analysis: determines the impact of environmental conditions on the property reuse.

- Land Use Assessment: identifies land use options consistent with land characteristics and local land use regulations.
- Infrastructure Assessment: identifies current conditions (e.g., utilities) that may be present potential opportunities or constraints on future uses.

This evaluation process can be guided by considering the goals and vision for the property and the information generated as part of the due diligence, land use assessment, infrastructure assessment and market study.

Keep in mind that an opportunity for one land use could be a constraint for another. For example, the presence of buildings on a property may be of value for an office use, but not a warehouse use.

3.6.1 Opportunities

Opportunities can include property features such as status on environmental condition (e.g., the site received a no further action determination, has been cleaned to unrestricted use), infrastructure, usable buildings and other improvements on the property, access (e.g., proximity to an interstate highway), location, and property size and shape (e.g., large rectangular property).

- What are the opportunities that may positively impact the successful implementation of each potential reuse and property disposition strategy?

- Is an opportunity unique to a particular land use? The value of each opportunity should be identified. For example, rail access may be valuable to a manufacturer, but may not be of value to a commercial user.

- Is there information missing that may be helpful in evaluating a potential opportunity? In many cases, there may not be sufficient information generated during the due diligence process (referred to as data gaps) to identify potential opportunities or quantify the potential value of an opportunity. If a data gap has been identified, the required information should be obtained.

3.6.2 Constraints

Information obtained through the due diligence process enables your community to identify potential redevelopment constraints for a property. These constraints can include those associated with the environmental conditions, as well as those commonly encountered through traditional real estate due diligence (e.g., title encumbrances, easements, inadequate infrastructure). Resolving these obstacles and the project risks they present will be key to the implementation of a successful reuse strategy.

The constraints will often depend on the property disposition strategy being considered. Constraints may, however, be common to more than one property disposition strategy. There are many combinations of constraints that could apply to brownfield properties. Similarly, the range of actions that a local government might take to resolve them will vary widely based on the particular circumstances surrounding the property, the local government's comfort with taking risks, available resources and other factors.

The process of identifying constraints is iterative. As due diligence proceeds and more information is obtained, certain redevelopment constraints may be eliminated or revised, or new obstacles may be

identified. As constraints are identified, they should be prioritized on the basis of their impact on the project.

Some common redevelopment obstacles include environmental liability, sufficient developable/buildable acreage, and necessary property improvements/infrastructure needs.

Assessing project constraints may include property features such as environmental conditions (e.g., extensive remedial action required), infrastructure, buildings, past improvements on the property that are currently unusable and require asbestos removal and demolition, zoning, easements, land use controls and access.

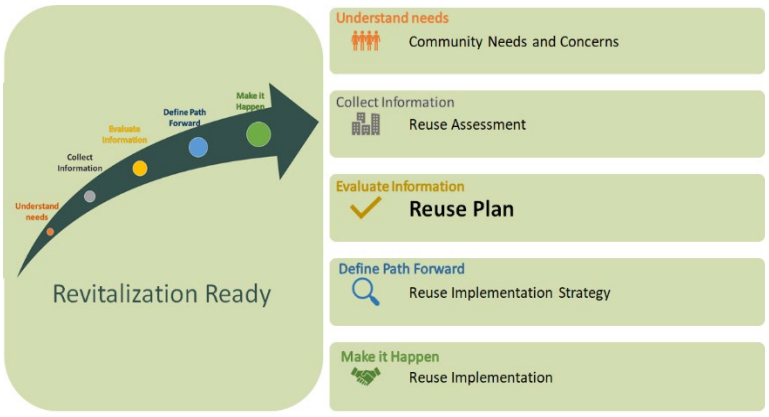
- What are the constraints that may negatively impact the successful implementation of each potential reuse and property disposition strategy? Identify each constraint that may impact the successful implementation of each potential reuse.

- What risk or liability is associated with each constraint?

- What information is still missing? If a data gap has been identified, it can be effectively addressed by obtaining the required information. As additional information is made available, constraints and related risk and liability should be revised accordingly.

*Documentation – Summarize the constraints (refer to the Constraints tab in the **Revitalization-Ready Workbook**).*

4 REUSE PLAN



Reuse planning is a process that utilizes the information generated during the reuse assessment to build a realistic plan for the potential reuse options for the property. The process typically looks at a range of desired reuse scenarios. A public planning process that provides for meaningful community engagement will help identify potential community needs and concerns, and build public support for the proposed project. The reuse planning process involves:

- Mapping and visualization of the property/parcel boundaries and property features and encumbrances.
- Determining developable area of the property.
- Developing a reuse vision.
- Identifying project risks and liabilities.
- Evaluating market viability.
- Developing a financial analysis and evaluating project economics.
- Evaluating project feasibility.
- Identifying property disposition strategies.

References:

EPA: Brownfields Program

EPA: Community Engagement

EPA: Community Reuse Property Prioritization Tool

EPA: Considering Reasonably Anticipated Future Land Use and Reducing Barriers to Reuse at EPA-lead Superfund Remedial Sites

EPA: Superfund Redevelopment Program

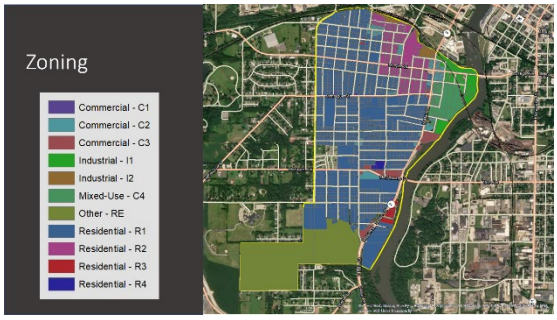
Focus WV Brownfields: Focus WV Brownfields Minai Grant Program Decision Enhancer Tool and Focus WV Brownfields Mini Grant Program Decision Enhancer Tool Handbook

4.1 MAPPING AND VISUALIZATION

The first step in the reuse planning process is to clearly define the property and the area surrounding the property. This is an important component of the reuse visioning and planning process that will require technical expertise in the use of computer-aided design (CAD), geographic information systems (GIS) or other mapping applications to complete.

Mapping and visualization are accomplished by developing a series of base maps that show the property boundaries and the surrounding area. Using maps to show the property and results of the reuse assessment is important during the visioning process. The mapping should include information generated during the reuse assessment such as:

- Aerial photography for the property and the area surrounding the property.
- Property boundary, including tax parcel boundaries.
- Boundary of the study area or surrounding area significant to the property reuse.
- Roads in the surrounding area, including location of interstate highway access.
- Rail accessible to the property.
- Surface water features (e.g., river, stream, lakes) in the area of the property.
- Topography (contours) identifying significant slopes or depressions.
- Flood/flood plain (100-year and 500-year).
- Wetlands and endangered species or protected habitats.
- Significant features related to the environmental condition that would impact development, such as closed impoundments or landfills, location of existing or planned engineering controls such as capped areas, location of existing or planned remedial action systems, monitoring or recovery wells.
- Current zoning for the property and surrounding area.
- Current land use.
- Utilities available to the property.
- Easements on the property.
- Existing buildings and remaining foundations.
- Historical or archaeologically sensitive structures or areas (National Register of Historic Places or local designation).



4.2 DEVELOPABLE AREA

Using the base mapping, the next step in the planning process is to determine the area of the property that can be developed. The developable area is the area that can be used for buildings and other structures or for parking and other activities not requiring a structure.

Total developable acres are the result of the total acres of the property minus acres associated with restricted property features that cannot be disturbed or built on:

$$Total\ Developable\ Acres\ = Total\ Acres - Restricted\ Acres$$

Restricted features can include wetlands, areas containing endangered species and protected habitats, closed impoundments, areas with significant slopes, archaeologically sensitive areas, deed-restricted areas restricting the type of development, inaccessible areas of the property, or other features that would prevent the use of an area of the property.

In addition to features that cannot be disturbed or built on, there are areas that can be incorporated into a reuse but may have restrictions that affect the type of development that can be placed in these

areas. These use-limited areas can include easement areas (e.g., underground or aboveground utilities or pipelines), flood plain areas, deed-restricted areas limiting the type of development, and areas where the shape or accessibility limit the use of the area. These areas may be usable for parking, landscaping, storage and other uses that do not involve the placement of permanent structures. While the use-limited areas are included in the developable areas, the use limitations need to be delineated and considered when evaluating reuse scenarios.

4.3 Property Reuse Vision

Based on the reuse assessment and the developable area, the reuse visioning process identifies and evaluates various uses for the property. A site reuse vision should reflect the community's reuse priorities while integrating the physical, economic and environmental realities that affect implementation and success.

The visioning process takes into account the community needs and concerns, environmental condition analysis, land use assessment, infrastructure assessment and the available area that can be developed to construct reuse scenarios. For brownfield properties, viable land uses may be impacted by the cleanup previously performed or planned for the property in the future. Cleanup activities, when completed, typically will result in one or more institutional controls being established, such as a deed restriction limiting land use (e.g., to commercial or industrial uses). Any proposed future reuse alternatives that would not comply with the institutional control may require additional cleanup activities.

The **Revitalization-Ready Workbook** identified potentially viable land uses for the subject property. In addition, the Workbook helped identify key property, demographic, and market information necessary to determine the size and scope of a reuse. With this information, the potential land use options should be considered, and a conceptual reuse plan developed which identifies the size, scope, and characteristics of a potential reuse. Each conceptual reuse plan should identify proposed buildings, pedestrian and vehicular circulation patterns, and parking needs. Consideration should be given to the type and square footage of new buildings and required parking. In addition, the assistance of planning, land use, legal, financial, and technical professionals is recommended.

The reuse planning exercise should take into account the following:

a) Property considerations
- Maximum acreage/area available for development
- Maximum lot coverage allowed
- Maximum height and floor to area ratios allowed by zoning

- Required setbacks
- Required parking

b) Property controls
- Land Use
- Environmental

c) Existing buildings (if applicable)
- Condition
- Potential reuses
- The market and its drivers
- Who will occupy this space and what will they pay?
- Maximized density may exceed demand

d) Property location, accessibility, and visibility
- Available workforce
- Energy costs

e) The location of the property

In keeping with the environmental setting, is the development making maximum use of natural assets and controlling any contamination issues?

The result of the reuse visioning process is one or more viable reuse scenarios for the property for further evaluation and development of the reuse plan. The reuse scenarios should be documented, including illustrations of potential features that represent the scenarios identified. These illustrations can include sketches, renderings and plot plans to communicate reuse concepts to the community, regulatory agencies and the real estate market.

The visioning process takes into account the community needs and concerns, environmental condition analysis, land use assessment, infrastructure assessment and the available area that can be developed to construct reuse scenarios.

Documentation – Develop documentation of the reuse scenarios, including illustrations of potential features that represent the scenarios identified. Illustrations can include sketches, renderings, and plot plans that can be used to communicate reuse concepts to the community, regulatory agencies and the real estate market.

Reference:

EPA: Plan for Brownfields Redevelopment Success: Site Reuse Vision

4.4 Project Liabilities and Risks

Considering the potential reuse scenarios developed during the visioning process, each scenario should be evaluated to identify the potential associated liabilities and risks. This guide focuses on discussions related to liabilities that a local government or a potential purchaser may assume as a result of its actions related to the brownfields redevelopment process.

For example, if the local government purchases the property without conducting due diligence or all appropriate inquiries or it is the current property owner, it may or may become the party responsible for cleanup under the applicable environmental regulations and also liable for damages associated with any environmental releases associated with the property.

Risks are the potential adverse consequences to the potential reuse that may result from a particular constraint on the property. For example, the need for funding to complete cleanup is a risk associated with whether the property reuse can be implemented.

Liability and Risk

Project risks and liabilities are generally associated with the constraints identified during the reuse assessment.

Liabilities are responsibilities that a local government or another entity may become legally obligated or accountable for during the brownfield redevelopment process.

Risks are the potential adverse consequences that may result from a particular liability or constraint on the property.

Liabilities and risks should be evaluated from the perspective of the community, property owner (if other than the community) and a potential developer. Evaluating project liabilities and risks involves the identification and prioritization of liabilities and risks that could adversely impact the achievement of the local government's project goals. These project risks and liabilities are generally associated with the constraints identified during the reuse assessment:

- Environmental liability
    - Liability under federal and state environmental statutes and regulatory programs can be the most significant liability at brownfield sites.
    - Other legal liabilities (e.g., common law liability associated with a contractual dispute concerning an indemnity or an easement) may be present and should be evaluated.

- Financial risks
    - Financial risks are the costs related to environmental liability (e.g., cleanup, third-party claims) and developing and maintaining the property (e.g., demolition, asbestos abatement, funding for the reuse or the cleanup, operation and maintenance of engineering or institutional controls, post-closure operation, monitoring, and maintenance).
    - Legal liability also can present a financial risk.

- Community issues
    - Issues raised by community members may pose a risk. This includes the concerns they express regarding the physical and environmental condition of the property and how they will be affected by the reuse.
    - Consensus from the community on potential reuse scenarios is an important component of a successful reuse strategy. Lack of consensus is a risk.

Evaluating liabilities and risks for a brownfield property generally starts with identifying potential environmental liabilities. Environmental liabilities and risks to a local government are driven, in a large part, by the local government's current or past ownership or use of a property or the potential acquisition of a property. Liabilities and risks to a potential purchaser are driven by their willingness to

assume certain liabilities and risks and the impact of their actions during the development of the property.

Once potential environmental liabilities have been identified, risks associated with those liabilities should be evaluated. In general, the risk will be a function of the ability of the local government or future property owner/developer to address a liability. Other risks may not be associated with a specific liability but may be constraints that affect the ability to successfully implement a reuse strategy. In many cases, a risk can be translated into a financial need.

Environmental Liability

Evaluating potential environmental liability is fact-specific and requires a thorough understanding of the applicable laws, property conditions and operating circumstances. The extent to which the environmental condition is being addressed or has been addressed will govern the extent of liability and risk that may be associated with the property. At a minimum, an environmental investigation that defines the type and extent of contamination on the property is necessary to make a reasonable evaluation of potential liability.

The liability or risk associated with each constraint may be minor, moderate or major. The evaluation of liabilities and risks should include how difficult it will be to overcome the liability or risk. Liabilities and risks will be unique to a property or a transaction. All liabilities and risks, however, will need to be considered and factored into the evaluation and decision-making process. The liability and risk management framework that is described in this guide should, however, apply equally well in evaluating those issues. The management of risk is discussed in detail in Appendix A: Risk Management Tools and Approaches. The following sections discuss the origins of some of the liabilities.

*Documentation –Document potential liabilities and risks for each constraint (refer to the Constraints tab in the **Revitalization-Ready Workbook**).*

4.4.1 Environmental Liability

Determining if there is environmental liability is an important first step in the evaluation of project risks. Environmental liability is the generic term used to describe the various obligations, costs, and responsibilities that can result from cleanup and management of an environmental impact to a property or not complying with federal, state or local environmental statutes and regulations. Environmental liability also may arise from violations of common law liabilities or be due to negligent behavior or illegal activities. Common law liability also encompasses contractual disputes arising through indemnification agreements, service contracts relating to the cleanup and management of a particular property, or other legal agreements.

While environmental liability is a key consideration when evaluating the potential reuse of a property, it must be viewed in the context of the entire project since specific facts concerning the project will dictate the significance of environmental liability for a particular property or project.

For example, if the environmental conditions associated with the property are limited or pose minimal risks to human health or ecological systems, environmental liability may not result in significant project risks. However, if contamination is extensive and not adequately addressed, the risks of taking on environmental liability may be much greater and need to be carefully managed.

Identifying potential environmental liability should be looked at it from the perspective of ownership and control of the property, as well as any actions taken to arrange or transport a hazardous substance for disposal or treatment from a property. In general, a current property owner or prospective property owner may be liable for cleanup as a result of either its current or prior ownership of the property, or its acquisition of the property. The extent to which the environmental condition is being addressed or has been addressed will govern the extent of liability and risk that may be associated with the property. At a minimum, an environmental investigation that defines the type and extent of contamination on the property is necessary to make a reasonable evaluation of potential liability.

Evaluating potential environmental liability requires a thorough understanding of the environmental condition of the property and the federal or state laws and regulations that apply to the property.

In some cases, a party responsible for cleanup of a property may have been identified under a state or federal regulatory program. If there is a responsible party identified to conduct the cleanup, the local government should evaluate the viability of the responsible party, the responsible party's objectives for the cleanup (land use restrictions, engineering controls, remedial action approach), the responsible party's progress on cleanup, and the potential for the local government or a future property owner to step in to complete the cleanup. The local government also should consider what happens if the responsible party fails to complete the cleanup and whether it could incur liability by performing environmental investigations, cleanup, building demolition, or physical improvements on a property it does or does not own or lease.

Environmental liabilities to a local government can be driven by regulations or liabilities assumed under a property sale agreement:

- If a local government owned a property while hazardous substances or petroleum products were managed at the property, or if a local government managed hazardous substances or petroleum products at a property owned by a third party, the local government may be liable for any releases or contamination that occurred during the period of time that it owned or used the property.
- A local government or a purchaser also can incur environmental liabilities for past releases at a property, depending on how the property is acquired.
- A local government or a purchaser can elect to assume certain environmental liabilities such as conducting and completing remedial action; long-term operation, monitoring and maintenance associated with a remedy; handling and disposing of contaminated materials encountered during construction; and installing and maintaining engineering controls such as vapor mitigation systems.

If the local government is not an owner of the property or a responsible party, but is interested in purchasing the property and retaining ownership or transferring the property to a third party, the local government should consider the following questions concerning liabilities that may be assumed as a result of becoming an owner of the property:

- Could the local government incur liability by acquiring or leasing a property?
    - Can the local government be found to be liable for contamination associated with its past uses or ownership?

    - Is the local government potentially exempt from environmental liability associated with past uses or owners (i.e., due to current ownership status or due to the type of planned acquisition of the property)?
    - Does the local government need to demonstrate its claim to liability protection (e.g., innocent landowner, bona fide prospective purchaser, contiguous property owner)?
    - Has the local government conducted sufficient due diligence and all appropriate inquiries prior to acquiring the property to meet the liability protection requirements?
- Is contamination present on the property that originates from an off-property source?
    - Is there a responsible party addressing this contamination?
    - Will the contamination adversely impact the ability to reuse the property (e.g., require cleanup, engineering controls or restrict land use?
    - Will the local government or a future property owner need to address the contamination in order to reuse the property?
    - Does the contamination impede the ability to achieve cleanup objectives for environmental conditions on the property?
- Has contamination associated with an environmental condition on the property migrated (or is likely to migrate) off the property?
- Are there institutional controls, engineering controls, or operating treatment systems ongoing at the property that the local government or other future owner would be responsible for in operating, maintaining and monitoring?
- Could a local government be responsible for reimbursing EPA or the state for unrecovered response costs if Superfund liens have been placed on the property?
- Is the local government protected from past owners or third parties seeking to recover costs they spent to perform environmental investigations and cleanup involving the property?

Two important steps in determining potential environmental liability under federal and state statutes and regulations are: 1) identify the responsible regulatory agencies during the due diligence process; and 2) meet with these regulatory agencies to identify the potential liabilities related to cleanup activities on a property, and options for avoiding or mitigating those liabilities. Sections 4.4.1.1 through 4.4.1.5 provide a brief overview of regulatory programs that can apply to cleanup of a brownfield property.

4.4.1.1 Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA)

CERCLA provides EPA with broad federal authority to respond to releases or threatened releases of hazardous substances, pollutants and contaminants that may endanger public health or the environment. It also allows EPA to compel responsible parties to perform cleanups or to reimburse the government for cleanups performed by EPA.

There are many different types of contaminated or potentially contaminated properties subject to CERCLA. Some contaminated properties are Superfund sites where the federal government is, or plans to be, involved in cleanup efforts. Other properties are brownfield sites, which may be impacted by the presence or potential presence of a hazardous substance, pollutant or contaminant. Generally, the federal government does not oversee or become directly involved in the cleanup of brownfield properties. Local and regional governments, in partnership with state environmental agencies, often need to take the lead for overseeing the assessment and cleanup of brownfield sites. CERCLA provides

EPA with the authority for EPA to provide grant funding to government entities and nonprofits for the assessment and cleanup of brownfield sites.

4.4.1.1.1 Environmental Liability under CERCLA

CERCLA established the "polluter pays" principle through a comprehensive liability scheme, which enables EPA to order certain categories of parties to conduct or pay for the cleanup of releases or threatened releases of hazardous substances. CERCLA's liability scheme helps to ensure that wherever possible, "potentially responsible parties" (PRPs), rather than the general public, bear the costs to assess and clean up environmental contamination. Under CERCLA, the following categories of persons may be considered PRPs and held liable for the costs or performance of a cleanup and damages under CERCLA to address releases or threatened releases of hazardous substances:

- the owner or operator of the facility;
- any person who owned or operated any facility at the time of disposal of any hazardous substance;
- any person who arranged for the disposal or treatment, or arranged for the transport for the disposal or treatment, of a hazardous substance at any facility; or
- any person who transported, or who accepted for transport to a disposal or treatment facility, any hazardous substance.

4.4.1.1.2 CERCLA Liability Protections

Although a local government may fall into one of the classes of PRPs described above, there are liability protections that may apply to certain local government acquisitions of contaminated property. For example, protections from CERCLA liability may be applicable in cases where a local government becomes the owner or operator of a property previously contaminated by a third party.

The following liability protections may apply to local governments and may provide the opportunity for local governments to establish that they are either exempt from liability or are eligible to claim protection from liability based upon the manner in which they acquired a property and have met continuing obligations. To retain protection from liability, local governments must not manage hazardous substances on the property after acquisition and must take "due care" or comply with "continuing obligations" following acquisition.

To retain protection from liability, local governments must not manage hazardous substances on the property after acquisition and must take "due care" or comply with "continuing obligations" following acquisition.

CERCLA (at section 101(20)(D)) relates to the liability of state and local governments that acquire ownership or control of a contaminated property through seizure or otherwise in connection with law enforcement activity, or through bankruptcy, tax delinquency, abandonment or other circumstances in which the government acquires title by virtue of its function as sovereign. EPA generally intends to exercise its enforcement discretion and treat a local government acquisition as "by virtue of its function as sovereign" only when a local government acquires title to a property via a function that can be effectively performed only by governments using a mechanism available only to governments. Liability as an "owner or operator" can be impacted if the government has caused or contributed to the release or threatened release of a hazardous substance from the facility.

Local governments may qualify for “bona fide prospective purchaser” (BFPP) liability protection (per CERCLA §§ 101(40) and 107(r)(1). A local government may qualify as a BFPP if it acquires ownership of or a leasehold interest in a property after January 11, 2002, and meets the following threshold criteria:

- The local government performed AAI into the previous ownership and uses of the property prior to acquiring the property.
- The local government is not potentially liable for releases that occurred at the property before the acquisition and has “no affiliation” with any other party that is potentially liable for contamination at the property.
- The local government must also meet certain continuing obligations for maintaining BFPP status after acquiring the property (CERCLA § 101(40)(B))

CERCLA (at § 107(b)(3)) also provides a “third-party” affirmative defense to CERCLA liability for any owner, including local governments, that can prove, by a preponderance of the evidence, that the contamination at the property was caused solely by an act or omission of a third party. CERCLA’s third-party defense also includes an “innocent landowner defense” as an exclusion to the definition of a “contractual relationship” in CERCLA §§ 101(35) that applies to a government that acquired the facility by escheat, or through any other involuntary transfers or acquisition, or through the exercise of eminent domain authority by purchase or condemnation. A local government asserting the third-party defense must show that the act or omission did not occur in connection with a contractual relationship, that it exercised due care with respect to the hazardous substance concerned, and that it took precautions against the third party’s foreseeable acts or omissions, and the consequences thereof.

4.4.1.1.3 Property Acquisitions and CERCLA Liability

As summarized above, the method or type of property acquisition taken by a local government can determine the application of CERCLA liability protections. Additionally, a local government may consider layering any available CERCLA liability protections. For example, a local government may want to consider undertaking all appropriate inquiries prior to acquiring a property in an effort to qualify for the bona fide prospective purchaser protection, even in cases where the local government believes it qualifies for an exemption to liability based upon the type of acquisition undertaken (i.e., qualifies for the section 101(20)(D) exemption). Local governments also should understand that the liability protections do not shield government entities from any potential liability that they may have as "arrangers" or "transporters" of hazardous substances under CERCLA.

To maintain any BFPP liability protection following the acquisition of a contaminated property, local governments must comply with the “continuing obligations” provided at CERCLA (section 101(4)(B)) that include:

- Complying with land use restrictions and not impeding the effectiveness or integrity of institutional controls.
- Exercising appropriate care by taking “reasonable steps” to prevent the release of hazardous substances. These obligations are site-specific but may include stopping continuing releases, preventing threatened future releases, and/or limiting exposure to earlier hazardous substance releases. Institutional controls may play a critical role in complying with reasonable steps.
- Providing full cooperation, assistance and access to persons authorized to conduct response actions or natural resource restoration.

- Complying with information requests and administrative subpoenas.
- Providing legally required notices.

For additional information on the liability protections afforded local governments under CERCLA, see Superfund Liability Protections for Local Government Acquisitions after the Brownfields Utilization, Investment, and Local Development Act of 2018.

References:

EPA: Brownfields Laws and Regulations

EPA: Superfund Liability Protections for Local Government Acquisitions after the Brownfields Utilization, Investment, and Local Development Act of 2018

EPA: Enforcement Discretion Guidance Regarding Statutory Criteria for Those Who May Qualify as CERCLA Bona Fide Prospective Purchasers, Contiguous Property Owners, or Innocent Landowners ("Common Elements")

EPA: Windfall Lien Administrative Procedures

4.4.1.2 Resource Conservation and Recovery Act (RCRA)

RCRA regulates the management of solid and hazardous waste and underground storage tanks (USTs). It applies to the generators, transporters and facilities that treat, store or dispose of hazardous waste. In many respects, RCRA serves as a complement to CERCLA by helping to ensure the proper management of waste that might otherwise result in releases requiring cleanup under CERCLA.

RCRA is composed of three primary programs (or RCRA Subtitles) that may affect redevelopment projects involving a brownfield property:

4.4.1.2.1 RCRA Subtitle C - Hazardous Waste Program

Subtitle C establishes a federal program to manage the treatment, storage and disposal (TSD) of hazardous waste from cradle to grave (from generation to final disposition), and cleanup of contamination caused by the treatment, storage or disposal of hazardous waste. If the property under evaluation is currently or was a permitted TSD facility, it is necessary to consider three obligations under Subtitle C: closure/post-closure, corrective action and financial responsibility requirements. If closure/post-closure and corrective action requirements were not completed, a local government acquiring or leasing the property may, in certain circumstances, need to conduct those activities. Further, where hazardous waste will remain on-site in landfills or other disposal areas as part of the permanent cleanup, the local government could potentially assume the responsibility for monitoring and maintaining those areas. A local government acquiring or leasing a TSD facility that completed these required investigations will be able to do so with considerable knowledge of the environmental conditions of the entire facility, at least as it applies to hazardous waste and constituents (non-RCRA waste or materials may not have been addressed).

Because RCRA, like many other state and federal environmental statutes, is a complex law with an equally complex body of regulations, local governments are strongly encouraged to seek experienced counsel and technical consultants before engaging in activities for which RCRA might be applicable. (See Appendix B for additional information and resources.)

References:

EPA: Corrective Action Sites around the Nation

EPA: Resource Conservation and Recovery Act (RCRA) Laws and Regulations

EPA: State Authorization under the Resource Conservation and Recovery Act (RCRA)

EPA: Underground Storage Tanks (USTs)

EPA: Oil Spills Prevention and Preparedness Regulations

4.4.1.2.2 RCRA Subtitle D – Solid Waste Program

Subtitle D establishes requirements for the management of non-hazardous solid waste, such as in municipal solid waste landfill facilities, solid waste disposal facilities, and construction and demolition landfills. When acquiring or leasing a property, a local government should consider the possibility that past disposal of solid waste may have taken place, particularly if the property has a history of commercial or industrial use. The local government could become responsible for making those facilities compliant with RCRA Subtitle D, including monitoring groundwater, conducting cleanup requirements, and addressing any releases that may have occurred. (See Appendix B for additional information and resources.)

4.4.1.2.3 RCRA Subtitle I – Underground Storage Tank Program

Subtitle I established requirements for the management, closure and corrective action of underground storage tanks (USTs) in states, territories and tribal lands that contain petroleum and hazardous substances. USTs are generally regulated by state UST programs with EPA providing support to tribal governments.

If the local government is an owner or operator of an UST or purchases or leases a property with an operating or abandoned UST, the local government may become responsible under Subtitle I for the closure of the UST system and investigation and cleanup if a release is found. While there are no innocent purchaser provisions in RCRA Subtitle I, some state brownfields laws provide relief from state liability for unknown tanks and unknown tank releases for purchasers that conduct appropriate due diligence prior to taking title to a property. The Underground Storage Tank Lender Liability Rule also provides certain exemptions for lenders and other parties that maintain indicia of ownership in an UST primarily to protect a security interest. (See Appendix B for additional information and resources.)

4.4.1.3 Polychlorinated Biphenyls (PCBs)

Local governments that acquire or lease a property may encounter PCBs in equipment or products that were manufactured prior to 1979 (such as transformers, capacitors and other electrical equipment; paints; caulk; and hydraulic fluids), or as contamination arising from past use or disposal. The cleanup, management and disposal of PCBs and PCB-contaminated waste in a redevelopment context is regulated under the Toxic Substances Control Act (TSCA).

Under TSCA, a property contaminated with regulated levels of PCBs must be cleaned up or decontaminated in accordance with certain specified requirements. Similarly, equipment or products containing PCBs at regulated levels that are not authorized for use, no longer in use or leaking must be properly disposed of or decontaminated.

TSCA is a strict liability statute. Persons responsible for addressing PCB contamination under TSCA may include past and new property owners and operators, and other parties that caused or contributed to the PCB contamination. (See Appendix B for additional information and resources.)

4.4.1.4 Asbestos

Any institutional, commercial, public, industrial, or residential structure, installation, or building that will be undergoing demolition or renovation must be first properly inspected for regulated asbestos-containing materials regardless of the age of the facility. Before initiating demolition and renovation activities, the owner or operator must notify EPA or the delegated state or local agencies, remove all regulated asbestos-containing materials from the affected areas, and properly dispose of them into an asbestos NESHAP-approved landfill. Privately-owned residential buildings having four or fewer dwelling units are generally excluded; however, if these buildings are demolished or renovated as part of a commercial or public project (e.g., urban redevelopment, highway construction, or any commercial or industrial development), they would be regulated.

The processing, handling and disposal of asbestos and asbestos-containing material when a building is being demolished or renovated are regulated under the Clean Air Act NESHAP. NESHAP also regulates asbestos in active and inactive waste disposal sites. (See Appendix B for additional information and resources.)

4.4.1.5 State Voluntary Cleanup Programs

EPA does not oversee cleanup activities at brownfields. Instead, brownfields often are cleaned up in accordance with and under the oversight of state "voluntary cleanup programs" (VCPs) or state response programs.

State VCPs play a significant role in assessing and cleaning up brownfields. The benefits of enrolling a brownfield in a state VCP include guidance and oversight provided by the state program, including guidance related to risk-based cleanups and constituent-based cleanup levels, as well as guidance on the use and long-term monitoring of institutional controls.

State response programs laws also provide certain protections from environmental liability for sites cleaned up in accordance with VCP requirements. Actions taken by a local government to fulfill liability protection requirements are often documented as a "no further action" (NFA) decision or NFA letter.

Individual states often use their own terms to refer to these NFA decisions or NFA letters. Generally, states make a "no further action" decision after determining that a brownfield site, or one part of a brownfield site, that is enrolled in the state response program, poses no unacceptable risks to human health or the environment. This usually follows investigative or cleanup activities taken by the property owner or prospective purchaser under state program oversight or following a state's comprehensive review of the cleanup actions taken at a brownfield. Obtaining a "no further action" decision generally means that the state will not require additional remedial action, based on the state agency's knowledge of site conditions when it issues the NFA. Some NFA decisions are conditioned on compliance with institutional or engineering controls that are designed to prevent exposure to contaminants left in place following risk-based cleanup activities.

EPA can support state VCPs through grant funding to establish and enhance VCPs and may enter into non-binding memoranda of agreements (MOAs) with individual states. MOAs include general

enforcement assurances to encourage the assessment and cleanup of sites addressed under VCP oversight.

CERCLA limits EPA's authority to take enforcement and cost recovery actions against persons who conduct a response action at a brownfield site in compliance with a state response program. That limitation is referred to as an "enforcement bar." There are significant exceptions to the enforcement bar, including when a state requests EPA assistance to perform a response action; when contamination has migrated across state lines or onto property subject to the jurisdiction of the federal government; when contamination presents an imminent and substantial endangerment to public health, welfare or the environment; or when previously unknown information indicates that further remediation is necessary to protect public health, welfare or the environment.

References:

EPA: Cleaning Up Brownfields Under State Response Programs – Getting to "No Further Action"

International City/Council Management Association and Public Entity Risk Institute: A Primer for Local Governments on Environmental Liability

EPA: State Brownfields and Voluntary Response Programs

4.4.2 Financial Risk

Financial risk is present in all development projects.

For a private developer, financial risk generally relates to profitability (i.e., whether its investment will be able to provide a reasonable rate of return). For a local government looking to facilitate the redevelopment of an underutilized or abandoned property, the main focus is often to limit the amount of local government funds that are needed and to ensure those funds are used to maximum public benefit.

The specific financial risks to the local government that are associated costs may be significantly higher than predicted or expected, or worse: that despite the local government's investment, the desired redevelopment does not occur.

For this reason, a local government's financial risk is often closely tied to the financial risk of a potential developer. A project that carries a high financial risk to a developer is far less likely to be pursued or ultimately successful. Impaired marketability of a property contributes to the local government's financial risk. Environmental issues, left unaddressed, can adversely affect marketability.

There is a relationship between a local government's environmental liability and its financial risk. EPA's memorandum Superfund Liability Protections for Local Government Acquisitions after the Brownfields Utilization, Investment, and Local Development Act of 2018 discusses a local government's potential liability under various federal environmental statutes, and explains the provisions under which they may minimize or avoid liability.

A local government's real concern often boils down to the financial risk resulting from its environmental liability. Will the environmental liability result in costs to the local government that exceed what they are willing or able to assume for cleanup, redevelopment and other costs? In this regard, financial risk

may be more likely to influence the local government's decision on whether or not to proceed with a property disposition strategy.

For these reasons, understanding the project economics from the perspectives of both the local government and potential developers is necessary to assess financial risk. Section 4.6 provides an overview of some of the factors that influence project economics and describes a useful tool that can be used to estimate the financial viability of potential redevelopment scenarios.

4.4.3 Community Needs and Concerns

Community needs and concerns regarding the current conditions of the property, and the status of cleanup and the redevelopment need to be considered and addressed. These needs and concerns often relate to environmental justice issues such as the social, economic and health effects of contamination and economic blight experienced by community members and potential added burdens such as increased pollution, traffic, congestion or gentrification resulting from the redevelopment.

Addressing community needs and concerns requires first identifying those most meaningful to the community and how the community wants to resolve those issues. Continued community engagement is a critical tool for accomplishing this goal. Having an ongoing dialogue with the community throughout the project is necessary to maintain a spotlight on its priorities and ensure community input is included as part of the cleanup and redevelopment decision-making process. The support of the community becomes especially important if the local government plans to access the property to conduct environmental assessments, acquire or lease the property, or take other actions that might require the local government to expend public funds or incur significant financial and other risks.

A positive project pro forma will not matter if the needs and concerns of the community are not being met and the community stakeholders oppose the project.

Building a community-supported redevelopment approach reduces the likelihood that community opposition will delay or even derail a project. If the potential for community opposition is high enough, developers and investors may be driven away. Simply put, a positive project pro forma will not matter if the needs and concerns of the community are not being met and the community stakeholders oppose the project.

4.5 Market Viability

A community will typically start with a visioning process to determine the viable land use options. Incorporating community feedback throughout the visioning process is critical to prioritize redevelopment options for an area. It is critical that the redevelopment vision is based in market and economic realities for the area. Understanding what reuses the market will support, and being able to communicate those findings as they relate to community priorities, are fundamental to project success.

Determining market viability of a specific land use involves focusing on market information that is specific to that use and using that information to create a financial analysis for that use. The findings of the financial analysis will help alleviate further financial risks.

Using the results of the market study that already detailed many attributes of an area's market (see Section 3.5), market viability for a specific land use is based on the following:

- Potential viable land use options: Industrial; office/commercial; retail/restaurant/hotel; green space.
- Overall (area) market climate.
- Building demand/vacancy.
    - Optimal size (square footage).
    - Tenant requirements.
- Lease rates/rents.
- Building costs (per square foot).

It is important to reach out to local and regional industry experts to ascertain both quantitative and qualitative market information. This information is critical to establishing optimal and best use for a site and will help to further develop the financial analysis. Some potential questions to help guide your community toward a better market understanding and financial analysis are:

- What are the market opportunities/challenges for the area?
- What type(s) of building and configuration(s) are in greatest demand?
- What triple net rents (tenant or lessee promises to pay all the expenses of the property, including real estate taxes, building insurance and maintenance) are achievable for each type?
- What is the average cost per square foot or range of cost per square foot to build each type?
- What industries or companies are generating requirements at present (also known as market clusters)?
- What is the potential demand for a specific building type (residential, commercial, industrial, warehouse) versus vacancy rates for that building type in this location?
- What are the potential triple net rent and potential user or industry for any existing buildings on-site?

4.6 Project Economics and Financial Analysis

Local governments should perform a basic financial analysis for each of the viable land use options identified to better understand the potential return on investment and overall viability of the project. While an interested party (developer or investor) is unlikely to develop the property exactly as described in the land use vision, going through the financial analysis process with your community will help everyone understand economic concerns. In addition, the financial analysis allows the development community to better understand the reuse possibilities and alleviate overall risks in regard to potential return.

From a local government perspective, a financial analysis will assist in weighing the financial risks and benefits of local government involvement in the redevelopment project. This evaluation may include estimating the potential costs to the local government of undertaking the identified reuse (e.g., property acquisition costs) and identifying potential sources of revenue and other funding to implement the project.

A general understanding of the financial viability of a desired redevelopment will help in determining whether the project goals are realistic and likely to attract private investment. Having an understanding of the potential property uses enables the community to construct a **sources and uses** chart for the

viable land use scenarios, and use the chart to build a **pro forma** spreadsheet to conduct an analysis. The pro forma analysis will help identify:

- potential financial viability of different redevelopment scenarios;
- relative effect of various cost and revenue assumptions on profitability; and
- amount of subsidies or incentives needed to attract investment.

Preparing a sources and uses chart, and pro forma requires an understanding of the market (see Section 4.5) and the intended property uses (which serve as the basis for potential costs and project revenue).

4.6.1 Sources and Uses

A sources and uses chart is a tool used often by local governments to evaluate public-led redevelopment projects and/or facilitate private development. The chart helps identify, organize and balance potential expenses, funding needs and sources of funding.

Essentially, the sources and uses chart includes two lists:

- a list of the funding requirements broken down by the type of activity or expenditure required for a reuse project; and
- a list of the known or potential sources of funding that can be used to offset an expenditure.

Since federal, state and local funding may have specific limitations to the site's use (e.g., site assessment, remedial action, construction), the sources of funding should match the needed expenditure. Private funding may not have these types of limitations; however, in developing the sources and uses chart, it is valuable to match the sources of funds with the planned expenditures to keep track of the funded and non-funded expenditures.

A template of a working sources and uses chart detailing possibilities of known or potential funding for a redevelopment project is provided in the **Revitalization-Ready Workbook**. Local governments are encouraged to incorporate the information appropriate for the specific project.

*Documentation – Document sources and uses of funds for the project (refer to the Sources and uses tab in the **Revitalization-Ready Workbook**).*

4.6.2 Pro Forma

A pro forma is a tool used to predict a project's financial viability. The tool is designed as a set of calculations that projects the financial return that a proposed real estate development is likely to create. It is a basic "go/no-go" analysis that local governments and developers use to decide whether to move forward with a project.

A developer will use a pro forma to alleviate quantifiable risks that can be calculated through the analysis. A local government can use a basic pro forma analysis to prepare financial estimates to assess how a developer might look at various redevelopment scenarios, and to evaluate the general impact of various cost and/or revenue assumptions. Generally, the more certainty a local government can bring to a property, the better positioned it will be to attract development.

The first step in developing a pro forma is to identify assumptions for modeling the analysis. These key assumptions are based on expected costs and revenue for the project. There are few absolutes as to how such analyses can be constructed, but there are common practices and techniques that nearly all pro forma attempt to provide in one form or another. At the center of these calculations is a set of assumptions based on the overall revenue and costs for the project. The components for these assumptions are derived from the market, and environmental and infrastructure assessments previously discussed.

Basic cost assumptions include:

- Cost of land – acquisition costs of purchasing the property if needed.
- Infrastructure/property development cost – site preparation costs based on findings of the infrastructure assessment.
- Building construction costs – costs associated with best use scenarios for buildings determined through the market study.
- Soft costs – costs that are not considered hard development cost, such as legal fees, permit fees, and architectural drawings.
- Costs of capital – interest and fees assumed through debt.
- Environmental costs:
    - Investigation and cleanup action determined through the environmental assessment.
    - Legal or consulting fees, soft costs associated with investigation and cleanup.
    - Maintenance of institutional or engineering controls.
    - Environmental liability insurance.

Basic revenue assumptions include:

- Selling shovel-ready property – when appropriate for project success, as a whole or as divided parcels.
- Constructing and selling individual building or units within building – sales price determined by the best use conceptual scenarios and regional market.
- Constructing and leasing buildings or units within building – lease rates determined by the best use conceptual scenarios and regional market.
- Creating and selling/leasing pad sites – driven by the regional market.
- Tax revenue.
- Other revenue (e.g., advertising signage, renewable energy production, cell towers).

A pro forma is most useful when it is well-structured and contains all the elements that pertain to revenue and cost. This includes everything from the base rental income to all the potential costs that are associated with investment properties. Pro forma inputs can be adjusted to run various reuse scenarios that will give the local government rough estimates of the potential revenue.

A pro forma analysis can range from a very simplified approach to one that is very detailed and evaluates complex factors. The pro forma provided in the **Revitalization-Ready Workbook** is a simplified or “back-of-the envelope” version of a pro forma that allows a local government to quickly evaluate the viability of a reuse option. It also helps evaluate the general impact of various cost and/or revenue assumptions. However, the pro forma in this guide will not substitute for a detailed financial analysis, is not applicable to complex projects, and should not be used to make investment decisions. Where the

local government does not have the in-house expertise to appropriately use a pro forma, it should consider obtaining an outside party with that expertise.

The pro forma worksheet provides default values (such as per-square-foot construction costs and lease revenues for various types of reuses) that can be used to calculate each line item. These default values are examples of the types of values to be input; they may not reflect current economic and market conditions or account for regional variations from national averages. Local real estate brokers, economic development officials, lending institutions or developers should be able to provide appropriate values for a particular geographic area. A range of values can be used where estimates are uncertain.

It is important to understand and evaluate all assumptions included in the analysis, particularly those that can dramatically affect results. For example, a small change in the capitalization rate (Net Operating Income/Development Value [property purchase and development costs]) can quickly cause the project to become less financially viable. Keep in mind that the rate of return in the pro forma worksheet also does not reflect the number of years the project will take. Developers, investors and lenders use discounted cash flow and other methods to adjust for the time value of money.

The pro forma worksheet provides an estimate of profitability, but just because the project appears to be profitable, that does not necessarily mean that developers will be willing to acquire and redevelop the property. Individual developers and investors will have their own view of what is considered an acceptable return on investment that takes into account project risk. As a general rule, higher project risk carries the expectation of higher potential returns. Developers will use other tools as well, such as market analysis, highest and best use studies, and other investment-related information, to determine the viability of a project.

There are a variety of ways that the pro forma worksheet can help guide the reuse evaluation process, including:

- A local government can evaluate whether a desired reuse is financially viable, assuming the property is free of contamination. This best-case scenario will provide a baseline for estimating the minimum number of public incentives or other assistance that might be needed to make the property marketable. Based on that analysis, the local government can begin to make some judgment on questions such as to whether certain reuse options are impractical, whether additional resources to conduct a Phase II ESA would be justified, and how to prioritize information gathering efforts.

  Even before verifiable information on the environmental conditions is available, the local government can build on those baseline estimates by making certain assumptions regarding the environmental conditions (i.e., that asbestos insulation will be present in all or certain buildings). This can help determine the relative contribution of those added costs should they prove to be true.

- If the Phase I ESA determines that the property has already been extensively investigated and that information is available, or the local government has conducted its own Phase II ESA, the pro forma worksheet can be used to estimate how various cleanup alternatives could affect the costs and profitability of reuse scenarios should those costs be passed on to the developer of the property.

Likewise, where cleanup has already occurred, the financial analysis can take into account the associated costs that might be passed on, such as operation and maintenance costs, settlement of environmental liens, and any costs to modify the existing cleanup, if necessary, to accommodate a proposed reuse.

- Added interest costs resulting from protracted delays in construction, rehabilitation and remediation activities can be considered.
- The impact of parceling the property under different scenarios can be evaluated. For example, it might be that the revenue generated by selling off portions of the property could be used to finance cleanup or property improvements on the other portions.
- Local governments can estimate the revenues they would receive from a project. Real estate taxes and permit fees can be estimated based on the size and type of the redevelopment project. Retail rents generally reflect sales volume and can be interpolated to calculate sales tax revenue.

*Documentation – Develop a pro forma for the project (refer to the Pro Forma tabs in the **Revitalization-Ready Workbook**).*

4.7 Feasibility

After reviewing the project economics and financial analysis, the local government needs to understand project feasibility. This includes identifying key assets and opportunities to attract investment to the redevelopment area.

Each reuse scenario identified during the reuse visioning process should be evaluated - taking into account the project risks and liabilities, overall market viability, and economics of the potential reuse - to determine whether it should move forward with the development of a reuse implementation strategy, be redesigned, or be abandoned altogether.

Determining overall feasibility of a proposed reuse is not dependent on resolving all identified constraints, risks or liabilities. Rather, feasibility depends on resolving the constraints, risks and liabilities that would make the implementation of a reuse scenario impossible (or extremely difficult) to implement. The presence of constraints, risks or liabilities is not necessarily a reason to remove a reuse scenario from further consideration.

Risk management tools and approaches will be evaluated as part of the development of the implementation strategy. Other examples of issues that may affect the feasibility of a reuse include minimal or non-existent markets for a reuse, significant economic constraints, or significant land use restrictions due to environmental issues.

4.8 Property Disposition Strategy

As used in this guide, disposition of a property is the retention, sale, transfer or lease of a property for purposes of positioning the property for sustainable reuse and cleanup of the property. A disposition

strategy is a framework for deciding ownership and development of the property, and how to achieve it in a manner that supports established project goals for sustainable reuse and provides value to the property owner, potential buyer and developer. The strategy should include an analysis of pros and cons that help characterize risks associated with the range of ownership and transfer options.

The process of developing a property disposition strategy involves preparing a document that evaluates and compares disposition alternatives for the project site, such as ***property sale, ground lease, or lease with option-to-purchase.*** The strategy also discusses benefits and challenges, liabilities, obligations and risk transfer options. Finally, the strategy will help to identify a preferred alternative and associated actions for implementation.

Property Disposition

Disposition of a property is the retention, sale, transfer or lease of a property for purposes of positioning the property for sustainable reuse and cleanup of the property.

A property disposition strategy is focused on property ownership and sustainable reuse. Essentially, it defines the local government's role and involvement in the implementation of a reuse strategy. There are a variety of property disposition strategies available to local governments that can be used to facilitate the redevelopment of brownfield properties. These typically fall into two general categories:

- acquisition approaches, in which the local government takes title to the property for some period of time; and
- non-acquisition approaches, in which the local government encourages and participates in the reuse effort.

Each action carries its own set of issues that must be understood in order to develop a strategy for managing project risks and, ultimately, achieving a successful project. Development of a property disposition strategy requires a multi-disciplinary team, including an environmental professional, real estate professional, insurance consultant, planner and/or other related professionals.

4.8.1 Property Owner Evaluation

The property disposition and risk management strategy for a property could differ somewhat depending on whether or not there is an existing owner who may be willing to work cooperatively with the local government.

In cases where the strategy will involve the purchase of a property or the involvement of a property owner, it is important to understand the viability of a property owner and the property owner's willingness to participate in the reuse process before selecting a property disposition and risk management strategy. Sections 4.8.1.1 and 4.8.1.2 discuss how the development of a property disposition and risk management strategy might be shaped by whether or not there is a viable property owner that may be willing to work cooperatively with the local government, or an unknown or uncooperative property owner.

4.8.1.1 Properties with Cooperating Owners

Owners of mothballed properties may have an incentive to improve the property or remove unusable structures in order to reduce their maintenance costs or insurance premiums, improve their corporate image, or reduce liability from potential fires or other safety hazards. For many owners, however, a variety of concerns may trump these potential benefits. These concerns include, but are not limited to:

- Prohibitive demolition or property preparation costs.
- Environmental investigations that might identify contamination issues and trigger action to address those issues under federal, state or local laws.
- Lack of expertise in dealing with environmental liability and cleanups.
- Transfer of the property, which could lead to uses that aggravate existing environmental conditions and cause the owner to incur greater liability and expense.

By recognizing that these types of concerns exist, the local government and the property owner may be able to work collaboratively to advance the interests of both parties. This cooperation could enable the local government to gain access for conducting due diligence, avoid a contentious and time-consuming eminent domain taking, or avoid altogether the burden and risk of acquiring the property or taking on the demolition and cleanup activities. It may even be possible to fashion an agreement or structure financial incentives so that the local government has some control over the future use and timing of property development.

A comprehensive plan with clear benefits to the local government can help build support among those within the community and local administration concerned with using public resources to bring about improvements on private property. A cooperative arrangement with the property owner, along with the property access that may entail, also may help the local government and property owner become eligible to receive federal and state brownfields funding to offset the environmental investigation and cleanup costs.

Parceling or subdividing a property is an option that can sometimes help address some of the property owner's concerns and provide other strategic benefits in facilitating redevelopment. These benefits may include:

- Freeing up areas of the property for earlier development.
- Creating a source of revenue through the sale of a portion of the property, which can then be used to clean up other contaminated areas or improve the safety, appearance or marketability of the remaining areas (e.g., by demolishing buildings or making other improvements).
- Helping to ensure that the components of a permanent cleanup remedy (e.g., an area capped with a protective cover) remain protective by retaining control over the use of those areas. In some cases, it may be possible to use these areas in a manner that ensures protectiveness while supporting the reuse of the surrounding properties (e.g., by installing a parking lot or pocket park over the areas).
- Evaluating the potential use of parceling, which requires not only the knowledge of the environmental conditions for the entire property, but also its effect on legal liability (which may differ depending on applicable statutes). For example, parceling a portion of a property may not change the legal status of those parcels under CERCLA or RCRA; however, where the buyer of a portion of a property has no relationship with the responsible party and contamination is completely contained on the remaining portion of the property, the buyer may not be considered an owner or operator under CERCLA or RCRA. Consequently, parties involved in the

transfer or leasing transactions need to discuss any regulatory implications with EPA, the authorized state, or other federal/state agencies as needed before proceeding.

- Where the local government agrees to conduct or participate in environmental investigations, building demolitions, cleanup or other activities on the property, the local government will need to assess whether that involvement could subject it to unacceptable legal, financial and other risks. The local government also should consider whether risk management tools, such as those outlined in this chapter and in Appendix A, might be appropriate.

In conducting these types of activities, the local government must be careful that doing so does not worsen conditions on or surrounding the site, which could subject the local government to liability under environmental laws, or negligence and other common law liabilities.

Even building demolition can carry environmental liability risk if not carefully planned and executed. For example, demolition may release asbestos from insulation into the air or surrounding soils. The removal of building foundations or slabs could alter groundwater flow or allow contaminants in the underlying soil to leach into groundwater or migrate to the surface. Burying demolition debris and other materials on the property could create additional sources of contamination or create a pathway for volatile contaminants to migrate to the surface. Other issues could arise from the temporary placement of contaminated demolition debris, which if not conducted properly could create a contaminant release.

Before proceeding with on-site activities, the local government will need to have sufficient understanding of the property's environmental conditions in order to develop measures to minimize the potential for causing or contributing to a release. Keeping a building slab or foundation in place might be one way to avoid releasing underlying contaminants or altering groundwater flow. Placing demolition debris on an impermeable surface and covering the debris piles to control airborne releases also could help prevent releases.

Other measures could include analyzing soils below areas that will be used for debris storage to support a defense against potential future claims that the storage activities caused or contributed to a release.

4.8.1.2 Properties with Unknown Owners or with Non-Cooperating Owners

Gaining access at abandoned properties or those with an uncooperative owner in order to assess environmental conditions, let alone conduct demolition and cleanup, can be problematic. In situations where a fire or other public safety threat exists, most local governments and states have the authority to enter the property to address those specific issues, but these authorities may be limited and may not extend to other areas of the property. Very few states have laws in place to enable local governments to access a property to perform an environmental assessment or conduct cleanup, or to allow it to seek cost recovery for those activities. Where access is available, the local government needs to consider the environmental liability and other project risks associated with undertaking any activities on the property.

If the results of a Phase I ESA conducted on an abandoned property provide reason to believe that significant contamination issues do exist, it is advisable to notify EPA or the state. This will help protect the health and safety of the community and could potentially help the local government avoid legal and political risks.

If EPA or the state believes that there is a sufficient basis for these concerns, the Agency may initiate its own investigation into the environmental conditions. EPA and state agencies can use various authorities to obtain information relevant to that investigation and, if necessary, to gain access to the property. Should the situation dictate, they may be able to take further steps to address these issues or compel the responsible parties to do so. While this may not always occur in the timeframes desired by the local government due to federal and state resource constraints, procedural issues and other reasons, the end result might be that the cleanup and revitalization of the property moves forward with less direct involvement by the local government.

If the property is a high priority for the local government, and obtaining access for investigation, building demolition or cleanup is not a viable option, acquisition may be the only available means of dealing with abandoned properties. There are no absolute guidelines for making this decision. It will depend on how much information is known about the environmental conditions and other pertinent factors, how risk-averse the local government is, whether the potential project risks can be adequately managed, and other considerations specific to the situation.

It is important to consider which federal and state environmental statutes may apply. For example, under certain state and federal environmental statutes and state property transfer laws, some level of environmental investigation and, if necessary, cleanup might be automatically triggered and transferred to the local government upon acquisition or leasing. Even if the primary intent of the local government is to acquire the property to demolish buildings or make other improvements, the local government may find that it must then address other areas of the property as well. The type of acquisition (e.g., eminent domain taking, property tax foreclosure, direct acquisition) may affect liability protections under federal and, possibly, state environmental statutes.

Acquiring a property that has already been investigated or remediated will reduce the uncertainty and therefore make the project risks more predictable. A property where these activities have occurred, even where some contamination remains on the property as part of the permanent remedy, can often be the preferable acquisition over a property where the environmental conditions are largely unknown. This decision will depend on whether the investigation and cleanup were comprehensive and occurred under the proper level of oversight. If the property is acquired, long-term continuing obligations will need to be met in order to preserve any liability protections that may be available to a local government under CERCLA and other applicable statutes.

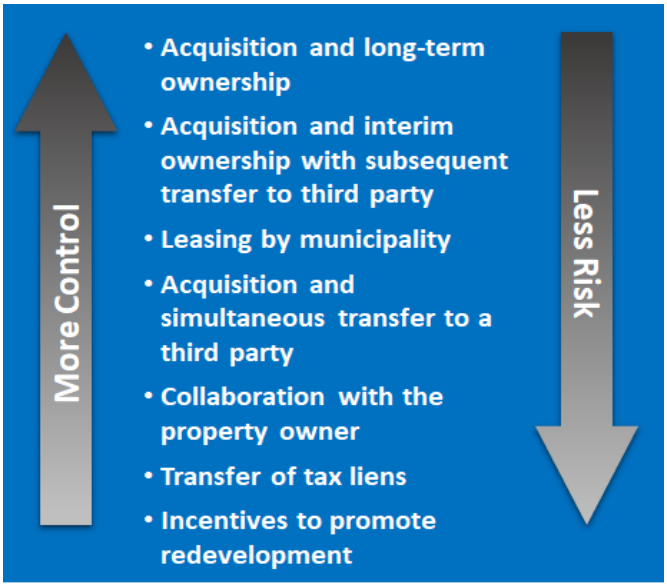
A local government considering the acquisition of a property may be able to access federal and state funds or other resources to cover some of the costs of environmental assessment and cleanup. EPA's Brownfields website is a starting point for identifying potential sources of assistance.

4.8.2 Selecting Property Disposition Strategies

The disposition strategy will outline the assets of the property, the liabilities and responsibilities to be assumed by a purchaser or developer, and the liabilities and responsibilities to be retained by the local government. Some of the more common property disposition strategies include:

- Acquisition and long-term ownership.
- Acquisition and interim ownership with subsequent transfer to a third party.
- Leasing by the local government.
- Acquisition and simultaneous transfer to a third party.
- Collaboration with the current property owner.
- Transfer of tax liens.
- Incentives to promote redevelopment.

These actions and the issues they raise are broadly representative of most real-world situations.



In a generalized way, these property disposition strategies are organized in descending order of local government control over the property. Often, having more control comes with an increased potential for incurring project risk.

To establish the proper baseline for evaluating these property disposition strategies, local governments should compare them to a no action option in which the local government does not directly intervene to facilitate redevelopment. When considering the acquisition of a property, the method of acquisition (e.g., tax foreclosure, escheat, eminent domain, purchase, inheritance, abandonment, donation) may be important.

4.8.2.1 Acquisition and Long-Term Ownership

Taking title provides control over the property to the title holder. Local governments often take and retain title to an underutilized property if there is a public reuse planned, such as a park or local government facility. Ownership also may allow the local government to have a greater role in the cleanup and reuse of the property. By controlling the land uses, local governments also can better ensure that land use restrictions are being met and cleanup components (e.g., groundwater monitoring wells, landfill caps) are properly maintained and not compromised.

If a local government intends to acquire the property by exercising eminent domain, it should determine if state law allows adjustment of the purchase price to reflect cleanup costs. Otherwise, the local government may be forced to pay considerably more for the property than its actual discounted value. A May 2008 report by the Northeast-Midwest Institute provides a summary of how different states address this issue (see Northeast-Midwest Institute: Mothballed Sites and Local Government Acquisition: How State Liability Protections, Eminent Domain Reforms, and Cost Recovery Authority Can Spur Local Government Action to Acquire and Redevelop Difficult Brownfields Sites, May 2008).

While different responsibilities may apply depending on state and federal laws, in general, the specific responsibilities of taking title to a brownfield property may include:

- Responsibility for carrying out the cleanup action on the property.
- Responsibility for cleanup action beyond the property boundaries.

- Responsibility for responding to third-party suits related to the contamination on the property or emanating from the property (unless otherwise protected from these suits through, for example, a settlement agreement with EPA and/or the state).

Other parties, including former owners and operators of the property, also may be responsible for a property's environmental issues.

4.8.2.2 Acquisition and Interim Ownership with Subsequent Transfer to a Third Party

Acquisition by the local government followed by a transfer to a third party is a way to involve private developers in the redevelopment process while potentially shielding them from some of the uncertainties and difficulties of property acquisition.

Some local governments have redevelopment authorities or land banks that will take title to properties and hold them while parcels are assembled, and redevelopment proposals are evaluated. Typically, the properties are then leased, sold or transferred to a developer who will implement an agreed upon redevelopment plan. An advantage to the local government is that the private entity performs the redevelopment and, in many cases, the cleanup action as well. A disadvantage to the local government is that it may have limited control over the cleanup and the future use of the property.

4.8.2.3 Leasing by the Local Government

In this action, the local government enters into a long-term ground lease with the owner that allows for the development and use of the property (e.g., establishing a library on the property) without taking title.

One potential advantage is that the current owner may assume some or all of the responsibility for conducting cleanup and maintaining the remedy components (such as treatment systems or landfill covers). Alternatively, the local government may agree to take on those obligations. In either case, the terms of the lease would typically need to cover these roles and responsibilities.

Leasing does not necessarily shield the local government from environmental liability. For example, as discussed later in this guide, a party leasing a brownfield property may, depending on the circumstances, be liable as an operator under certain federal and state environmental statutes. Some courts also have held that long-term leases can be equivalent to ownership for the purposes of establishing liability.

A local government also may incur legal liability for causing or contributing to the environmental contamination as the result of its use of the property or by a party that sublets the property from the local government. Conducting due diligence to understand the environmental conditions can therefore be as important when leasing a property as it is with acquiring a property.

Before entering into a lease, a local government should carefully consider its environmental liability risk, including whether it might qualify for any liability protections under specific statutes.

4.8.2.4 Acquisition and "Simultaneous" Transfer to a Third Party

Acquisition and simultaneous transfer to a third party is similar to the above approach, except that the local government and the third-party recipient of the property prearrange their agreements for the property, and the property's transfer can be accomplished immediately after the acquisition by the local government. This has the potential advantage to the local government of minimizing expenditures and

property maintenance responsibilities; however, control limitations may be similar to those where the local government acquires the property and transfers it to a third-party months or even years later.

4.8.2.5 Collaboration with the Property Owner

In some situations, the property owner may be unwilling or unable to perform environmental investigation, cleanup or other activities needed to improve the marketability of the property or address health and safety issues but may allow or work with the local government to do so. To gain support for this approach, local government officials may need to build a convincing case that such collaboration is in the best interests of both the property owner and the local government.

Collaborative partnerships may be one way to deal with mothballed properties, where the owner continues to pay property taxes, but does not do anything to clean up or improve the property. Cooperative owners can provide property access for environmental assessments and other investigations without involving the local government in the chain of title.

Depending on the nature of activities performed by the local government, the local government may need to consider obtaining indemnifications and other agreements with the property owner. As with other property disposition strategies that lead to direct involvement in activities on the property (e.g., investigation, cleanup, construction), the local government should consider whether this carries an unacceptable risk of legal liability.

4.8.2.6 Transfer of Tax Liens

Where allowed under state law, the local government may transfer or sell tax liens for the property to a third party who then forecloses on the property and takes title. This action can be used where the property is abandoned or where the current title holder is in arrears on tax payments. State laws governing the right of redemption by the owner or other party with a vested interest in the property also will need to be taken into account.

While this process can take a year or longer to complete, it may be worth considering in situations where the local government can attract qualified developers and exercise sufficient control over development. Many local governments also auction portfolios of tax liens.

Sometimes, however, a party will acquire the portfolio with the intention of taking action on only certain properties in the portfolio. This may actually delay or inhibit redevelopment on the remaining properties.

4.8.2.7 Incentives to Promote Redevelopment

Generally, incentives and incentive packages pose fewer project risks to a local government but provide it with less control over the development of the property. For example, certain financial incentives, such as those that involve forgiving back property taxes, could carry few environmental liability risks, but may result in significant financial risk and lack support within the community. Still, local government incentives can sometimes be viewed as a more attractive alternative than property disposition strategies that require more direct and active local government involvement in the brownfield property.

Other examples of local government incentives are:

4.8.2.7.1 Zoning and Use Exemptions

The local government may increase a property's attractiveness to developers by changing zoning or creating zoning and use exceptions prior to the developer talking title, as zoning and land use often represents a great source of uncertainty for developers. However, the local government can run the risk of establishing an unwanted precedent by granting such exceptions.

4.8.2.7.2 Tax Increment Financing (TIF)

TIFs can be a tool to attract developers to properties that are otherwise financially unappealing. TIFs encourage development of many types of underutilized properties, not just those with environmental issues. As with non-brownfield properties, the development needs to result in an increase in the value of the property for this technique to make economic sense. The local government also should carefully consider future obligations and tax revenues to make sure it can afford to grant this type of incentive. (See Council of Development Finance Agencies [CDFA]: Tax Increment Finance (TIF) Resources for additional information on tax increment financing.)

4.8.2.7.3 Infrastructure Improvements

The local government can make a project more financially attractive by providing infrastructure normally paid for by the developer. A local government's investments on new infrastructure will generally have to be made before any tax revenues are realized.

4.8.3 Screening Property Disposition Strategies Based on Project Goals

The local government should screen its property disposition strategies to determine compatibility with project goals and risk management considerations to identify one or more strategies that warrant further consideration.

The first question is whether the local government needs to intervene at all. If developers are willing to reuse the property in a way that the local government supports, the local government may be advised to step out of the way and let the development proceed. On the other hand, if no one has brought forward a proposal that is acceptable to the local government, or financially attractive to a developer, more proactive involvement by the local government may be appropriate.

The screening process eliminates a property disposition strategy from further consideration when it is apparent that it will not reasonably achieve the project goals. Screening avoids spending resources unnecessarily and provides an early reality check for the project.

Documentation: Identify and document the key elements of the disposition strategy for the project.

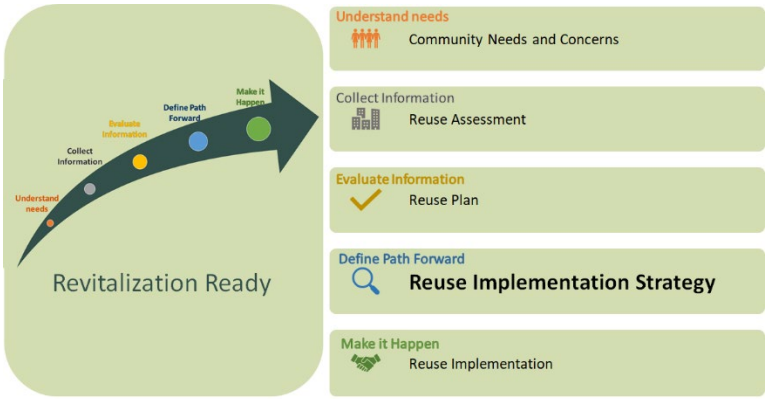
References:

EPA: Plan for Brownfields Redevelopment Success: Site Disposition Strategy

Northeast-Midwest Institute: Mothballed Sites and Local Government Acquisition: How State Liability Protections, Eminent Domain Reforms, and Cost Recovery Authority Can Spur Local Government Action to Acquire and Redevelop Difficult Brownfields Sites, May 2008

Northeast-Midwest Institute: Commentary - Overcoming Impediments to Public Agency Acquisition of Brownfield Sites, September 2009

5 Reuse Implementation Strategy



Implementing a reuse strategy occurs after the reuse planning process identified one or more feasible reuse scenarios, along with a plan for property disposition to move forward with implementation. The reuse implementation strategy outlines the approach for:

- Identifying risk management tools and approaches to mitigate or minimize risks and liabilities (see Section 5.1).
- Developing a Brownfields Investment Package (see Section 5.2) and Resource Roadmap (see Section 5.3)to Identify resources and attract investment.
- Leveraging resources (see Section 5.4).
- Addressing site investigation and cleanup on the property (see Section 5.5).
- Disposing of the property (see Section 5.6).

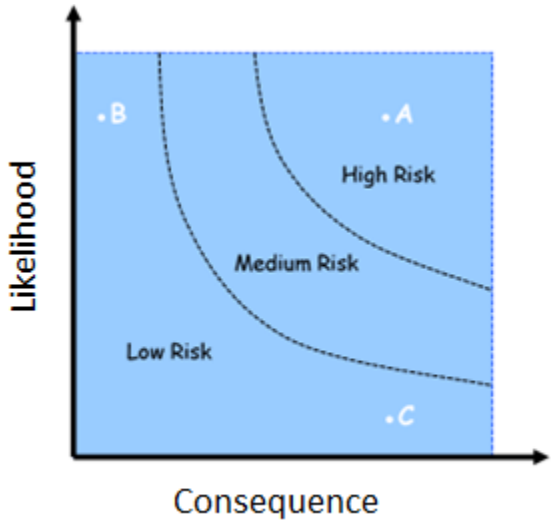
5.1 Risk Management Tools and Approaches

Risk management includes several activities, including risk evaluation, risk control and risk transfer. This section provides an introduction to the tools and approaches that are commonly used by local government when redeveloping brownfield sites. Risk management is discussed in more detail in Appendix A.

Risk evaluation identifies likely adverse events and includes a two-part evaluation for each event: the likelihood of an adverse event occurring, and the consequences of that event. A particular event may be likely to occur, but if the consequences are low, the risk also could be considered low. If an event has a high likelihood of occurring and a high potential consequence, the risk may be considered high and unacceptable.

Risk is a function of the likelihood and consequences of an adverse event. In evaluating risk, both factors need to be considered together. In the graphic below, Point A (high likelihood, high consequence) is a high-risk event, while Point B (high likelihood, low consequence) and Point C (low likelihood, high consequence) represent only low-risk events.

Once potential adverse events are identified and there is an understanding of their likelihood and consequences, potential ways to manage these risks can be considered. The risks can then be reassessed under the risk management approach.



Ideally, risk management evaluations are made on a quantified basis. However, they are often made on a qualitative or comparative level: How likely is it? What could happen if it occurs? And what can be done to minimize either or both? Incomplete or unreliable information complicates these determinations.

As a practical matter, risk management usually comes down to managing uncertainty. For example, when crossing the street, a pedestrian evaluates the frequency and speed of the cars, the distance to be traveled, their own agility, conditions of the road, and other relevant information before making that decision. Without that information, the pedestrian doesn't have certainty of safety and may decide that crossing the street is not worth the risk.

Uncertainty in the context of redevelopment can be associated with information that:

- is potentially available, but unknown (e.g., data gaps in sampling and analysis); and
- must be inferred or imagined because it involves an event that has not yet occurred and is not fully within one's control (e.g., will EPA take an enforcement action? Will an abutting property owner sue?).

These categories of uncertainty are often interdependent. For example, with greater understanding of the environmental condition at a property, the local government can more certainly predict whether EPA or the state might require further investigation or cleanup of the property.

Risk management is typically conducted in an iterative, staged manner and can involve traditional tools or other approaches, including:

- Insurance products.
- Indemnification agreements.
- Additional data gathering.
- Delay of acquisition until further cleanup is completed.
- Use of a different method of property acquisition.

There are no shortcuts to risk management. The selection of risk management tools and approaches to use in any particular circumstance will depend on the local government's needs and sensitivity to risk. No one tool or approach is likely to provide absolute protection.

Some tools and approaches, such as insurance products or contractual provisions, can provide important benefits, but should not be used as a substitute for careful analysis and proactive strategies that reduce uncertainties and the source of potential risks.

No one tool or approach is likely to provide absolute protection. Employing multiple layers of protection will often be necessary — with specific tools and approaches reinforcing or building on others. For example, indemnification agreements can be most effectively negotiated if the parties have a clear understanding of the risk they are attempting to transfer. Indemnification agreements also may need to contain specific escrow or insurance provisions that back up the indemnification provisions. Similarly, insurance underwriters may be more likely to provide broad pollution coverage and charge the lowest premiums for environmental conditions that are well-characterized and controlled.

No one tool or approach is likely to provide absolute protection. Employing multiple layers of protection will often be necessary — with specific tools and approaches reinforcing or building on others.

Each tool and approach has distinct limitations that must be understood in order to be used effectively. For example, indemnification agreements can be used to clarify responsibilities between the local government and another party, such as the property owner and developer; however, the indemnification agreements will not necessarily shield the party being indemnified against CERCLA liability. Local governments should seek expert legal advice regarding the use of indemnities and should be aware that, depending on the circumstances of their use, they also may undercut the ability to meet the requirements of some CERCLA liability defenses. As another example, insurance products can limit a local government's financial exposure with respect to the specific circumstances defined by the coverage but may be inappropriate as a long-term solution. Insurance products also are difficult to obtain for smaller-scale projects and may be prohibitively expensive in some cases.

Risk management tools and approaches can generally be separated into three categories to 1) better understand or quantify risks; 2) control risk; or 3) transfer risk. Sections 5.1.1 through 5.1.3 provide additional discussion for each of these categories. Within each of these categories, risk management tools can generally be further categorized as relating to:

- Property activities.
- Statutory/regulatory protections.
- Transactional activities, including contract provisions.
- Insurance.

Some risk management tools and approaches associated with each of these categories that are available to local governments are identified in Appendix A. The uses and limitations of some of these tools are further described on EPA's Brownfields website. Useful resources available on that website are:

- Environmental Insurance and Risk Management Tools: Glossary of Terms
- Environmental Insurance and Risk Management Tools in Brownfields Cleanup and Redevelopment
- Environmental Insurance Helps Ensure Redevelopment

Before discussing specific risk management tools and approaches, the local government should first gather information that can reduce data gaps. **To that end, one of the most important steps that a local government can take is to consult with EPA or the state agencies overseeing the cleanup with respect to the environmental status of the property and the cleanup required for the property.** EPA and the states understand the legal and technical complexities associated with the cleanup and reuse of brownfields and are sympathetic to the challenges that local governments face in tackling them. They want to help local governments safely bring properties burdened by environmental issues back to the public tax rolls.

Understand and Quantify Risk
Property Activities that Local Governments May Take
Meeting with EPA and State Regulators
Due Diligence/All Appropriate Inquiries
Environmental Investigation
Cleanup Action Planning
Reasonable Worst-Case Scenario Planning
Engaging Stakeholders
Financial Analysis

5.1.1 Understand/Quantify Risk

Understanding the risks involved in a transaction or a course of action is the foundation of risk management. Information gaps can hinder the ability to adequately define and quantify project risk — and can in themselves introduce risk — and efforts to close the most significant of those information gaps will often be the first focus in managing risk. Where significant information gaps exist, the local government will need to assess whether the costs and risks of obtaining that information are justified.

Risk quantification considers the potential economic costs attributable to that risk and allows that risk to be accounted for in the project pro forma. Not all risks can be reduced to purely economic terms; however, some risks may need to be evaluated on a qualitative or comparative basis. Actions to understand and quantify risk are generally associated with property activities (see table above).

5.1.2 Control Risk

Some risks can be controlled by taking actions to eliminate or reduce the source of the risk. One example of risk control is assuming the responsibility for conducting a cleanup action in accordance with applicable regulatory requirements. A local government may also control potential liability and risk by ensuring that the local government meets the criteria for qualifying for and maintaining any applicable statutory liability exemptions. Risks also can be controlled through transactional strategies and insurance mechanisms. Actions to control risks are generally associated with property activities, statutory/regulatory protections, and transactional activities (see table below for examples).

Control Risk	
Property Activities a Local Government May Take	**Statutory/Regulatory Protections**
Timing Local Government Involvement	Statutory Exemptions and Defenses
Interim Cleanup Action	Prospective Purchaser Agreements
Cleanup Action	No Action/No Further Action Letters
Voluntary Cleanup	Other Determinations of Completion
Remedial Systems Monitoring and Maintenance	**Transactional Activities**
Institutional Controls	Escrow Accounts
Oversight of the Environmental Contractors	Purchase Price Adjustment
Following Accepted, Good Commercial Practices	Grants
	Tax Benefits and Credits
	Private Investors
	Specialized Loans
	Redevelopment Authorities
	Land Banks

Transfer Risk	
Transactional Activities	**Insurance**
Indemnification	Comprehensive General Liability
Representations and Warranties	Pollution Liability
As Is Provision	Errors and Omissions
Covenants	Cost Cap
Assumption, Retention and Release Provisions	Secured Lender
Schedule of Included or Excluded Liabilities	Finite Risk
Post-Signing and Pre-Closing Conditions	Institutional Controls and Post-Cleanup Action Care
Fixed Price or Performance-Based Contracts	

5.1.3 Transfer Risk

Risks that the local government cannot control cost-effectively can sometimes be transferred to third parties through mechanisms such as indemnification agreements and insurance. For example, if the local government ends up with a statutory obligation to clean up contamination at a property, risk transfer can potentially reduce its financial exposure. It is critical to understand the limitations of the risk transfer mechanisms. Actions to control risks are generally associated with transactional activities and insurance (see table below for examples).

*Documentation – Summarizes risk and liabilities and actions (refer to the Constraints tab in **Revitalization-Ready Workbook**).*

5.2 Brownfields Investment Package

A brownfield investment package is a document and/or website that will help you communicate the distinctive assets, advantages, and financial information for your redevelopment project. It should describe a viable investment opportunity based on your community's specific goals and redevelopment vision.

While a brownfield investment package ("package") is used to explain the overall market traction and potential for the redevelopment in a way that attracts local, regional, and national capital and other resources, it also helps communities organize their stakeholders around a unified vision and make decisions driven by market realities and site potential.

The process of creating a brownfield investment package offers your community an opportunity to better understand the obstacles and constraints that can be overcome through prioritized local investment and development decisions. It is especially useful for weaker market areas. Your community can use the process to think through how to implement that redevelopment and organize assets and incentives in ways that advance sustainable and inclusive growth.

Many communities establish a task force led by public, private and civic institutions as their first step in designing a package. This approach helps ensure that a broad mix of city, anchor institutions and community leaders can work together and with the community to create the package. The task force is often set up to assign responsibilities with firm deadlines to the members. Once the package is complete, the task force members can help bring visibility to the package and identify appropriate incentives (e.g., zoning, low-cost or no-cost land, tax increment financing and tax abatements) that align with the community's vision and priorities.

Organizing a task force is not feasible for every community; however, your community can create the package with an organization leading the effort who coordinates with key stakeholders and keeps the community up to date. Encourage key stakeholders to voice their support throughout the process to signal local commitment to the project. When complete, use as many channels as possible outside your local area to bring the highest visibility to the package.

In addition to describing key investment opportunities, local flavor and enthusiasm should be evident throughout the package. Use the package to celebrate the unique character and assets within your community. Your brownfield investment package should contain the following common elements:

5.2.1 Economic Context

All communities exist within (and are economically attached to) a broader area and regional economic ecosystem. To that end, the brownfields investment package should represent the redevelopment area at varying economic levels based on market potential. It should set the economic context by providing information on driving market clusters, sectors, institutions and companies that define its unique assets and demonstrate the strongest economic growth opportunities given general trends and dynamics. When applicable, it also should explore recent trends in entrepreneurship, company formation and growth, and venture funding.

5.2.2 Governance Context

The brownfields investment package also should act as an introduction to local governance by providing an overview of government structure and leadership. It should indicate which state and local entities are the most important points of contact and include their contact information. The package needs to provide a transparent description of any local resources and incentives relevant to your redevelopment.

5.2.3 Local Information

After setting the larger context, the brownfields investment package should present a granular assessment of your community's competitive position and prospects. It should include specific information on growth dynamics, investment patterns and catalytic projects in the immediate area.

5.2.4 Project-Specific Information

The brownfields investment package also should describe the range of opportunities specific to the redevelopment area. This should include whether it is near infrastructure, areas of economic growth, the availability of additional land and buildings for economic use, or the presence of anchor institutions like universities, hospitals, and major employers. It is useful to include whether your community has site control, how the redevelopment aligns with city goals, completed conceptual design(s) and adequate financial analysis.

5.2.5 Areas of Focus

The brownfields investment package should be grounded in local data and local opportunities. It should reveal a distinctive economy with several pathways for growth and investment. The package should be used to set the stage for different types of investors – public, private and civic - to immediately familiarize themselves with your community and redevelopment opportunity. The package should generally include the following key focus areas:

- Regional introduction and governance;
- Market summary;
- Area overview and assets;
- Specific property overview; and
- Development potential.

Reference:

EPA: Creating a Brownfields Investment Package

5.3 Resource Roadmap

After project costs are determined, your community will need to identify potential funding sources to implement necessary actions. Funding sources can include:

- Tax increment financing (TIF), or TIF equivalent.
- Tax credits.
- Tax exemptions.
- Enterprise Zones and Quality Jobs Programs.
- Opportunity Zones.
- New market tax credits.

- Permit/impact fee waivers and rent abatement.
- Sales tax revenue sharing.
- Grants.
- Bond issuance.
- Cash/local government direct investment.
- Job credits.

To help with the funding responsibilities, a local government should engage in partner discussions or develop a Resource Roadmap (see EPA's Setting the Stage for Leveraging Resources for Brownfields Revitalization and Plan for Brownfields Redevelopment Success: Resource Roadmap) to identify potential sources for the funding needed for the project, as well as the timing and requirements that are associated with the funding. The Resource Roadmap will serve as a useful tool for developing a strategy for leveraging funding for brownfields and community revitalization.

A Resource Roadmap is a document, sometimes in matrix form, that identifies revitalization priorities, their key components and phases, and the estimated cost for each project component and phase (or at least the most important next phases). While the Resource Roadmap is similar to the sources and uses chart in that they both identify sources of funds for a project, it serves as a strategic guide to project leveraging by matching individual project components to appropriate funding and financing sources, whereas the sources and use chart provides an accounting of available funds to identify, organize and balance potential expenses, funding needs and sources of funding. The Resource Roadmap identifies all potential funding sources for your project, including the timing and complexity of the funding process. In concert with the other planning phases, the Resource Roadmap outlines a strategy for identifying and tapping into available funding sources for individual project components from federal, state, philanthropic, private sector and local financing sources.

The Resource Roadmap can be a handy guide for project teams pursuing grant and loan funding. It also can be a great information tool to provide to local leadership (such as a city council) and funding champions (such as state and local legislators).

The Resource Roadmap can be a handy guide for project teams pursuing grant and loan funding. It also can be a great information tool to provide to local leadership (such as a city council) and funding champions (such as state and local legislators). The Resource Roadmap can help map out potential sources of funding and how to meet matching-share requirements for individual funding sources. Communities also should be able to inform developers/investors of available sources/incentives and financial benefits to allow projects to progress where financing gaps exist that would otherwise make projects economically unviable.

What is involved in creating a Resource Roadmap?

- Defining the specific project components and phases for each priority brownfield project.
- Estimating costs for each component and phase.
- Identifying the best sources for funding each component and phase.
- Creating a chart or matrix with this information, organized by project component and phase.
- Updating the Resource Roadmap as funding commitments are pursued and secured.

Reference:

EPA: Plan for Brownfields Redevelopment Success: Resource Roadmap

5.4 Leveraging Resources

Leveraging is the use of existing resources or funding to attract additional resources or funding. Wise use of existing investments may lead to other investments (funding or other types of resources) from other parties. It is a good idea for communities to begin their brownfields redevelopment projects by establishing strong leadership, assembling a team of committed partners, engaging with the community, and carefully assessing how to make the best use of limited local dollars so that initial local investments will leverage additional funding.

Initial investments, when made strategically, can result in attracting additional investments because they establish commitment to a project, instill confidence in the potential success of a project, and address the sustainability of the project.

Initial investments, when made strategically, can result in attracting additional investments because they establish commitment to a project, instill confidence in the potential success of a project, and address the sustainability of the project. Initial local investments can include:

- Using available local funds for planning, site assessments or property purchases.
- Focusing personnel on identifying and securing sources of seed money for a project (e.g., government or foundation grants) and those that will leverage additional investment (i.e., community planning grants or brownfields assessment or cleanup grants).

Examples of leveraging include:

- When a local government uses its own local resources to purchase property and conduct an environmental assessment of the property, or when a local government obtains a brownfields assessment grant and uses those funds to assess the environmental conditions at the property, the community can use the results of that investment to attract private investment.
    - The initial investment in the property purchase or the environmental assessment demonstrates commitment on the part of the local government to the reuse or redevelopment of the property.
    - The same initial investment in the environmental assessment of a property provides information to potential investors or developers that can delineate the level of risk associated with further investments in the property or project.
- Many nonprofit funders require grant applicants to demonstrate local commitment to a project by committing matching funds or in-kind resources, such as staff time and the use of locally owned equipment.
- Local investment or project commitment: Private investors and developers often judge a project's potential for success by the degree of local investment and commitment.

- Redevelopment projects established within local government master plans as priority projects may have a better chance of attracting private investment than projects merely listed in a Request for Proposal (RFP) or real estate posting.
- Projects or properties where local governments invested in infrastructure improvement, transit upgrades or beautification projects may have a greater advantage in attracting additional funding due to the demonstration of local commitment.
- Federal and state agencies may give preference to grant applicants who can demonstrate commitments of resources from other funding sources, particularly when the locality uses those resources in effective ways to make genuine progress toward meeting project goals.
- Projects where strong local leadership shows a willingness to collaborate with other partners and investors demonstrate a potential for sustainability. Potential investors are attracted to projects where local leaders are committed to working with them over the long term for the mutual benefit of all investors.
- Strong public participation and the ability to demonstrate community commitment to a project also can be leveraged to attract the collaboration and investment of private partners. Investors need a sense of commitment and a level of confidence that their investments will lead to success and an acceptable rate of return.
- Technical assistance and in-kind contributions from project partners demonstrate local commitment to the project, which often is essential when applying for state and federal grants and in attracting outside developers.

The EPA guide Setting the Stage for Leveraging Resources for Brownfield Redevelopment will help local communities successfully leverage resources for brownfields and community revitalization. It focuses primarily on what communities can do before they solicit funding to organize themselves and make the preparations necessary for mounting a successful leveraging effort. The guide provides a step-by-step approach to help localities organize efforts to pursue and secure funding from a variety of sources for brownfields and community revitalization, including successful case studies and resources from EPA.

Reference:

EPA: Anatomy of Brownfields Redevelopment

EPA: Community Actions that Drive Brownfields Redevelopment

5.5 Site Investigation and Cleanup

An important part of the reuse implementation strategy is developing an approach to address the site's environmental condition and related cleanup. This approach needs to include how environmental cleanup activities will be handled during any property transaction or the redevelopment activity.

As discussed in Section 4.4.1, a completed site investigation is important to understanding and addressing potential risks and liabilities to the local government or to a current or future owner or developer of a property. In particular, the completed site investigation is needed to evaluate potential remedial actions that will be required for the property, and the potential for land use and engineering

controls that may impact the use of portions of the property. Decisions with respect to remedial action, including the use of land use controls, should be made in the context of the proposed use for the property. The approach to remedial action on the property will be critical to the reuse.

The approach to site investigation and cleanup may differ depending on the property disposition strategy selected. In some cases, if the local government is planning to purchase the property, it may elect to complete the investigation and the cleanup activity prior to bringing on a developer or transferring the property to a developer. In cases where the economics of a property transaction support the transfer of the responsibility for completing the cleanup, the local government may want to have a future buyer or developer complete the remedial action.

Integrating implementation or completion of remedial actions with development activities on the property can create synergies and project efficiencies. For example, roads, parking and foundations can act as engineering controls by limiting direct contact with contaminated soil. Locating monitoring wells and remedial action equipment, and taking into consideration the location of buildings and structures on the property, can be critical to the ability to effectively develop the property. These synergies and efficiencies provide an economic benefit while accelerating the implementation and completion of development on the property. Taking advantage of these synergies and efficiencies can be achieved by involving the agencies overseeing the investigation and cleanup required for the property in the reuse planning process.

Reference:

EPA: Brownfields Road Map to Understanding Options for Site Investigation and Cleanup: Sixth Edition

5.6 Property Disposition

The disposition of a property requires defining an approach to ownership and development of a brownfield property in a manner that provides value to the current and potential future owner and developer. Depending on the property disposition strategy (see Section 4.8) that is to be used, the approach for disposition may be different. For example, if the local government is the owner of the property and intends to remain as the owner, disposition may involve the lease of the property to a developer or a contract with a developer to develop the property. If the local government is planning to purchase the property or transfer the property to a third party, the disposition will be the sale or transfer of the property. The disposition may involve a request to solicit and identify prospective purchasers or developers.

The disposition of a property requires defining an approach to ownership and development of a brownfield property in a manner that provides value to the current and potential future owner and developer.

5.6.1 Interested Parties

A local government or other development entity will need to identify parties interested in acquiring, redeveloping, leasing and using the redevelopment site. Potentially interested parties should be identified based on the attributes needed to complete the proposed development. For example, a potential consideration is identifying parties that have experience with brownfields redevelopment or access to resources necessary to successfully implement the reuse plan.

5.6.2 Expression of Interest (EOI) Process

The process typically includes testing the market through an expression of interest (EOI), potentially followed by a more formal request for proposals. An EOI is a formal, often confidential, process that will gauge interest in a site and identify potential redevelopment opportunities. The process involves a written request for non-binding EOIs, site tours and review of responses. The EOI request packages materials that describe the site, available utilities and infrastructure, and environmental status. Through the EOI process, communities can obtain conceptual development proposals and pre-qualified development teams.

5.6.3 Request for Proposal (RFP) Process

An RFP is a formal, competitive process for obtaining acquisition and redevelopment offers for a redevelopment site. It involves a written RFP package with documentation on site conditions and assets, copies of existing surveys and deeds, information about site tours and interviews, and a review of proposals. The solicitation materials of the RFP also should clearly define the municipality's goals for redevelopment. The process is usually implemented after completing a site reuse assessment. Interested parties must have access to reliable information on the site to submit a bid.

5.6.4 Outreach

As part of the process, it is crucial to reach out to necessary markets to identify interest and relay information on site potential and EOI/RFP status. This may include outreach outside of the regional area to markets that may have interest in the assets unique to the municipality. The outreach process also may include scheduling events around the EOI/RFP processes to attract key individuals from the development community to the municipality for them to visit the site and understand the potential opportunities for redevelopment. The outreach process should occur before and during the solicitation process. The more thorough the outreach process, the better the opportunities for achieving the desired redevelopment goals.

References:

EPA: Plan for Brownfields Redevelopment Success: Evaluation of Market Viability

EPA: Plan for Brownfields Redevelopment Success: Site Disposition Strategy

6 REUSE IMPLEMENTATION

Implementation of a reuse plan will vary based on the property or properties involved, the environmental condition of the property and many other factors that are unique to a particular transaction. Below are several key issues that can be important to the successful implementation of the reuse.

6.1 PROPERTY SALE/LEASE AGREEMENT

The property transaction will involve a contractual agreement to define the terms of the transaction and the responsibilities of the buyer and seller with respect to the environmental condition of the property. This typically will involve outlining the responsibilities of both parties with respect to cleanup and long-term operation, maintenance and monitoring, as well as providing indemnities and financial assurance mechanisms.

6.1.1 Environmental Responsibility

The property sale/lease agreement should clearly define the parties responsible for conducting remaining investigation and cleanup activities, as well as responsibility for long-term operation, monitoring and maintenance of ongoing remedial action, and institutional and engineering controls. The agreement should describe the responsibilities for performance of environmental activities, including financial responsibility and regulatory compliance; provide indemnities related to the retained or assumed environmental responsibilities, procurement of pollution legal liability (PLL) insurance or other financial mechanism; and address other risk and liability transfer issues.

6.1.2 Integrating Cleanup with Redevelopment

Coupling redevelopment with cleanup activities can ensure cost-effective site cleanup and address potential environmental risk. Brownfields real estate transactions provide an opportunity to integrate environmental cleanup with sustainable reuse of a property. The design and implementation of the reuse of the property can incorporate potential cleanup activities, as well as long-term operation, maintenance and monitoring related to the environmental condition of the property. Reuse planning can incorporate siting of cleanup equipment, monitoring wells and buildings to avoid conflicts with the development.

6.1.3 Engineering and Institutional Controls

Many brownfield properties incorporate in their remedial plans controls that restrict property access or use. The presence of existing or proposed engineering and/or institutional controls should be identified in the transaction. Typically, engineering controls such as asphalt caps and fencing require periodic inspections and repairs as necessary to ensure they remain protective of human health and the

environment. Institutional controls such as land use restrictions often take the form of deed restrictions or easements. Property owners must be aware of these restrictions and ensure they transfer to the new owner if the property is sold.

6.2 Transactional Due Diligence

When implementing a reuse project, there are many items to be aware of in order to complete a transaction and make the project a reality. Below is a list of information that may be needed prior to closing on a transaction.

6.2.1 All Appropriate Inquiries

As discussed in Section 3.1.1, the Phase 1 ESA is an environmental due diligence report prepared for real estate transactions such as land purchases and building purchases. If a property is impacted by an environmental condition on the property or on adjacent properties, in order to meet the AAI requirements and qualify for certain protections from liability under CERCLA, ensure that the one-year-and-180-days prior to acquisition update requirements for all appropriate inquiries are met (see Section 3.1.1.2).

6.2.2 Geotechnical Study (Soil Study)

The goal of a geotechnical investigation is to obtain information on the physical properties of the soil to support development on the property. In the case of a geotechnical investigation for a development project, the following are important areas of examination:

- Footprint of the building.
- Land area on which the building will be located.
- Land slope.
- Land closeness to water (lake, stream, river).
- Geographical location where the building will be located.

6.2.3 Property Survey

A property survey is a legal document that shows the location of all improvements relative to a commercial property's boundaries. For property transactions, an American Land Title Association (ALTA) survey provides a detailed land parcel map, showing all existing improvements of the property, utilities and significant features of the property. It identifies easements and exceptions cited within an insurance title commitment document. The ALTA survey is a combination of a boundary survey, title survey and a location survey, and generally contains an illustration of the physical features of the property and a written report detailing the surveyor's opinions and concerns.

6.2.4 Local Government Review and Approval

Once the initial plans have been developed and the purchase contract signed, it is time for the implementation process to occur. This next phase focuses on critical signoffs and approvals required for the proposed reuse development to come to life.

In order for projects to become realities, they must first get the approval of the appropriate local government and other government entities. These local government processes should be reviewed to ensure they are appropriate, required and adequate for optimal development. If possible, local

governments can listen and work with the development community to better understand their needs in order to design the most efficient process for both parties. Submittal and review often entail several processes.

6.2.4.1 Zoning Review

Zoning review is meant to ensure the compliance with standards and provisions set by each local government, while encouraging quality development. It is intended to encourage the most appropriate use of the land, enhance aesthetic value, and facilitate adequate provision of transportation, schools, parks, and other public requirements.

6.2.4.2 Site Plan Review

A detailed site plan is submitted, along with associated documents to particular government departments, agencies, utility companies and others, for review and initial comments. The purpose of the review is to address how the particular development is designed and to address any issues related to public safety, water supply, sewage disposal, utilities, traffic, emergency access, public obstructions, and a variety of other elements.

6.2.4.3 Design Review

A design review provides architectural building elevations, landscape plans and drawings related to design principles and aesthetic requirements. Once the site plan and design are approved during the design review process, a developer will generally be allowed to submit construction drawings for review by the local government building department.

6.2.4.4 Entitlement Process

As part of implementation, a development must be granted permission from local regulatory agencies and the community. From a developer's perspective, it is crucial to be prepared for this stage of the implementation process, as there will be many questions from local government planners, local residents and government leaders. From a local government perspective, it is important that these processes are streamlined to ensure the process is as efficient as possible. Examples of entitlement can be:

- Rezoning.
- Zoning variances.
- Use permits.
- Utility approvals.
- Road approvals.
- Landscaping.

6.2.4.5 City Council or Local Planning Commission Approval

Reuse developments must often first receive approval from the city council, local government planning commission or some other local government body. Working with and gaining approval from the government's planning department generally allows for a planning commission or city council to approve the project at a formal public hearing. However, not all projects need the official approval of a city council or planning commission.

6.2.4.6 Public Hearing

In addition, a public hearing may be required for local property owners and residents, in order to hear feedback on the proposed reuse development. Any individual or community group, including a neighborhood council, may speak on the proposed project.

As the project works its way through the entitlement and local approval processes, a developer will begin to get a much better sense of what cost and timing are required to construct the project successfully. Local government efficiency during this process is critical to further reduce risk and alleviate any unnecessary concerns that may arise.

6.2.4.7 Building Plan Submittal and Approval

Once a project receives approval from the local planning commission or city council, it moves into construction drawing/building plan submittal with the building department.

The local government will then review the plan for compliance with the approved preliminary site plan, project conditions of approval, the required building plan checklist, and all applicable codes and ordinances. A planner will review the site plan for final approval.

Once plans have been reviewed during the usual rounds of the review process and determined to be in compliance with the local government codes, building permits are then issued. These permits give the developer authority to start construction work. While the approval requirements are necessary, it is important for the local government to facilitate the most efficient process as possible to remain transparent and effectively guide the development community through implementation.

APPENDIX A: RISK MANAGEMENT TOOLS AND APPROACHES

A.1 ACTIVITIES

A.1.1 Meeting with Federal and State Regulators

Unless a local government is already an owner or responsible party for the property, there is probably little downside for the local government in discussing potential property disposition strategies with the regulatory agencies. These discussions can help identify potential pitfalls and other considerations that might keep the local government from making costly and avoidable mistakes.

Federal and state agencies have considerable expertise in the environmental laws and programs that might relate to a particular project, and although they cannot provide specific legal and technical advice, they can help explain and guide local governments through the regulatory process. If the agencies have had direct involvement with the property, they also should be able to discuss the nature of that involvement, known environmental conditions, the need for additional studies and cleanup, future plans for the property, potential EPA and state environmental liens, and other issues. In addition, they may be able to point the local government toward funding and other resources that can be used for reuse planning, environmental assessment and cleanup.

To make the most of these discussions, local government officials should first carefully consider the material contained in this guide and how it might apply to their project.

A.1.2 Due Diligence and All Appropriate Inquiries

As described in Section 3.1, due diligence helps a local government to define the potential issues, costs and risks associated with a property. Eliminating data gaps through due diligence can significantly reduce uncertainty.

An all appropriate inquiries investigation is necessary to potentially qualify for certain liability protections under CERCLA (see Section 3.1.1.2).

A.1.3 Environmental Investigation

Under many cleanup programs, Phase I and II ESAs are conducted to determine whether serious environmental issues exist or could exist on the property.

Environmental investigations typically go beyond Phase I and II ESAs and provide the basis for making actual cleanup decisions. As a result, environmental investigations generally provide a higher level of confidence that the environmental conditions have been adequately characterized. This reduces uncertainty regarding the cost and duration of cleanup activities, the likelihood of unanticipated events complicating the cleanup, and other factors that could have an adverse impact on a redevelopment project. For these reasons, developers and investors are generally more willing to consider properties where environmental investigations have been conducted. Environmental investigations are discussed in more detail in Section 3.2.1.

A.1.4 Cleanup Action Planning

Cleanup action planning that takes into account future land use often allows the cleanup and private-party property development efforts to be better coordinated. This can provide a number of risk management benefits, including:

- Ensuring that future use of the site does not undermine the protectiveness of the cleanup.
- Minimizing unnecessary impediments to reuse.
- Reducing the costs of both cleanup and redevelopment by addressing them in the same construction event.
- Designing buildings and other planned redevelopment infrastructure to be compatible with cleanup activities.

The reuse assessment, described in Chapter 3, can be a useful resource document to help inform the cleanup action planning process.

A.1.5 Reasonable Worst-Case Scenario Planning

Reasonable worst-case scenario planning is essentially used to answer the question: What is the worst thing that could happen by moving forward with a particular property disposition strategy? This process helps the local government to better understand the upper limits of its potential risk and liability. Further, it helps to focus management efforts on the environmental issues that could have a large impact on the project schedule and costs. Reasonable worst-case analysis also can help determine appropriate insurance limits.

The worst-case scenario should be based on available information with reasonable, but conservative, assumptions about the risks and liabilities that may be encountered. In some cases, several scenarios may need to be evaluated to more fully assess potential risks.

A.1.6 Engaging Stakeholders

As discussed in Chapter 2, proactive stakeholder engagement will help ensure that community issues are identified and addressed early in the redevelopment process. Reuse planning that involves community stakeholders is a primary strategy for understanding and addressing community and environmental justice issues prior to soliciting requests for proposals from developers. Developers typically want to understand the interests of the community so they can determine without great expense whether their development idea will be acceptable. In addition, once stakeholders have bought into a neighborhood or community plan, they can be influential advocates for achieving that vision.

A.1.7 Financial Analysis

As discussed in Sections 4.4.2 and 4.6, financial risk is an essential consideration for a local government involving itself in the cleanup and reuse of a brownfield property. Some level of financial analysis, commensurate with the magnitude of financial risk, should be performed. That financial risk will likely depend on the property disposition strategy and the specific nature of the activities contemplated.

A.1.8 Timing Local Government Involvement

The timing of local government involvement is a strategically important determination that can dramatically impact project risk. Sometimes a situation necessitates a more immediate response by the local government. In other situations, the local government may have the time to allow certain events to

play out or to take additional steps to identify and manage risks before proceeding with a potential acquisition or other property disposition strategy.

Examples of such steps include:

- Allowing EPA- or state-mandated assessments or cleanup activities to proceed, thereby reducing uncertainty regarding a property's environmental conditions.
- Working with the community and other stakeholders to gain consensus around future uses of the property and performing comprehensive investigations that more completely characterize risks.
- Developing a plan for phased cleanup and redevelopment activities on larger properties.
- Identifying potential funding sources for cleanup, demolition, infrastructure replacement and other activities.
- Negotiating partnership agreements with the current owners or potential developers.

The local government should also consider the possibility that delaying or foregoing action on a property, even if the property is still privately owned, could in itself create unacceptable risks for the local government.

A.1.9 Interim Cleanup Action

In some cases, it may be necessary or beneficial to undertake an interim cleanup action to address imminent hazards on a property. Examples of these interim actions include the removal of abandoned drums, cleanup of spills, and construction of security fences.

Performing interim cleanup actions to address the worst environmental problems or stabilize the environmental conditions at the site also will make the property more marketable and possibly allow a developer to obtain financing and insurance at more favorable rates.

Interim actions can be used to control cleanup costs (e.g., reducing the volume of material to be treated or removed by taking steps to prevent the further spread of contamination). Interim actions also may help guard against claims that a local government caused or contributed to a release through its inaction. For reasons such as these, a local government may sometimes consider initiating interim cleanup actions at a property.

Before taking any interim cleanup actions, however, a local government should ensure that it understands any risks associated with the action, including the incurrence of liability. The interim actions must be taken in a manner that does not worsen the environmental conditions at the site. The action also must be in compliance with federal, state and local environmental requirements. To provide proper coordination between federal, state and local authorities, most federal and state environmental cleanup programs require proper notification prior to conducting interim cleanup actions.

After the completion of an interim cleanup action, additional environmental investigation, monitoring and/or further cleanup action may be needed before a comprehensive, final cleanup is achieved.

A.1.10 Cleanup Action

As discussed in Section 3.2, a cleanup, or remedial, action is conducted primarily to reduce or eliminate real or potential exposures to hazardous substances and other regulated materials. From a development standpoint, cleanup actions can help manage project risk by reducing uncertainty associated with the

environmental conditions. The extent to which this is true will depend on the specific nature of the cleanup action.

If a local government is contemplating conducting a cleanup action or evaluating a property at which cleanup actions have already taken place, it is important to consider how those cleanup actions are likely to influence redevelopment efforts. Cleanup actions that remove all contaminants are generally more desirable to developers but are not always technically feasible or cost-effective. Long-term management of some waste in place is therefore often the best choice for many properties (see Section 3.2).

With effective planning between the entity conducting the cleanup action and the entity seeking to facilitate the redevelopment of the property – which in some cases may be the same entity – potential barriers to redevelopment and therefore project risks can be minimized.

Many factors can impact how well a cleanup action reduces project risk. Apart from non-cleanup-related issues (e.g., the economy), these may include permanence (e.g., have contaminants been completely removed? Have they been converted to a physical or chemical form that effectively prevents leaching or reduces toxicity?). Other factors include the need for long-term operation and maintenance (see Appendix A.1.12), the need for institutional controls (see Appendix A.1.13), the time it takes to complete the cleanup action, and any physical barriers that might limit future uses (e.g., treatment buildings, monitoring wells).

EPA does not have the authority under CERCLA to conduct or to require responsible parties to conduct actions that are solely intended to provide enhancements or betterments to the property. An example of a potential enhancement might be the construction of a parking lot that is not needed to implement the cleanup. An EPA memorandum, Considering Reasonably Anticipated Future Land Use and Reducing Barriers to Reuse at EPA-lead Superfund Remedial Sites, (March 17, 2010), further discusses when actions taken to facilitate reasonably anticipated future land use may be within the scope of CERCLA authority. With proper planning, it may be possible for the local government or developer (if one already exists) to fund and/or construct enhancements in coordination with the cleanup activities.

A.1.11 Voluntary Cleanup

State response programs, commonly referred to as voluntary cleanup programs (VCPs), play a significant role in assessing and cleaning up brownfields and other lower-risk sites. Many states have VCPs to encourage and facilitate the cleanup of brownfield properties. The specific details of these programs vary from state to state, but they are often designed to provide more flexibility to parties performing investigation and cleanup activities. This flexibility potentially allows such parties greater control over the conduct and scheduling of those activities and helps to reduce the associated costs.

EPA does not oversee cleanup activities at brownfield sites. Instead, EPA can support state VCPs through grant funding to establish and enhance VCPs and may enter into non-binding memoranda of agreements (MOAs) with individual states that include general enforcement assurances to encourage the assessment and cleanup of sites addressed under VCP oversight. Further, at certain sites being addressed under a state VCP, the 2002 Brownfields Amendments provide that EPA may not take a CERCLA enforcement action against parties at the site, absent special circumstances. This provision creates an important incentive for performing voluntary cleanups of brownfields under state VCP oversight.

EPA has entered into non-binding MOAs with most states that clarify the general roles and responsibilities of each agency regarding cleanups under the state VCP. While an MOA, or absence of an MOA, does not alter EPA's or a state's legal authority, the MOA may provide the general public and development community with some confidence that EPA and the state agency are working in a coordinated manner.

Links to state VCPs can be found in the Cleaning Up Brownfields under State Response Programs – Getting to 'No Further Action' report.

A.1.12 Maintenance and Monitoring of Remedial Systems and Structures

Many brownfield properties can have residual contamination after the completion of a cleanup action. To ensure continued protection of human health and the environment, engineering controls (such as pavement that acts as a cap over contaminants) and monitoring (such as measurements of contaminant levels in groundwater or indoor air) are often required. The engineering controls generally necessitate some sort of maintenance. For example, where pavement will be serving as a soil barrier or cap, periodic inspection for cracks and repaving are common maintenance activities.

Site monitoring serves to verify the results of environmental investigations, reveal trends in contamination levels, and monitor the performance of remedial systems and structures. Site monitoring may include the collection and analysis of groundwater, soil, air or other media. Generally, the cleanup action plan or closure report will identify the required maintenance and monitoring activities.

Likely and known maintenance and monitoring requirements should be identified early on in planning for the redevelopment. This includes determining which parties will be responsible for fulfilling these requirements. If a local government takes on management responsibilities of a property through acquisition or leasing, it should prepare a plan for meeting any obligations it might have regarding the operation, maintenance and monitoring of the remedial systems and structures. This includes establishing a routine schedule for inspecting engineering controls and conducting monitoring to identify deficiencies and other developing problems before they become more serious.

Failure to perform the required maintenance or monitoring can allow the property conditions to deteriorate and endanger human health and the environment, and may result in potential liability (see discussion under CERCLA in Section 4.4.1.1). In addition, most post-closure environmental insurance policies require fulfillment of maintenance and monitoring requirements as a condition of coverage. Failure to properly conduct maintenance and monitoring can result in denial of insurance coverage claims.

A.1.13 Institutional Controls

Institutional controls typically include easements, environmental covenants or deed notices, which notify property users and future owners about the presence of residual contaminants that remain after the completion of the cleanup action and of any restrictions on future uses of the land, surface water and groundwater. (See Section 3.1.1.5 for further discussion of institutional controls.) Generally, the cleanup action plan or the closure report for the cleanup action will identify the required institutional controls.

A.1.14 Oversight of the Environmental Contractors

Performing appropriate oversight of the site assessment, cleanup action and construction contractors can potentially help reduce the local government's common law liability if something goes awry with the redevelopment. The local government can include work out and mediation clauses in its contracts if there is doubt as to the contractor's ability to fully perform the agreed obligations. The contracts also can be staged or drafted with contingency clauses to reduce uncertainty on complicated development projects.

Forward commitment contracts can sometimes be used to provide the certainty that a local government needs to proceed with a project while providing flexibility if conditions change as the project progresses.

A.1.15 Following Accepted, Good Commercial Practices

The local government can potentially minimize the risk of contractual- and negligence-based liability by following accepted good commercial and customary practices and by fulfilling the terms of the contracts to which it has agreed.

A.2 Statutory/Regulatory Protections

Statutory exclusions and defenses can often be the first layer of protection for local governments or other entities considering the acquisition or leasing of a potential brownfield property because they are embodied directly into the law. Although sometimes subject to interpretation and legal challenges, they can provide a solid foundation for building a risk management strategy. Government enforcement discretion policies, while they do not carry the same weight as statutory exclusions and defenses and do not bind private parties, also can potentially provide important protections for the local government.

Potential liability protections under federal and state cleanup statutes may or may not apply to a specific property depending on the method of acquisition and other site-specific facts. A clear understanding of potential statutory liabilities and the available exemptions and defenses to them is needed for the local government to evaluate the various types of acquisition and control options. It also is critical to fully understand the threshold conditions and continuing obligations that are necessary to qualify for and maintain these liability protections.

A.2.1 CERCLA Liability Protections for Local Government Acquisitions

In 2018, Congress enacted the Brownfields Utilization, Investment, and Local Development Act of 2018 (BUILD Act). The BUILD Act amended CERCLA's Section 101(20)(D) liability protection for state and local government acquisitions of brownfield property by adding a new category of exempt acquisitions and by removing a requirement that the properties must be acquired "involuntarily." To assist local governments and to clarify its enforcement discretion intentions, EPA developed guidance to provide an overview of CERCLA's liability framework and protections and EPA's enforcement discretion policies that may apply to local governments (see EPA: Superfund Liability Protections for Local Government Acquisitions after the Brownfields Utilization, Investment, and Local Development Act of 2018).

Liability protections that may apply to local government acquisitions of brownfield property are provided in Appendix A.2.2 to Appendix A.2.4 and summarized in the table below.

A.2.2 State and Local Government Acquisitions of Brownfield Property

CERCLA § 101(20)(D) now provides that "[t]he term 'owner or operator' does not include a unit of State or local government which acquired ownership or control through seizure or otherwise in connection with law enforcement activity, or through bankruptcy, tax delinquency, abandonment or other circumstances in which the government acquires title by virtue of its function as sovereign." EPA generally treats a "unit of State or local government" to mean any unit of government within a state, including a: (a) county; (b) borough; (c) local government; (d) city; (e) town; (f) township; (g) parish; (h) local public authority, including any public housing agency under the United States Housing Act of 1937; (i) special district; (j) school district; (k) intrastate district; (l) council of governments, whether or not incorporated as a nonprofit corporation under state law; and (m) any other agency or instrumentality of a multi-regional or multi-intrastate local government. In addition, EPA generally intends to exercise its enforcement discretion and treat a local government acquisition as "by virtue of its function as sovereign" only when a local government acquires title to a property via a function that can be effectively performed only by governments using a mechanism available only to governments. (See the table below for a list of these functions.)

A.2.3 Bona Fide Prospective Purchaser Provision

The bona fide prospective purchaser liability protection may be available for a local government that purchases or leases a brownfield property if it establishes its bona fide prospective purchaser status prior to acquisition and maintains its status after acquisition. It protects parties from certain CERCLA liability as long as certain threshold conditions and continuing obligations, including all appropriate inquiries, are conducted prior to acquiring the property, the purchaser does not contribute to hazardous substances on the property, and the purchaser is not potentially liable or affiliated with a liable party for cleanup on the property.

If there are concerns about state environmental liability, the appropriate state regulators should be contacted to determine the availability of prospective purchaser agreements under state law.

A.2.4 Third-Party and Innocent Landowners

CERCLA § 107(b)(3) provides a "third-party" affirmative defense to CERCLA liability for any owner, including a local government, that can prove, by a preponderance of the evidence, that the contamination was caused solely by an act or omission of a third party whose act or omission did not occur "in connection with a contractual relationship." CERCLA's third-party defense also includes an "innocent landowner defense" as an exclusion to the definition of a "contractual relationship." The "innocent landowner defense" includes "a government which acquired the facility by escheat, or through any other involuntary transfers or acquisition, or through the exercise of eminent domain authority by purchase or condemnation."

Potential CERCLA Liability Protections for Local Government	Methods of Property Acquisition								
	Tax Lien and Delinquency Foreclosures	Bankruptcy	Escheat	Eminent Domain	Transfer	Purchase	Inheritance or Bequest	Abandonment	Gift/Donation
State and Local Government Acquisitions	●	●	●	●	●			●	
Bona Fide Prospective Purchasers	●	●	●	●	●	●	●	●	●
Third-Party and Innocent Landowners			●	●		●	●		

Reference:

EPA: Superfund Liability Protections for Local Government Acquisitions after the Brownfields Utilization, Investment, and Local Development Act of 2018

A.2.5 Other Determinations of Completion

States with voluntary cleanup programs provide no further action determinations or other documents to verify when cleanup requirements under voluntary cleanup programs or other regulatory programs have been adequately met. Each state will impose its own limitations on the scope of the document and on the nature of any disclaimer and reopener language; however, in general, these determinations can provide some level of closure and comfort to the various parties with a potential financial stake in the property and its redevelopment (e.g., lenders, insurers, investors, tenants). In addition, some states provide liability protections from state regulatory enforcement to purchasers that generally meet all appropriate inquiries requirements and other requirements under the state voluntary cleanup program. State determinations of compliance do not resolve issues of federal liability at the site.

A.3 Transactional Activities

A.3.1 Escrow Accounts

Escrow accounts can be used to cover issues not resolved in the purchase and sale of a property. Whatever purpose the escrow agreement has usually occurs after the closing. This may include escrow funds for remediation, long-term monitoring and fees associated with closure.

A.3.2 Purchase Price Adjustments

If the buyer agrees to complete remediation or meet some other obligation in the future related to the remediation or other activity identified during the due diligence, the seller can offer an adjustment to the purchase price rather than pay for that expense directly.

A.3.3 Grants

Although not normally thought of as a risk management tool, grants can reduce the local government's financial exposure or provide the funds necessary for the successful completion of the project. Local governments may be eligible for certain types of EPA brownfield grants, including property-specific grants for Phase I and Phase II ESAs, even though they are not the owners of a property. The 2018 BUILD Act expanded brownfields assessment grant eligibility to nonprofit organizations organized under Section 501(c)(3) of the Internal Revenue Code. Nonprofits are now eligible for both EPA Brownfields Assessment and Cleanup Grants.

A.3.4 Tax Benefits and Credits

Federal and state tax incentives exist to help reduce the financial risk associated with redeveloping brownfield properties. EPA has a discussion of various tax incentives that can be used in brownfields redevelopment on its website, including Opportunity Zones, New Market Tax Credits, Low Income Housing Tax Credits, Historic Rehabilitation Tax Credits, and Energy Efficiency and Renewable Energy Tax Credits (see EPA: Supporting Brownfields Redevelopment using Tax Incentives and Credits). A number of states also have created tax incentives specifically targeted to brownfield properties (see ASTSWMO: 2020 State Brownfields Program Analysis). State brownfield program coordinators should be contacted for information regarding those incentives.

A.3.5 Private Investors

Investors put money into a redevelopment project in return for a share of the profits from the project. Because their money is fully at risk, private investors carefully consider the risks associated with redeveloping brownfield properties. Many private investors understand that it is generally in their best interests to work with local governments to help ensure a successful outcome and, therefore, may help the local government identify areas of potential risk that the local government had not anticipated or fully understood. At the same time, the interests of the private developers and the local government may not always be aligned, so the local government should be cautious of overly relying on that advice and assistance.

Private investors also often provide the initial, partial financing that provides enough certainty that other more traditional financing sources can feel comfortable financing the remaining amount.

A.3.6 Specialized Loans

Loans are generally secured by collateral that the lender can seize if the borrower defaults on the loan. Redevelopment projects for brownfield properties have historically been perceived as too risky for traditional bank loans, but there are lenders that have established expertise in these projects. They are often familiar with the government and private grants that can help fund a project, and they understand brownfield properties and cleanup action projects. Like the private investors discussed in Appendix A.3.5, some of the specialized lenders can help guide the local government's reuse evaluation process because of their experience with these types of projects.

In some cases, these specialized lenders will provide early, partial financing that gives enough certainty that other more traditional lenders can feel comfortable financing the remaining amount.

A.3.7 Redevelopment Authorities

In general, redevelopment authorities are public administrative units charged with redeveloping blighted areas within a particular jurisdiction. Many were created initially in response to the post-World War II housing shortage and the availability of federal money to address urban redevelopment. The specific powers of a redevelopment agency are spelled out in the enabling legislation from which it derives its authority. Examples of specific powers include buying and selling property, acquiring property through the exercise of eminent domain, granting tax concessions to encourage commercial and/or residential development, receiving loans and grants from the federal government, borrowing money, and entering into contracts.

It is not unusual for a local government to transfer property that it owns to the redevelopment authority for that same jurisdiction. Based on the enabling legislation, there can be important legal and policy reasons to make such a transfer. However, if a local government is liable under CERCLA as an owner/operator at the time of disposal or as a generator or transporter, it does not lose its status as a liable party by transferring the property to a redevelopment authority. Similarly, the redevelopment authority may not be able to qualify as a bona fide prospective purchaser if it is found to be affiliated with a liable party (for example, the local government transferring the property) through any corporate, contractual or financial relationship other than the relationship created by the mechanism transferring title to the property.

Under CERCLA, a redevelopment authority also may be liable as the current owner of a brownfield property, or as the owner/operator at the time during which hazardous substances were disposed of at the property, or as the generator or transporter of the hazardous substances disposed of at the property.

A redevelopment authority also may find itself liable under CERCLA if EPA concludes that the redevelopment authority and a liable local government are one and the same entity. In reaching that conclusion, EPA will review the enabling legislation creating the redevelopment authority, as well as other factors specific to the situation, including the level of control the local government exerts over the redevelopment authority. (See Section 4.4.1.1 and Appendix A.2 for an explanation of potential liability protections under CERCLA.)

A.3.8 Land Banks

An increasing number of states and local governments are passing legislation to develop land banks. Land banks can be an effective tool in redeveloping and reusing properties in areas suffering from abandonment and blight. Land banks differ from redevelopment authorities. Generally speaking, redevelopment authorities are created to use significant governmental powers to develop or redevelop particular properties for a particular purpose. In contrast, land banks are created to acquire the growing number of privately or public-owned urban parcels that are not being reclaimed or redeveloped by market forces.

Land banks are governmental or non-governmental entities created to assemble, temporarily manage and develop vacant, abandoned and tax-delinquent properties in order to convert them to a productive

use. While most land bank properties may not be contaminated, local governments should be aware of the potential for contamination prior to acquiring the property.

Whether a local government acquiring a land bank property qualifies for liability protection under the CERCLA involuntary acquisition exemption, bona fide prospective purchaser provision, third-party defense, or other statutory provisions will be determined on a case-by-case basis depending on the specific facts at issue. (See Section 4.4.1.1 and Appendix A.2 for an explanation of the liability protections under CERCLA.)

References:

EPA: Land Revitalization Fact Sheet: Land Banking

Additional information can be found on the U.S. Department of Housing and Urban Development Land Banks and Land Banking website.

A.3.9 Contractual Provisions

Reducing exposure to common law liability begins with following the accepted, good commercial practices of due diligence. Performing proper oversight of contractors also can help reduce the local government's common law liability. Representations, warranties, indemnification agreements and other specific contractual language between the responsible parties, redevelopers, cleanup action contractors and the local government can sometimes further reduce the local government's financial exposure when conducting due diligence, environmental investigations, cleanup action and construction. This contractual language can, for instance, define conditions for taking possession of the property by the local government, describe schedules, and identify and assign liability responsibilities. Local governments can be either a buyer or a seller depending on the property disposition strategy selected. The following are examples of contractual provisions that may apply to brownfield properties. These provisions are most commonly included in transactional agreements (e.g., lease, purchase and sales agreement), although some also may be applicable to other agreements. For example, indemnifications are often found in service contracts for conducting due diligence, cleanup action, or the operation and maintenance of equipment. Private contracts may transfer financial responsibilities between parties but do not affect statutory liability.

The local government should consult with legal counsel when evaluating the uses and benefits of contractual provisions. The following descriptions are intended to better inform discussions with legal counsel and should not be relied upon to make decisions regarding their applicability to a given set of circumstances.

A.3.9.1 Contractual Provisions

An indemnification in a contract can sometimes be used to obtain a release from liability for certain future legal claims, liabilities and lawsuits, and also for compensation for any loss the local government may incur. This can include liabilities associated with known environmental conditions or possibly an unknown environmental condition that may have been associated with prior use of the property. As with many contractual agreements, the value of the indemnity is only as good as the financial viability and longevity of the party giving the indemnity. Local governments should seek expert legal advice regarding the use of indemnities and should be aware that, depending on the circumstances of their use, they may undercut the ability to meet the requirements of some CERCLA liability defenses.

A.3.9.2 Representations and Warranties

Representations and warranties can be used to define certain facts and provide assurances about the property or its environmental condition (e.g., all underground storage tanks have been removed and no further action is warranted). Specific remedies or consequences can be included if the representations and warranties are not accurate or not fulfilled (e.g., the seller or responsible party will remove an underground storage tank discovered subsequent to the property transfer and conduct any corrective action required by the regulatory agency). As with many contractual agreements, the value of the representations and warranties is only as good as the financial viability and longevity of the party giving the indemnity.

A.3.9.3 "As Is" Provisions

An "as is" provision can sometimes be used to avoid liability by the seller for defects in the land and liability for potential contamination. In this case, the buyer could be accepting liability for known, or possibly unknown, contamination on a property. The use of an "as is" provision requires a good understanding of the risks and liabilities associated with the property. This provision is typically used where the buyer determines that the potential risk and liabilities are well defined, acceptable and economically feasible.

In accepting an "as is" provision, the local government is relying on the representations and warranties of the seller. It is important to note that an "as is" provision does not always completely relieve the seller of its duty to disclose defects in the property to the buyer. Under many state laws, the seller is required to disclose known facts that may adversely affect the value of the property.

A.3.9.4 Environmental Covenants

A covenant can sometimes be used to obligate one party to engage in or refrain from specific actions, such as a deed restriction prohibiting certain types of activities or construction on a property by the property owner or lessee. Many states have implemented environmental covenants, which are agreements between the regulatory agency and a responsible party that define responsibilities for long-term stewardship of engineering and institutional controls (see Appendix A.1.13). These covenants may include property owners or lessees of a property. Additional information on environmental covenants is available in the Environmental Covenants Act.

A.3.9.5 Assumption, Retention and Release Provisions

The buyer and seller of a property can allocate risk or liability for certain conditions through a provision where the buyer accepts, or the seller retains, responsibility for known or unknown environmental conditions and releases the other party from liability for current and future claims arising from the specified conditions. This approach is typically used to allocate risk of future liability for a currently existing but unknown condition. The provision should be structured to ensure that the seller is protected from risk or liability caused by future buyers of the property or tenants of the property.

A.3.9.6 Schedule of Included or Excluded Liabilities

Where the buyer and seller have agreed to the transfer or retention of certain liabilities, the contract should include a schedule or list of liabilities that are going to be assumed by the buyer or retained by the seller.

A.3.9.7 Post-Signing and Pre-Closing Conditions

Post-signing and pre-closing conditions are agreements between the parties of a property transfer that allow certain actions to be taken or certain conditions prior to closing or during some pre-determined timeframe after signing an intent to purchase. Typically, these provisions can provide an opportunity for the buyer or seller to back out of the deal, adjust the purchase price, or seek other remedies if conditions are not met. These provisions can be used to allow a buyer to conduct environmental investigations or other activities and terminate or modify a transaction if certain unacceptable conditions or thresholds are found. These conditions also can include cost-sharing provisions for environmental investigations and property access agreements.

A.3.9.8 Fixed Price or Performance-Based Contracts

Fixed price and performance-based contracts can be used to control financial risk by reducing uncertainty in the cost of assessment and cleanup action activities. For example, fixed price and performance-based contracts with environmental cleanup contractors can help clearly define the costs of assessment and cleanup activities. These types of contracts are routinely used in the construction industry and increasingly in the environmental field.

A.4 INSURANCE

Obtaining insurance coverage for certain risks may be worth considering if a local government is actively managing the property or leading the redevelopment effort. Alternatively, or in addition, the local government can ask to be named as an additional insured on developers' and cleanup action contractors' environmental liability policies.

The following are examples of insurance provisions that may apply to brownfield properties. These and other insurance products are discussed in EPA's Environmental Insurance Helps Ensure Redevelopment fact sheet. The underwriting of brownfield properties is a specialized and evolving area of insurance, and local governments should consult with a qualified expert and legal counsel to discuss the benefits and limitations of these products for a given set of circumstances.

A.4.1 Comprehensive General Liability Insurance

Comprehensive general liability insurance generally provides broad protection against situations in which an entity must defend itself against lawsuits or pay damages for bodily injury or property damage from third-party claims. These claims are enforced and interpreted based on state law. Comprehensive general liability insurance can be used to address general redevelopment issues and other potential liabilities; however, it has become more restrictive over time and rarely covers environmental liabilities.

A.4.2 Pollution Liability Insurance

Pollution liability insurance can sometimes be used to protect the local government against third-party claims for bodily injury, property damage, and off-site and on-site cleanup costs. In addition, it can be used to provide some protection against newly discovered contaminants, natural resource damage claims, regulatory reopeners, and other contamination-related costs. These policies are typically short-term, averaging from one to five years and often not more than 10 years. Regulatory reopener coverage usually begins when the project has achieved a "No Further Action" status and extends coverage for 10 years.

A specialized form of pollution liability insurance is contractor's pollution liability insurance. This type of insurance covers contractors against the possibility that their activities on the property will make the pollution worse or cause third parties to be harmed. It is usually purchased on an annual basis by the contractors providing cleanup action services. For large, complex projects, contractor's pollution liability insurance can be purchased on a project basis, with limits dedicated to the specific project. It is important for the local government to make sure that all of the contractors and subcontractors involved in the project have adequate pollution liability insurance limits and that they maintain this coverage throughout the project and for some period after completion.

A.4.3 Errors and Omissions Insurance

Errors and omissions insurance can sometimes be used to protect the local government from errors in professional services. Generally, this insurance is purchased on an annual basis by the consultant or attorney providing services to the redevelopment project. The local government should make sure that the professionals involved in a project have adequate errors and omissions insurance coverage that is maintained throughout the project and for some period after completion.

A.4.4 Cost Cap Insurance

Cost cap insurance can sometimes be used to reduce financial risk by providing the insured an upper limit on the costs of cleanup action. Costs over budget are paid by the insurer, with limitations. Cost cap insurance can address issues such as cost overruns for cleanup action expenses, changes in regulatory standards/laws, and newly discovered contaminants. Policies are based on the cleanup action cost plan and terms typically based on the anticipated length of the cleanup action.

A.4.5 Secured Lender Insurance

A secured lender insurance policy can sometimes be used to provide coverage to the lender for the outstanding loan balance in the event of a default on projects where environmental contamination exists. Typically, a secured lender policy allows the insurer to either pay off the outstanding loan balance or pay for cleanup action costs and certain other damages.

A.4.6 Finite Risk Insurance

Finite risk insurance can sometimes be used to transfer broad financial liabilities from the insured to the insurer. Typically, the insured pays the insurer the entire expected cost of the cleanup action — plus a risk premium to cover potential cost overruns, unanticipated cleanup action, and third-party liability — before redevelopment begins, and the insurer assumes financial responsibility for the cleanup action. In many finite risk policies, the insurer also provides oversight of the cleanup action program. This type of insurance is generally applied to longer-term and more costly cleanup actions. These policies also can be negotiated in a manner that allows the return of unspent monies at the end of the project.

A.4.7 Institutional Controls and Post-Remedial Care Insurance

These insurance provisions may potentially be used to reduce financial risk associated with institutional controls (see Appendix A.1.13) and post-remedial maintenance and monitoring activities (see Appendix A.1.12). The insurance would typically cover cost overruns related to the design and establishment of the institutional control and damages resulting from an error in the design, or establishment of the institutional control, an error or omission on the part of the parties maintaining the control, or failure of the control.

The policy terms are typically renewable in multi-year increments, based on the anticipated length of the post-cleanup action monitoring and maintenance. (See Section 3.1.1.5 for a general discussion of institutional controls.)

APPENDIX B: LOCAL GOVERNMENT OVERVIEW OF CERCLA, RCRA, PCBS, AND ASBESTOS REGULATIONS

B.1 INTRODUCTION

Local governments may become involved with contaminated properties in several ways, many of which present opportunities to facilitate cleanup or redevelopment. Depending on the type and manner of involvement, the local government may be concerned with potential liability for cleanup costs under various federal, state and local laws. This appendix provides an overview of the key federal laws that may apply to local governments that become involved with contaminated property, with an emphasis on CERCLA and applicable EPA enforcement discretion policies.

Some Potential Avenues for Local Government Involvement at Contaminated Properties

- Promoting redevelopment through municipal incentives such as zoning and use exemptions, tax increment financing, and infrastructure improvements.
- Responding to emergencies and potential public health, safety, and environmental hazards.
- Foreclosing on and transferring tax-delinquent properties.
- Collaborating with a current owner to obtain access, investigate, clean up, and redevelop property.
- Acquiring property and "simultaneously" or subsequently transferring it to a third party.
- Utilizing a "land bank" or redevelopment agency to acquire, hold, lease, and/or control vacant, abandoned, and tax-delinquent properties.
- Acquiring property for short-term and long-term use or redevelopment.
- Enforcing zoning and building codes and planning future land use.
- Performing demolition, site assessment, investigation, and cleanup activities.
- Securing property access and institutional controls such as deed restrictions, environmental covenants, and land use controls.
- Participating in public meetings concerning the site property.

(EPA: Superfund Liability Protections for Local Government Acquisitions after the Brownfields Utilization, Investment, and Local Development Act of 2018)

Local governments that are contemplating involvement with potentially contaminated properties should start coordinating with relevant regulatory agencies as early as possible to discuss how the local government may be able to protect itself from being held liable for costs or damages that may be associated with the cleanup and reuse of the property.

EPA encourages the cleanup and revitalization of contaminated properties by addressing potential liability concerns, specifically by clarifying its enforcement intentions by describing circumstances when it may exercise its enforcement discretion to not pursue enforcement actions against certain parties that may fall within a category of liable parties under CERCLA and implementing landowner liability protections provided by law. In addition, many states have created landowner liability protections and voluntary cleanup programs that can coordinate satisfaction of both state and federal legal requirements.

EPA recommends that local governments refer to applicable statutory language, regulations, and EPA guidance documents (referenced throughout this guide) prior to taking any action to acquire ownership or control, or to clean up or redevelop contaminated property. Local governments also should consult with the appropriate state environmental agency and their own legal counsel. EPA's Regional offices may be able to provide information and assistance to local governments considering the acquisition of contaminated property.

Prior to acquiring ownership or control of a potentially contaminated property, all parties, including local governments, are strongly encouraged to perform an environmental site assessment, such as "all appropriate inquiries" (AAI)[1], to ensure they make informed decisions regarding the property's environmental conditions. This information can help a local government ensure that its activities do not disturb or exacerbate site contamination. This information also can help to preserve its ability to satisfy certain federal or state liability protections.

B.2 Overview of CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. §§ 9601 et. seq.) was enacted in 1980 in response to public concern about abandoned hazardous waste sites. CERCLA authorizes the federal government to assess and clean up contaminated sites and provides authority for responding to releases or threatened releases of hazardous substances, pollutants, and contaminants.

CERCLA established a comprehensive liability scheme, which enables EPA to order certain categories of parties to conduct or pay for the cleanup of releases or threatened releases of hazardous substances. EPA may exercise its response authority through removal, remedial, and enforcement actions. The National Oil and Hazardous Substances Contingency Plan (NCP), 40 C.F.R. Part 300, provides the "blueprint" or guidelines for conducting removal and remedial actions under CERCLA.

There are different types of contaminated or potentially contaminated properties subject to CERCLA in the United States. Below are two examples of properties subject to CERCLA.

Many of the properties that local governments may be interested in acquiring may qualify as brownfield sites.

- Superfund sites are polluted sites where the federal government is, or plans to be, involved in cleanup efforts. EPA manages these polluted sites through removal (short-term) actions or remedial (long-term) actions. Over 1,300 sites are listed on EPA's National Priorities List (NPL). Consistent with the NCP, remedial actions financed by the Hazardous Substances Superfund Trust Fund are undertaken only at sites on the NPL.

- Brownfield sites are properties where "the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.[2]" Generally, the cleanup of brownfield sites is less complex than at Superfund

[1] All appropriate inquiries (AAI) is a process of evaluating a property's environmental conditions and assessing the likelihood of any contamination. Parties must conduct AAI before acquiring property to obtain certain liability protections discussed below. For more information, see EPA's Brownfields All Appropriate Inquiries website.
[2] Overview of EPA's Brownfields Program, EPA

sites. States and tribal governments are responsible for establishing and enforcing assessment and cleanup standards for addressing environmental contamination at brownfield sites. States and tribes also oversee cleanup activities at sites enrolled in state and tribal voluntary cleanup programs.

CERCLA Liability Overview

Under CERCLA § 107(a), the following categories of persons may be considered potentially responsible parties (PRPs) and held liable for the costs or performance of a cleanup under CERCLA to address releases or threatened releases of hazardous substances and damages to natural resources:

- The owner or operator of the facility;
- Any person who owned or operated any facility at the time of disposal of any hazardous substance;
- Any person who arranged for the disposal or treatment, or transport for the disposal or treatment, of a hazardous substance at any facility; or
- Any person who accepted any hazardous substance for transport to a disposal or treatment facility that such person selected.

CERCLA's liability scheme helps to ensure that wherever possible, PRPs, rather than the general public, pay for cleanups. Under CERCLA, a PRP's liability for cleanup is interpreted as:

- Strict – A party is liable if it falls within one of the four categories of parties in CERCLA § 107(a) regardless of whether the party was at fault or negligent, or the party's conduct was in compliance with industry standards;
- Joint and Several – If two or more parties are liable for the contamination at a site, any one or more of the parties may be held liable to the government for the entire cost of the cleanup, regardless of its contribution to the site, unless a party can show that the injury or harm at the site is divisible; and
- Retroactive – A party may be held liable even if the hazardous substance disposal occurred before CERCLA was enacted in 1980.

Liability Protections under CERCLA

Although a local government may fall into one of the classes of PRPs described above, there are liability protections that may apply to local government acquisitions of contaminated property.

CERCLA provides certain exemptions from liability, as well as defenses to liability. These liability protections are self-implementing. More information on these protections and EPA's enforcement discretion documents that may apply are addressed in detail in the memo from Director Cynthia Mackey, Superfund Liability Protections for Local Government Acquisitions after the Brownfields Utilization, Investment, and Local Development Act of 2018.

The CERCLA liability protections (exemptions and defenses) that may apply to local government acquisitions of contaminated property include:

- CERCLA § 101(20)(D) exempts certain units of local government from the definition of "owner or operator" under specified circumstances.
- CERCLA §§ 101(40) and 107(r)(1) offer liability protection from "owner or operator" liability to parties that acquire a contaminated property with knowledge of the contamination and achieve

and maintain their status as bona fide prospective purchasers (BFPPs). (See EPA: Bona Fide Prospective Purchasers for additional information.)

- CERCLA §§ 107(b)(3) and 101(35)(A) provide liability protection to parties that acquire contaminated property and meet the third-party defense requirements and the innocent landowner (ILO) criteria set forth in those sections.

The method or type of property acquisition by a local government plays a critical role in the application of CERCLA liability protections. If it is unclear whether a particular liability protection may apply, a local government may consider increasing the likelihood that it will not be deemed liable by layering the available CERCLA liability protections. It is important to note that the exemptions under CERCLA § 101(20)(D) and BFPP liability protection do not shield government entities from any potential liability that they may have as "arrangers" or "transporters" of hazardous substances under CERCLA. EPA's enforcement discretion is limited to the unique circumstances of each case and does not protect against third-party suits.[3]

It is important to note that the exemptions under CERCLA § 101(20)(D) and BFPP liability protection do not shield government entities from any potential liability that they may have as "arrangers" or "transporters" of hazardous substances under CERCLA.

CERCLA § 101(20)(D), as amended by the 2018 Brownfields Utilization, Investment and Local Development (BUILD) Act, provides liability protections to state and local governments that acquire ownership or control of a contaminated property. However, these protections do not permanently or unconditionally insulate a government entity from potential CERCLA liability.

Rather, CERCLA § 101(20)(D) provides a non-exhaustive list of examples of acquisition methods that may exempt local governments from potential liability as an "owner" or "operator" under CERCLA. This includes an exemption from the definition of "owner or operator" for "a unit of State or local government which acquired ownership or control through seizure or otherwise in connection with law enforcement activity, or through bankruptcy, tax delinquency, abandonment or other circumstances in which the government acquires title by virtue of its function as sovereign" if that government entity did not cause or contribute to the release or threatened release.

B.3 Overview of RCRA

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to address problems from municipal and industrial waste and amended in 1984 to address the prevention, detection and cleanup of releases from petroleum and hazardous substance underground storage tanks.

RCRA establishes the framework for a national system of control for solid waste and underground storage tanks:

- Subtitle C focuses on hazardous solid waste.
- Subtitle D is dedicated to non-hazardous solid waste requirements.

[3] Property transactions with PRPs that EPA deems are intended to interfere with CERCLA's liability scheme are not eligible for EPA's enforcement discretion

- Subtitle I regulates underground storage tanks (USTs) containing petroleum and hazardous substances.

Most states are authorized by EPA to take the lead in implementing the RCRA program; however, the extent of the authorization may vary from state to state. State authorized programs are required to be no less stringent than the federal requirements. As such, RCRA requirements may vary somewhat from state to state. In general, states regulate underground storage tanks, including cleanup; however, cleanup under RCRA Subtitle C or Subtitle D may be regulated by either EPA or the state. EPA implements the underground storage tank program in Indian Country and provides support to tribal governments.

B.3.1 RCRA Subtitle C

RCRA Subtitle C regulates the generation, transportation, and treatment, storage, and disposal (TSD) of hazardous waste. The RCRA program authorizes EPA to require the investigation and cleanup of hazardous waste disposed of at RCRA Subtitle C facilities. This cleanup process is known as RCRA corrective action. An individual facility can fall into more than one TSD category and have multiple regulated Hazardous Waste Management Units.

Owners/operators of operating RCRA Subtitle C facilities generally must obtain a permit. There are some exceptions to the permit requirement, including generators that store their waste for less than 90 days; however, these exempted facilities still must comply with specific requirements, such as record-keeping, manifesting, and labeling of containers. Hazardous waste transporters must be licensed.

Certain obligations apply to RCRA Subtitle C facilities, including closure/post-closure, corrective action, and financial responsibility requirements. Differences in obligations depend on whether the facility is classified as a permitted TSD facility, interim status TSD facility, or hazardous waste generator.

A local government that acquires or leases a TSD facility that has not completed its closure/post-closure and corrective action requirements may need to conduct those activities. In addition, the local government could potentially assume the responsibility for monitoring and maintaining areas where hazardous waste will remain on-site as part of the permanent cleanup, such as in landfills or other disposal areas. Unlike CERCLA, where the "responsible parties" include previous owners, the RCRA closure/post-closure obligations transfer to the party owning or operating the facility. However, under certain circumstances, EPA does have enforcement authority under RCRA to compel past owners to remediate contamination.

The RCRA Subtitle C financial assurance requirements require owners/operators of TSD facilities (except for states and the federal government) to demonstrate that they can cover the estimated future costs of closure/post-closure. RCRA TSD owners and operators also are required to demonstrate financial responsibility for corrective action that may be necessary to protect human health and the environment. The required financial assurance can be provided via a variety of mechanisms. The Transmittal of Interim Guidance on Financial Responsibility for Facilities Subject to RCRA Corrective Action memo provides a general overview of financial assurance requirements for corrective action.

Before acquiring or leasing a RCRA Subtitle C facility, the local government should contact EPA or the authorized state to discuss the status of closure/post-closure and corrective action activities and financial assurance/liability coverage. If the owner/operator still exists, it may be advisable to meet

with them to negotiate the transfer or retention of obligations for conducting closure/post-closure and corrective action activities.

Guidance on RCRA corrective action can be found at RCRA Online. Guidance on RCRA corrective action enforcement can be found at RCRA Corrective Action Cleanup Enforcement.

B.3.2 RCRA Subtitle D

RCRA Subtitle D regulates the disposal of nonhazardous solid waste (such as municipal garbage and industrial waste), as well as hazardous waste exempted from RCRA Subtitle C (such as hazardous waste received from households and conditionally exempt small quantity generators) and disposal of coal combustion residuals (such as in landfills and surface impoundments).

Under RCRA Subtitle D, state and local governments are the primary planning, permitting, regulating, implementing, and enforcement agencies. However, EPA establishes the technical design and operating criteria that states must include in their own regulations to be authorized to implement RCRA.

Some of the types of Subtitle D facilities include municipal solid waste landfill facilities, waste piles, industrial nonhazardous waste landfills, surface impoundments, land application units, and construction and demolition landfills. Solid waste disposal facilities that do not comply with the applicable regulations are considered open dumps and are prohibited. EPA also issued regulations under the Clean Air Act that apply to emissions from large landfills. In addition, certain criteria under the Clean Water Act and other federal statutes may be applicable.

A local government that is considering acquiring or leasing a facility should consider the possibility that past disposal of solid waste may have taken place, particularly if the property has a history of commercial or industrial use. The local government could become responsible for making those facilities compliant with RCRA Subtitle D, including addressing any releases that may have occurred.

Additional information on RCRA (Subtitle D) is available at Resource Conservation and Recovery Act (RCRA) Overview. The standards that apply to municipal solid waste landfill facilities units are discussed further at What is a Municipal Solid Waste Landfill? Information pertinent to the disposal of construction and demolition debris, discussed further at Industrial and Construction and Demolition (C&D) Landfills.

B.3.3 RCRA Subtitle I

The RCRA Subtitle I program regulates the design, construction, installation, operation, testing, release detection, and closure of underground storage tanks (USTs) containing petroleum and hazardous substances. The investigation, remediation and financial responsibility for releases from USTs also are regulated under RCRA Subtitle I.

Not all USTs are regulated under the Subtitle I program. Some of the storage tank facilities that are not regulated under Subtitle I include:

- Facilities where less than 10 percent of the combined volume of a tank and associated piping are underground.
- Farm and residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes.
- Tanks storing heating oil used on the premises where it is stored.

- Tanks on or above the floor of underground areas, such as basements or tunnels.
- Septic tanks and systems for collecting storm water and wastewater.
- Flow-through process tanks.

EPA has approved most state UST programs to operate in lieu of the federal UST program. In states that have not been approved by EPA, both state and federal UST regulations apply. EPA has an enforcement agreement with most of these states that allows the state to lead on enforcement efforts. More information on program approvals for each state is available at State Underground Storage Tank (UST) Programs.

Many of the state UST programs are more stringent or broader in scope than the federal requirements. In some states, for example, tank programs include heating oil and above-ground tanks. While there are no innocent purchaser provisions in RCRA Subtitle I, some state brownfields laws provide relief from state liability for unknown tanks and unknown tank releases for purchasers that conduct appropriate due diligence prior to taking title to a property. The federal UST Lender Liability Rule also provides certain exemptions for lenders and other parties that maintain indicia of ownership in a UST primarily to protect their security interest (40 CFR §§ 280.200-280.230).

Owners or operators of regulated USTs are required to maintain financial responsibility for remediation costs should a release occur. Federal and state governments and their agencies that own USTs are not required to demonstrate financial responsibility; however, local governments must do so. The UST regulations specify several options for demonstrating financial assurance. Additional information on the UST financial responsibility requirements can be found at Resources for UST Owners and Operators.

In addition to Subtitle I requirements, state and local fire and building codes also apply to underground tanks containing petroleum and other flammable and combustible liquids. Tanks containing petroleum located in proximity to navigable waterways of the United States or adjoining coastlines also may be subject to the Spill Prevention Control and Countermeasures (SPCC) requirements, unless they are fully regulated by EPA's UST regulations. EPA is the lead federal response agency for oil spills occurring in inland waters, and the U.S. Coast Guard is the lead response agency for spills in coastal waters and deep-water ports. (See Oil Spills Prevention and Preparedness Regulations for more information about the SPCC program.)

Additional information on UST programs is available at Underground Storage Tanks (USTs) or by contacting EPA and state offices. An EPA document, Musts for USTs, describes these requirements. The full text of the laws, regulations, and relevant codes is available at Underground Storage Tanks (USTs) Laws and Regulations. EPA's Office of Underground Storage Tanks has additional information and resources relating to corrective action at UST sites at Cleaning Up Underground Storage Tank (UST) Releases and relating to petroleum brownfields at USTs: Petroleum Brownfields.

B.4 Polychlorinated Biphenyls (PCBs)

In enacting section 6(e) of the Toxic Substances Control Act (TSCA) Title I, Congress directed EPA to regulate the use and disposal, manufacturing, processing, and distribution in commerce of PCBs. In this regard, TSCA legislated true cradle-to-grave (from manufacturing to disposal) management of PCBs in the United States.

Although TSCA provides the primary regulatory framework for controlling PCBs, these compounds also are regulated to some extent under the Clean Air Act, Clean Water Act, RCRA, and CERCLA.

Section 6(e) of Title I of TSCA cannot be delegated to the states, and therefore jurisdiction remains with EPA. However, several states have established their own laws and regulations concerning PCBs, and in some instances, EPA may coordinate with states.

While PCBs are no longer commercially produced in the United States, local governments that acquire or lease a property may still encounter PCBs in certain equipment or products that were manufactured prior to 1979, such as transformers, capacitors and other electrical equipment, hydraulic fluids, paints, and caulk, and other building materials, or as contamination arising from past use or disposal. Similarly, equipment or property contaminated with PCBs at regulated levels that are not authorized for use, no longer in use or leaking must be properly disposed of or decontaminated.

TSCA is a strict liability statute. Persons responsible for addressing PCB contamination and equipment that contains PCBs under TSCA Title I can potentially include past and new property owners and operators, and other parties that caused or contributed to the PCB contamination.

When considering the acquisition or leasing of property that has undergone a prior PCB cleanup, the local government should consider whether the land use assumptions upon which those cleanups were based are consistent with the intended future use. Certain uses may require more stringent requirements than what was previously acceptable. Such assumptions are often, but not necessarily always, incorporated into deed restrictions on the property.

EPA has published a manual for addressing the cleanup of PCB remediation waste: Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act (TSCA). A PCB Questions and Answers Manual that responds to a number of specific technical and regulatory issues is available at Revisions to the PCB Q and A Manual. Other information, including an electronic version of the PCB regulations, can be found on EPA's PCB website at Polychlorinated Biphenyls (PCBs).

B.5 Asbestos

The National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements for asbestos promulgated under Clean Air Act (CAA) §112 establish work practices to minimize the release of asbestos fibers during activities involving the processing, handling, and disposal of asbestos and asbestos-containing material when a regulated facility, such as a building, is being demolished or renovated.

NESHAP also regulates asbestos in active and inactive waste disposal sites. These requirements and standards are described in 40 CFR Part 61, Subpart M. The CAA allows EPA to delegate NESHAP authority to state and local agencies. Even after EPA delegates this responsibility, the Agency retains the authority to oversee delegated programs and enforce NESHAP regulations. Additional information regarding the asbestos NESHAP is available on EPA's website at Asbestos.

Besides NESHAP, other federal laws govern how asbestos materials must be handled in schools, public buildings, and commercial or industrial buildings. For example, Title II of TSCA (also called the Asbestos Hazard Emergency Response Act [AHERA]), addresses asbestos in schools. TSCA's Title II also establishes

accreditation requirements for persons conducting asbestos inspections and response actions (abatement activities) in schools, and public and commercial buildings (defined by statute as any non-school building except residential apartment buildings of fewer than 10 units). The Occupational Safety and Health Administration (OSHA) regulates exposure to asbestos in the workplace through the Construction Industry Standards (29 CFR §1926.1101) and General Industry Standards (29 CFR §1910.1001) (see Asbestos). The NESHAP regulations and other relevant laws and regulations are available at Asbestos Laws and Regulations.

A release of asbestos also can cause liability under other federal environmental statutes, including:

- Under CERCLA, asbestos is a hazardous substance. Thus, generally, a release or threatened release of asbestos may subject a local government to CERCLA liability. Generally, unless a building or structure is in danger of collapse or could otherwise release asbestos to the environment, EPA's Superfund program is not typically involved in asbestos abatement activities. An important exception would be situations where removal of the building or structure is a necessary part of a CERCLA response action (for example, removal of a building or structure is necessary to provide access to the underlying contamination).
- While the federal RCRA Subtitle C regulations do not specifically list asbestos as a hazardous waste, EPA does have the authority to require cleanup of asbestos using, for example, section § 7003 of the RCRA statute.

States also may regulate asbestos under their authorized RCRA programs or other laws establishing additional requirements. In addition, requirements governing asbestos are sometimes instituted at the local or county level.

Office of Brownfields and Land Revitalization (5105T) | EPA-560-F-21-193 | November 2021 | www.epa.gov/land-revitalization