North Carolina Brownfields Redevelopment Toolbox

North Carolina Department
of Environment and Natural Resources
Division of Waste Management
Brownfields Program
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INTRODUCTION

A Message from the North Carolina Brownfields Program

The Program's mission is to facilitate the safe redevelopment of abandoned idled or underused environmentally impacted properties known as brownfields. It is our goal to redevelop these brownfields sites with you as a team, to bring them back to productive use while protecting public health and the environment. Whether you are the local government official attempting to jump start economic development and environmental protection in your jurisdiction, or whether you are a developer who has a redevelopment concept for a property, but can't get to first base with lenders because of environmental liability concerns, we have the means and the expertise to identify stumbling blocks and aspire to help you surmount them. As you peruse this document, please keep in mind that our Program's staff are available to assist you. We can answer questions, provide guidance from initial queries to technical expertise, and offer advice based on extensive experience with all types of projects. All of our contact information and a host of other resources about the program is on our web site at **www.ncbrownfields.org**. Give it a look and see why we invite you to come clean up with us.

But in addition to us there are more resources at your disposal. Chief among these is the U.S. EPA. Not only do they support us in our efforts to serve you, but the EPA also can provide various brownfields grants and other financial tools that it can award directly to local governments. We hope this document helps you to understand how to navigate the brownfields process with all of these partners.

Purpose of this Toolbox

The purpose of this Toolbox is to explain the process of cleanup and redevelopment of contaminated properties in straightforward terms, and provide North Carolina communities, interested coalitions, and Prospective Developers (PDs) with a systematic, start-to-finish guide to cleanup and redevelopment of Brownfields in the State. This Toolbox can be used for a range of property types that have redevelopment potential, but are stymied in the marketplace due to suspected or known environmental contamination. The

NC DENR DWM Brownfield Program (NCBP) derives its authority from the state statute known as the Brownfields Property Reuse Act of 1997. Additional information about the NCBP is provided in Appendix A and online at www.ncbrownfields.org.

How to Use this Document

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

This Toolbox provides a user-friendly framework for successful Brownfield Redevelopment implementation. Use this Toolbox as a starting point in the initial stages of Brownfield redevelopment, familiarize yourself with the issues and resources provided, and refer to it throughout the various stages of your project.

The following is a guide to navigating the Toolbox for effective completion of your project.

1. For a general overview of the process for assessment, cleanup, or redevelopment, review the narrative summary provided at the beginning of each relevant section. Keep in mind that Brownfield redevelopment can be an iterative process and you may have to revisit certain steps during the course of a project. For example, conceptual design of property use and marketing of the property can and should whenever possible be conducted contemporaneously with assessment and cleanup.

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

3. Follow this approach until environmental issues are resolved or until you reach Step 4, Redevelopment of your Property. This section provides information that can assist you in addressing the issues inherent in marketing and developing a formerly contaminated property (or one where contamination has been properly and safely addressed, but has not been completely eliminated.)

4. More specific nuts and bolts questions about the NCBP will come up as you read through the four steps. The most common questions and answers are presented in Appendix A. Refer to Appendix A as you read through the 4 steps for additional information that is specific to the NCBP.

Catch the Wave

Supported by the U.S. EPA, the North Carolina Brownfields Program has facilitated redevelopment of more than 120 properties with more than 150 in the pipeline. This represents a private redevelopment investment of more than $3.8 billion. That's a pretty big wave.

THE FOUR STEP BROWNFIELDS REDEVELOPMENT PROCESS

In this section the Toolbox breaks the redevelopment process into four steps:

Step 1: Get Started - Property Identification, Project Planning, and Marketing
Step 2: How to Determine if You Have Contamination on Your Property
Step 3: Cleaning Up Your Property
Step 4: The Finish Line – Redevelopment of Your Property!

Incorporated within each section is a summary of available state and federal tools that can assist with that step in the process. Refer to Appendix B for additional information on federal tools and nation-wide resources. Refer to Appendix C for additional information on state tools and resources. Resources will vary from state to state so it is important for entities unfamiliar with redevelopment in North Carolina to consult current resources prior to embarking on a redevelopment project within the State.

Step 1: Get Started-Property Identification, Project Planning, and Marketing

This section provides guidance on how to initiate the redevelopment process. These tasks include identifying marketable contaminated properties with redevelopment potential in your community, how to develop a revitalization plan to address those properties, and how to address project planning.

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

Our experience has shown that the most successful brownfields approaches in North Carolina start with getting private development interests involved in the process from the beginning. This involvement usually comes in the form of participation by leading business and property

developers in a locally formed brownfields property redevelopment team. The reason their involvement is so important is that they will provide perspective on those sites that might hold redevelopment interest. Without their involvement in site selection, many sites could end up being assessed without viable end prospects for actual brick-and-mortar redevelopment. Brownfields assessments are a key to unlocking a brownfield property's otherwise natural economic potential. Therefore, successful Brownfield redevelopment projects offer other economic fundamentals that attract developers once environmental liabilities are addressed.

Whether your community's goal is to develop a comprehensive revitalization plan for multiple properties, or if you plan to redevelop just one contaminated property, successful project planning must consider multiple factors. Three key inter-related considerations are 1) the land use contemplated for the redevelopment area, 2) the level of resources available for environmental investigation and cleanup of the property(ies), and 3) how will the property(ies) be marketed for redevelopment. Early consideration of these issues will pave a more efficient path to successfully meeting community redevelopment goals.

Activities and Available Tools

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

- Does your community want to clean up these properties and market them to potential commercial, industrial or residential buyers or developers?

- Does your community want to retain some of these properties for its own use, perhaps for municipal or open-space purposes, or for affordable housing?

- Has your community been approached by potential buyers or developers who have been subsequently "turned off" because the property is contaminated or perceived as contaminated?

- Does your community have (or want to prepare) a comprehensive plan for redeveloping its abandoned or underutilized properties that are known or suspected to be contaminated.

FAQs for Step 1

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

Establishing a community-led redevelopment plan aids in removing environmental hazards from communities, eliminates the need to develop pristine open space and farmland, revitalizes communities by creating jobs, and returns property to productive use and to local tax rolls. An additional advantage of a community-based approach is that community members, who may be the most knowledgeable about a property's history and have a vested interest in its redevelopment, provide a direct role in determining how their impacted properties can be cleaned up and redeveloped to best facilitate the community's future development plans. Having a redevelopment plan for contaminated properties increases the chances of securing Federal funding to assist with brownfields assessment and cleanup.

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

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

Why is redevelopment of these properties important?

These properties are often abandoned or underutilized, with owners no longer maintaining the property or paying taxes. Abandoned properties can quickly become eyesores, and may attract vandalism and illegal dumping, which degrade the environment, depress our communities, and potentially put our health at risk. Productively reusing such properties reduces urban sprawl, increases the tax base, cleans up the environment, encourages urban revitalization and creates jobs for the community and surrounding communities. Redeveloping these properties links economic vitality with environmental protection.

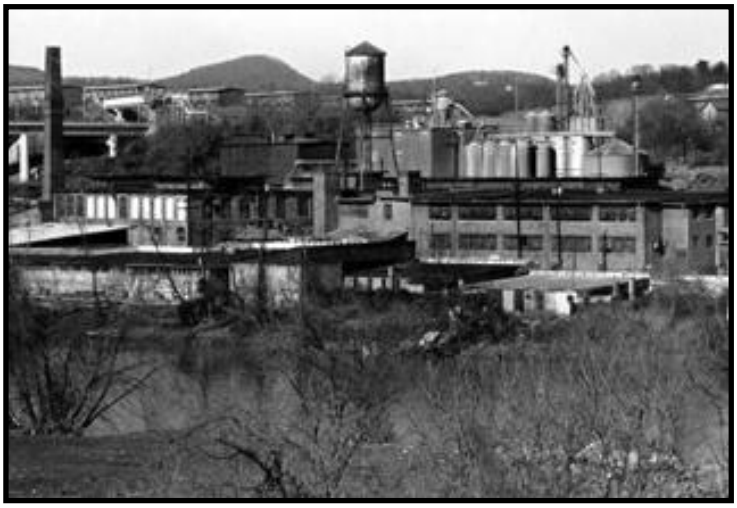
Forming a Property Redevelopment Team

If the answer to any or all of the above questions is yes, your community may want to consider forming a property redevelopment team. Such a team is typically comprised of a mix of public and private parties from your community who have an interest in fostering well-planned, successful cleanup and redevelopment. The team can be large or small or as formal or informal as the community needs. It can be tailored to the size and complexity of one specific project, or it can guide an entire redevelopment vision. It can be made up of elected officials, planners, attorneys, environmental professionals, economic development officials, and members of environmental and citizen interest groups. The team can bring valuable perspectives from each member's area of expertise to help develop a mission and determine long-term and short-term goals based on the community's redevelopment needs and desires.

In addition to forming a team, it can be quite helpful to contact other local communities, private entities or environmental legal and consulting professionals with previous experience addressing these types of properties. The EPA maintains a list of current and former Brownfield grant recipients who are experienced in the issues and solutions encountered at these sites. The list can be found at http://www.epa.gov/swerosps/bf/reg4.htm. EPA also holds seminars for recent grant recipients, which provides a forum where grantees and other knowledgeable state, federal and private entities can share their expertise regarding Brownfield redevelopment. Additional information on these training seminars can be found at https://www.trainex.org/offeringslist.cfm?courseid=794&all=yes.

The North Carolina Brownfields Program also maintains a list of former grant recipients on its web site at http://www.ncbrownfields.org/epa_grant_recipients.asp and provides information and advice to communities interested in seeking federal brownfields grant opportunities, as well as periodic grant workshops in conjunction with the U.S. EPA.

Understanding Environmental Liability



A Prospective Developer (PD) in North Carolina must pass certain eligibility tests to be entitled to enter the NC Brownfield Program. Once deemed eligible, the PD negotiates a Brownfield Agreement (BFA) with the State of NC Brownfield Program, administered through the DENR Division of Waste Management. The BFA covers the parameters of the agreement between the two parties, including specifying the scope of work to be performed at the site, liability protection if the scope of work and other requirements of the agreement are performed in accordance with the agreement, and the conditions on which the liability protection for a PD may be withdrawn. Liability protection passes from PD to successive owners of the property as long as the conditions of the BFA are not violated.

Determining the Intended Use for the Property

The intended reuse of a property plays an important role in the redevelopment process. If contamination is identified, the nature and extent of the contamination will have to be assessed sufficiently to understand the risk of exposure, if any, to site contaminants based on the planned reuse. Depending upon the planned reuse, areas of elevated contaminant concentration may be removed or can be allowed to remain at the site under the conditions of the BFA. In North Carolina, areas of a Brownfield property that exceed unrestricted land use standards for contaminants in soil, soil vapor, or groundwater are identified in BFA documents and on a survey plat. Land use restrictions (LURs) in the BFA prevent uncontrolled access to these areas and to contaminated groundwater.

For example, if the redevelopment plan calls for the construction of a light industrial facility, it may be appropriate to apply industrial investigation and

cleanup standards that are less stringent than those that would be applicable to a property that is to be redeveloped for residential use. Therefore, it is important to consider potential redevelopment plans at the outset of any project.

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

Marketing Your Property **[photo from wireworld.com]**

It is important to remember that success in the final marketing of the property can be made much easier through the involvement of the business and development community from the start. When steps toward marketing of the Brownfield property are left to the end of the cleanup phase, the process can yield disappointing results. So, hopefully, Brownfield property marketing efforts are occurring incrementally throughout the process. In the best scenarios, final marketing plans and intended uses are worked out with interested developers in the Property's conceptual stage.

Once you have an idea of what you want the site to be, you can turn your attention to identifying possible developers for the site if they have not already been identified. You may be marketing your Brownfield property, working to ensure a good return on your investment, and attracting the right developer with a vision that matches the community's needs and interests. You will be facing the challenges inherent in any development project, such as providing appropriate infrastructure, but you also need to convince future buyers and occupants that the site will be or is safe for their intended use. In the State of North Carolina, a negotiated BFA between the PD and the State will assist in meeting this end by defining the work to be performed, determining land use restrictions associated with the site, and providing liability protection and tax incentives to the PD.

Financial Assistance for Community-Lead Assessment and Cleanup Activities

Forming a team, or coalition, and determining the best use of your community's contaminated properties are important first steps that require resources. U.S. EPA offers Brownfields grants on a periodic basis (usually once a year, with grant application rounds normally beginning in the fall) to assist communities with various activities related to contaminated property redevelopment. One of the grants U.S. EPA makes available to communities is the Brownfields Assessment Grant. This grant provides funding for property assessment, planning activities, and community outreach activities related to qualifying sites. This grant can also provide funding for conducting contaminated property inventories as part of the planning process. EPA also awards Cleanup Grants and Revolving Loan Funds on a competitive basis for cleanup activities on eligible properties. More information about the Brownfields Assessment Grant process can be found on U.S. EPA's Brownfields web page at: www.epa.gov/brownfields/assessment_grants.htm. More information about the EPA Cleanup Grants and the Revolving Loan Funds can be found at http://www.epa.gov/swerosps/bf/cleanup_grants.htm and http://www.epa.gov/brownfields/rlflst.htm, respectively.

At the present time, there are no funding sources for assessment or cleanup through the State of North Carolina Brownfield Program. However, the NCBP provides certain tax benefits to Brownfield properties in the State. In addition the Brownfields staff provide technical guidance and support throughout the brownfields process. Other sources of funding may be available to assist with infrastructure development on qualified sites. Information on additional resources is provided in Appendices B and C of this document.

Developing an Inventory of Contaminated Properties

Historical industrial or commercial property use often resulted in environmental contamination. If your community has an industrial past and now has abandoned or underutilized industrial or commercial properties, an inventory can help you identify the number and location of such properties. Then you can begin to consider an action

plan for these sites to benefit the economic health and vibrancy of the community, and select priorities based on community needs and interests, and site marketability.

Communities are often in the best position to create such inventories and determine the most marketable sites for redevelopment. Local governments often have direct knowledge of underutilized properties, through tax rolls and historical documents, and the planning expertise to select properties that have the greatest redevelopment benefit to its citizens. Evaluating a property's marketability is a crucial initial step in prioritizing assessment, cleanup and redevelopment efforts.

Municipal planning and economic development staff are often a good choice to lead the Brownfield redevelopment efforts at the local level. Staff contacts at various municipal departments can assist in gathering property information for use in Brownfield site decision making. Such information, such as current property owner, parcel identification number, parcel maps, historical and current uses, chemical storage, violations of building codes, and permitting issues, is obtained from the tax collector's office, Register of Deeds, local geographic information system databases, building and health departments, local fire departments, and the local library and historical societies. You may want to enlist the help of local citizens or a local volunteer service organization during community outreach activities to maximize your inventory efforts.

Information maintained by State and Federal agencies may also be helpful in the early stages of inventory development. The State of North Carolina Department of Commerce and the Research Triangle Institute (RTI) provide lists of marketable properties that may or may not be contaminated. Many of these sites may be eligible for the NCBP (**Smartsites.org & NC SiteSearch).** Refer to Appendices B and C for additional planning resources.

Determining Your Next Step

The following series of questions will help you determine the next step in the redevelopment process, and remember using the word **"community"** here ideally includes input from stakeholders beyond the local government alone and includes property developers, business leaders, lenders, and other parties interested in economic development of your community:

- Has your community identified a marketable property(ies) where redevelopment is complicated by real or suspected environmental contamination, and the nature and extent of that contamination is not known?

- *If "yes", go to **Step 2 "Determine If You have Contamination on Your Property".***

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

- Has your community identified a property(ies) where contamination exists, documented the nature and extent of contamination, and analyzed the risks posed by that contamination?
  - *Go to **Step 1 "Developing an Inventory of Contaminated Properties" and Step 3 "Cleaning Up Your Property".***

- Has your community evaluated cleanup options for a contaminated property project and selected a remedial action?
  - *Go to **Step 4 "The Finish Line – Redevelopment of Your Property!".***

Step 2: Determine If You Have Contamination on Your Property

Once you have identified a Brownfield property that your community would like to redevelop, the next step is to determine whether there are environmental conditions present that may affect future use and redevelopment. This will assist you in determining what liability the community may have and possibly the cost it might bear if it chooses to take ownership and begin a cleanup.
Making a determination of whether a property is contaminated or not is accomplished by conducting an environmental site assessment, which includes a review of historical records, an inspection of the site and, quite often, collecting and analyzing soil and groundwater samples.

FAQs for Step 2

What is an environmental site assessment?
Environmental site assessments are typically conducted in phases, and are used to determine whether a site is contaminated or not. A Phase I environmental assessment is a review of available documentation and knowledge associated with the property's historical record to see if there is known recognized environmental conditions (RECs) or the potential for environmental conditions (PECs) at the property. The scope of work for a Phase I Environmental Site Assessment (ESA) should be based on EPA's AAI, which is defined below. If the Phase I results indicate that there is known or potential contamination, the assessment of the site proceeds to the next phase. A Phase II ESA involves sampling of the site, evaluation of site data, and sometimes a preliminary screening level risk evaluation. The Phase II scope of work should be designed to provide results that will determine: the extent of contamination, the types and probable sources of contamination, the level of risk to humans and the environment associated with the contamination, and whether the contamination needs to be cleaned up based on a particular property's planned reuse.

Phase I ESAs performed under EPA Brownfield grants are required to satisfy EPA's All Appropriate Inquiry (AAI) rule that was developed as part of the 2002 amendments to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). AAI is a process of evaluating a property's environmental conditions, and must be done in order to obtain certain liability protections under federal Superfund Law. If a property can be assessed through federal grant funding, it makes the site all that more attractive to a potential developer.

What is meant by "All Appropriate Inquiry" (AAI)?
All Appropriate Inquiry, or AAI as it is commonly known, is an environmental site assessment that meets the requirements of U.S. EPA's All Appropriate Inquiry rule (40 CFR 312). Following the requirements of AAI in a pre-purchase environmental site assessment gives a prospective purchaser liability protection from CERCLA (a.k.a., Superfund) for those environmental issues that are identified by the AAI assessment.
Prospective property owners who were never involved in any practices that might have contaminated the property may be eligible for liability protection from CERCLA, if AAI is conducted prior to purchasing a property. In addition, to maintain protection from CERCLA liability, property owners must comply with certain "continuing obligations" provided in the statute. For more information on the AAI rule, access the U.S. EPA web site at http://www.epa.gov/swerosps/bf/regneg.htm. Most of, but not all, of these obligations will be met when you enter the NC Brownfields Program and perform the work necessary to obtain a brownfields agreement.

FAQs for Step 2, cont.

Will an environmental assessment performed several years ago meet the new AAI requirements?
No. Information from older Phase I reports may be used as a resource, but the 2002 Federal Brownfields Act requires that a Phase I assessment used to meet the requirements of AAI must be completed within a year prior to taking ownership of the property. This is to ensure that the current environmental status of the property is known at the time the property is transferred. In addition, certain aspects of the AAI assessment must be completed within 180 days prior to the property transfer (i.e., the on-site investigation, the records search, the interviews, and the search for environmental cleanup liens). This protects the buyer from inadvertently accepting liability for contamination that may have occurred between the time the initial assessment was conducted and when the property actually transfers. However, the point may become moot once a brownfields agreement is reached with the NC Brownfields Program as the agreement is a liability protection and assurance of due care vehicle for the property.

Who pays for the assessment?
Assessment costs are typically paid for by the prospective developer as part of their due diligence process. Municipalities or other local government coalitions may be able to conduct these environmental site assessments through a competitively awarded EPA Brownfield Assessment Grant if the site meets certain eligibility criteria. The EPA Region 4 Targeted Brownfield Assessment Program can provide municipalities with additional assessment services through federal contractors. The State of North Carolina does not provide staffing support or funds to conduct Phase I or Phase II ESAs; however, the NCBP Project Managers can assist in reviewing and guiding ESAs for sites that have been accepted into the Brownfield program.

Who performs the environmental site assessment?
Environmental site assessments are typically conducted by environmental consultants trained and experienced in the areas of environmental investigation and cleanup. Federal regulations require that AAI investigations be carried out by qualified environmental professionals who meet certain minimum requirements.

When hiring an environmental consultant, be sure to check their qualifications and references just as you would with any contractor. There are consultants in the State of North Carolina that have experience specific to State and/or Federal Brownfields sites, and therefore are familiar with the specific document requirements and processes related to the North Carolina and EPA Brownfield programs.

For more information on hiring an environmental consultant, access the U.S. EPA web site at http://www.epa.gov/brownfields/aai/HiringEP_Addendum_factsheet.pdf.

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

Activities and Available Tools

Phase I Environmental Assessments

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

Phase I site assessments are used to identify existing or past signs of potential contamination at a property. Contamination can consist of hazardous substances and petroleum products as well as asbestos, lead-based paints, mold, and radon. If the Phase I assessment does not indicate a significant potential for environmental risk due to contamination at the site, then further investigation or cleanup may not be needed.

If the assessment is inconclusive or identifies potential contamination that poses environmental risk, further environmental assessment may be needed to ascertain if a particular reuse plan is safe for a given site. This is addressed through the development and implementation of a Phase II ESA scope of work. Soil, sediment, soil vapor, indoor air, surface water and/or groundwater sampling may be required to determine whether the property is contaminated, if it is safe for its planned reuse, or if it needs to be cleaned up before it can be redeveloped.

Phase II Assessments: Sampling and Risk Assessment

A Phase II environmental site assessment is an evaluation of environmental conditions at a property. This evaluation relies on the collection and analysis of soil, sediment, soil vapor, surface water, and/or groundwater samples, and other measurements taken at the site to confirm and quantify the presence of environmental contamination at the property.

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

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

The scope of the Phase II ESA, should be based on an evaluation of historical use and potential source areas of contaminants, and to some extent, the planned use of the property. For example, properties that are planned as residential, may be required to generate more data during the Phase II ESA process to demonstrate that the site is safe for this use, or to define areas of elevated concentrations for removal to make the site safe for residential use. Alternatively, if commercial or light industrial use is planned, depending on site-specific factors, it may be acceptable to conduct risk-based decision making with less data than that necessary for planned residential sites.

North Carolina Brownfields Program Assessment Guidance

The NCBP staff can assist you with understanding the type and amount of environmental data that are needed to be collected on your site based on historical information and plans for reuse. Entering the NCBP before a Phase II ESA has been completed enables discussions between the State and the PD that will provide focus on the tasks that the PD will need to complete during a Phase II ESA in order to negotiate a meaningful brownfields agreement.

U.S. EPA Assessment Grants

Grants of up to $200,000 are available to local government entities that bear no responsibility for causing the contamination at a site. These competitive grants are available on an annual basis for planning, and assessing, and performing community outreach for sites contaminated with petroleum or hazardous substances. See www.epa.gov/brownfields/assessment_grants.htm for more information.

Targeted Brownfields Assessments

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

For more information on tools and resources to assist you with project planning and site identification, refer to Appendices B and C of this document.

Determining Your Next Step

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

- Did my environmental site assessment reveal potential contamination or other recognized environmental conditions on this property?
  - *If no, go to **Step 4, "The Finish Line – Redevelopment of Your Property!".***
  - *If yes, and you want to clean up the property before marketing it for redevelopment, go to **Step 3, "Cleaning Up Your Site".***
  - *If yes, but you do not want to clean up the property prior to marketing it for redevelopment, go to **Step 4, "The Finish Line – Redevelopment of Your Property!"***.
- Does the contamination pose a risk to human health or the environment?
  - *If yes, then cleanup will likely be necessary, so proceed to **Step 3 "Cleaning Up Your Property".***
  - *If no, and it does not affect the future use of the property, then proceed to **Step 4, "The Finish Line – Redevelopment of Your Property!".***
- Does the contamination require cleanup or other corrective measures in order to protect human health or the environment, or can the contamination be addressed through a deed notice or other similar mechanism?
  - *Go to **Step 3, "Cleaning Up Your Property".***

Step 3: Cleaning Up Your Property

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

In North Carolina, NCBP BFAs contain land use restrictions (LURs) such as prohibitions against groundwater and surface water use, residential use, day care centers or use by other sensitive populations, and restrictions against uncontrolled exposure of on-site. The NCBP requires that LURs are certified annually by the owner of the site as a requirement of the BFA. If active or passive remediation methods are in use at a site, the annual certification is to include performance data or other measures that the remediation method is continuing to perform in an acceptable manner.

The LURs are specified in the BFA and the Notice of Brownfield Property, which is recorded in the county Register of Deeds office where the site is located. The BFA therefore runs with the property and subsequent owners of the site are required to abide by the provisions in the BFA, while also receiving its benefits.

FAQs for Step 3

Who do I need to consult to get help with cleaning up the site?
If you haven't done so already, you should hire an environmental consultant to work with you to develop and implement a plan to address the contamination at your site. Additionally, it may be necessary to hire an environmental attorney who is familiar with state and federal laws to assist you in dealing with the legal issues relative to the cleanup process. Finally, you should also contact the appropriate NC DENR and/or other applicable local governmental agency(ies) to ensure that any cleanup work you are planning to conduct will fulfill state and local requirements.

For information on the NCBP, refer to Appendix A and http://www.ncbrownfields.org/. For information on the NC DENR IHS or UST section, refer to the appropriate section at the Divison of Waste Management website at http://www.enr.state.nc.us/. Refer to your specific county or municipal level environmental regulatory agency for local requirements.

FAQs for Step 3, cont.

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

If, after conducting an environmental assessment as described in Step 2, your sampling results exceed the NC unrestricted use standards as defined by http://www.wastenotnc.org/soiltable.pdf the NC Groundwater Quality Standards (2L standards), or the risk evaluation indicates that a potential risk to human health or the environment exists, it is likely that some form of cleanup is necessary. For the Brownfields program, under certain instances, land use restrictions (LURs) can also be used alone or in combination with active remedial options to mitigate and manage potential exposures to contaminants, making the site safe for the planned reuse.

What types of cleanup might be necessary at contaminated sites?

Soil, sediment, surface water, groundwater or indoor air that is impacted above unrestricted use standards may need to be cleaned up at a contaminated site in North Carolina. Techniques have been developed to address contamination in each of these media. In many cases, site risks can be controlled through the use of institutional controls like land use restrictions (examples include prohibiting groundwater use or limiting the site to industrial use).

Other times more active cleanup may be needed. The type of cleanup and institutional controls selected is based on situation-specific considerations such as type of contamination, amount of contamination, depth to groundwater, intended use of the property, and extent of risk to human health or the environment. Additional actions might be necessary during a building demolition phase to address issues such as asbestos or lead-based paint.

In North Carolina asbestos and lead-based paint are regulated by the North Carolina Division of Public Health and Human Services. Asbestos information can be found here: www.epi.state.nc.us/epi/asbestos/ahmp.html. Lead-based paint information can be found at: www.epi.state.nc.us/epi/lead/lhmp.htm.

How much will the cleanup cost?

The more reliable site-specific information you have about the soil type, groundwater conditions, and the nature and extent of contamination on your property, the easier it will be to evaluate the potential cleanup options and estimate the cost of these options, with less uncertainty. Under the NCBP, determining future intended use for the property may allow you to tailor the cleanup to the specific site use, and reduce the costs using risk-based decision making.

Incorporating cleanup activities into the general construction process or using innovative architectural designs can help reduce costs. For example, it may be possible to reduce the volume of contaminated soil for excavation and disposal by constructing buildings over less-contaminated areas, and/or paving areas of higher contamination to reduce exposure pathways. In addition cost-effective remediation techniques designed to address contamination under buildings and in groundwater have been developed, and may be appropriate for your project. A wealth of information about remedial technologies and their use are readily available, such as http://www.clu-in.org/remed1.cfm and http://www.itrcweb.org/. In addition, reputable environmental consultants working with experienced NCBP Project Managers can assist in developing options that are appropriate for your Brownfield site.

FAQs for Step 3, cont.

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FAQs for Step 3, cont.

What are institutional controls?
In cases where the cleanup does not remove or address all of the contamination at the property to the most stringent of standards (e.g., for residential or unrestricted use), Institutional Controls (ICs) may be required as part of the cleanup. ICs are legally enforceable restrictions, conditions, or controls that run with the land to limit or prevent the use of the property, ground water, or surface water so that future exposure to contamination can be prevented or minimized.

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

Activities and Available Tools

Types of Cleanups for Contaminated Sites

The type of cleanup required at a property depends on a number of factors. These factors include location, type and amount of contaminant(s) present, how widespread and deep the contamination is and the intended future use of the property. An evaluation of available Phase II data should be conducted to identify whether data gaps exist that could hinder development of a sound cleanup plan. A supplemental focused investigation designed to fill these data gaps may make sense in this instance. When a site participates in the NC Brownfields Program, NCBP staff can provide guidance on just what focused assessment is necessary for that site.

The most common types of cleanups include removal or treatment of contaminated soil, capping and/or covering the contaminated area, and cleaning up groundwater. However, additional methods for mitigating risks at contaminated properties include the use of ICs (see FAQ above) and engineering controls. U.S. EPA has published a compendium on cleanup options that can be found at http://www.epa.gov/tio/download/misc/roadmap3edition.pdf. Additional information can be found at http://www.clu-in.org/remed1.cfm and http://www.itrcweb.org/.

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

can be "capped" by a newly constructed building, roadway, or parking areas, with provisions for cap maintenance.

Cleanup work can be incorporated into the general design and construction schedule to increase efficiency and lower costs. For example, if a building is planned over an area of contaminated groundwater that could pose an indoor air contamination problem, a sub-slab depressurization system can be easily and inexpensively installed during construction of the building foundation.

Because the amount of cleanup needed can be highly dependent on future use, it is very important to plan your assessment scope of work early on with the intended site reuse in mind. The assessment information should be gathered in a manner to allow you to design appropriate but cost-effective cleanup options that can be incorporated into the redevelopment process. The North Carolina Brownfields Program is ready to customize the assessment and cleanup processes to the end uses planned.

Importance of Determining Future Use of the Property

The redevelopment of a contaminated property is essentially a real estate transaction, and any real estate transaction is affected by location, location, location. A key question that must be answered for every property redevelopment project is, "Will a return on my investment be realized?" Knowing the options for cleanup and a range of potential cleanup costs in advance will aid in addressing this question.

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

So, the intended future use of a site can determine the extent of cleanup that will be required. It is just as true that the extent of cleanup can determine the future use of a site. Sometimes the intended use of a site is known from the beginning and the cleanup is tailored for that use. In other cases, available funding limits the extent of cleanup, which may then dictate more limited options for future use. Knowing the intended future use can significantly affect the

cleanup both in scope and cost.

Liability Protection Available for Prospective Developer

One of the benefits of conducting a cleanup under the NCBP is the liability protection offered in the form of a covenant-not-to-sue contained in the brownfields agreement. Once the "safe-making" actions specified in the brownfields agreement are completed, liability protection is automatically in force that protects the Prospective Developer (PD) from enforcement action by the NC DENR DWM for remaining contamination known to exist at the site prior to its redevelopment.

It is important to note that the agreement does not provide liability protection concerning future site contamination for which the PD or other party may be responsible. Because the brownfields agreement defines the PD's cleanup liability at the property, and limits that liability to those actions specified in the agreement, it removes the uncertainty regarding site cleanup costs. In this way, the agreement functions to provide comfort to lenders or other entities that would not otherwise be willing to offer project funding. The brownfields agreement, then, is the chief mechanism for breaking this common barrier to obtaining redevelopment financing.

In their Brownfield Applications, PDs must make the case that the liability protection provided by a brownfield agreement is necessary to break such a barrier or is otherwise required for the redevelopment project to proceed. These may be used to demonstrate to prospective purchasers, future users of the site, lenders, the local community, and other interested parties that contamination issues have been resolved, or are being mitigated, and the site is safe for reuse.

Loans and Grants Available for Funding Cleanup

One of the biggest barriers to cleanup of contaminated properties is financial resources. U.S. EPA Brownfields cleanup grants are an excellent source of funding for cleanups of qualifying properties (see Step 1, "Site Identification, Project Planning and Marketing") by municipalities and other qualifying entities. Since the grants are highly competitive and applications are only accepted once a year, your project schedule and budgeting should have some flexibility built in for these constraints. EPA also provides the impetus for municipalities to apply for Revolving Loan Funds. EPA hosts grant application writing seminars through the clu-in website at
http://www.trainex.org/offeringslist.cfm?courseid=571&all=yes

More information about the Brownfields Cleanup Grants and Revolving Loan Funds can be found on U.S. EPA's Brownfields web page at:
http://www.epa.gov/brownfields/cleanup_grants.htm. For more information on tools and financial resources to assist you with project planning and site identification, refer to Appendices B and C of this document.

Determining Your Next Step

- Have you completed cleanup prior to redevelopment?
    - Go to **Step 4, *"The Finish Line – Redevelopment of Your Property!"*** for assistance in marketing or developing your site.

- Have you identified but not addressed all environmental concerns at the property, and do not intend to clean up the property prior to selling it?
    - Go to **Step 4, *"The Finish Line – Redevelopment of Your Property!"*** for assistance in marketing your site.

- Do your cleanup activities require institutional controls and have they been appropriately filed and recorded according to applicable statute and regulation?
    - Refer to **Appendix C**, which provides contacts and information specific to the requirements of your state.

- If you know who the purchaser of the property will be, have you conveyed the content and responsibilities of the institutional controls to them?
    - Go to **Step 4, *"The Finish Line – Redevelopment of Your Property!"*** for assistance in marketing your site.

- If your site requires long-term maintenance, have you made plans to fund and carry out those obligations or made arrangements for others to do it on your behalf?
    - Refer to **Appendix C**, which provides contacts and information specific to the requirements of North Carolina.

Step 4: The Finish Line – Redevelopment of Your Property!

By working through Steps 1 through 3, you have quantified the environmental concerns at your property. You have either addressed those environmental concerns through cleanup or institutional controls, or you have documented them for a future developer to address as part of redevelopment. Assessment activities were completed to the satisfaction of applicable regulatory agencies and actions were taken, or plans were developed for resolving unacceptable environmental risks. The property is ready for redevelopment.

You may be redeveloping the property yourself instead of seeking to sell it to a developer. In this case, return on investment is not necessarily a primary driver, but you will still need to address infrastructure. As previously stated you will also need to convince future occupants or users that the site is safe for their reuse. On the other hand, you may have decided not to clean up the property yourself, but instead to market it for simultaneous cleanup and redevelopment. This is most likely to be successful when contamination at the property has been quantified and final cleanup costs can be determined with some degree of certainty. Although with maturation in redevelopment thinking, there are a number of savvy developers whose goals may match your redevelopment vision that look specifically for brownfield sites.

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

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

Local, regional, and state economic development staff can help you market your property. Coordinating with theses representatives will help ensure use of the most efficient tools in your particular area. In North Carolina, various resources as identified in Appendix C are available to assist with these efforts.

FAQS For Step 4

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

At a minimum, most developers, lenders and potential occupants will want to be assured that the site has been appropriately cleaned up and closed out of the state and/or federal programs. Copies of available Phase I ESA report, Phase II ESA reports, and clean up reports, and documents that provide a comparison of cleanup options and costs would be appropriate to provide. Interested parties may also wish to conduct a regulatory agency file review of public environmental records pertaining to the site. Contact the relevant division of NC DENR http://www.enr.state.nc.us/ to arrange for a review of site files at the appropriate NC DENR office(s) in the State. As part of the NCBP Brownfields public notification process, a public information repository is established during the public comment period at a location(s) affording reasonable proximity to site information, such as the local library or municipal planning office.

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

The answer is highly dependent on site specifics and the type of resources that will be used to assist in redevelopment. But generally, the NC Brownfields Program may be involved in any assurances needed as to work performed to make the site safe for the intended reuse, including periodic certifications that land use restrictions remain in force. EPA Region 4 and the NCBP staff are available to address issues related to eligibility, funding, and liability issues pertaining to Brownfield sites in the State of North Carolina, and to help navigate the redevelopment process.

How should I market this property?

The involvement of local developers and lenders in your redevelopment team as mentioned in Step 1 will often have by this point generated leads or at least have determined that this site has significant market potential. Local commercial real estate agencies are also a frequent partner in this effort. However, there are some other tools available that can allow you to market your property to the right audience at little or no cost. One example of an effective marketing tool is a State or local property inventory. The State of North Carolina Department of Commerce and the Research Triangle Institute (RTI) provide lists of marketable properties that may or may not be contaminated. Many of these sites may be eligible for the NCBP. Refer to the websites www.Smartsites.org & www.NC SiteSearch for more information.

FAQs for Step 4, Cont.

If my property has a deed restriction/institutional control/environmental covenant incorporated into the site plan or requires long-term operation and maintenance of remedial systems, how will this impact the marketing and redevelopment of the site?

If your property is safe for reuse but has a deed restriction, or other institutional control, potential site developers and occupants will need to be made aware that in certain areas some uses are either prohibited (installing wells for using groundwater is not permitted) or restricted (e.g., excavation below 6 feet requires a soil management plan). Potential developers and owner/occupants need this information so that they can safely use the property and so that they can fulfill any ongoing obligations associated with the deed restriction. These obligations are property-specific and are addressed in the NCBP BFA. They include periodic review and reporting of site conditions and performance measures of operating remediation systems.

TIPS FOR SUCCESS

No. 1 – Establish and maintain a well-rounded Brownfields property redevelopment team

Make it a priority to get private sector participation of local lenders, developers, and businesses that have employment or expansion potential onto your local Brownfields Redevelopment Team. This can be of great benefit in site selection and in gathering redevelopment leads that greatly increase your chances of ultimate success. Also if your Team does not already include local, state or federal economic development agency staff, look to the resources described in Appendices B and C, and contact the agencies best suited to help with your particular project.

No. 2 – Establish clear goals that gain stakeholder buy-in to your process

With many varied stakeholders come many varied goals. Work with your Team to develop its own appropriate locally supported redevelopment goals for your property(ies) and make them known, both interim and final. Interim goals could surround applying for and obtaining EPA grant funds if your team decides to pursue that option. The final goal should always include a brick-and-mortar reuse of the property. Other goals can include the public benefits of economic development measures, sustainable development, set asides for green space, greenway linkages, or smart growth concepts. The team's success in developing local support for a project will likely improve if local officials, citizens groups or individual citizens are on the team, or are afforded an opportunity to weigh in with their vision and ideas for redevelopment in the area.

No. 3 – Identify and use available tools

Identify and use your redevelopment goals to identify and utilize appropriate tools throughout the redevelopment process. Tools available at the federal and state level are located in Appendices B and C. Develop contacts within the brownfields practitioners in other local governments across the state to gain their insights and learn from their experiences.

No. 4 – Make sure the site is marketable before you make it "shovel ready"

Assessing and cleaning up a property that has no market potential can severely hamper chances of success in achieving the final goal. However, once a site that has redevelopment potential is chosen, work to make your site 'shovel-ready' for development. A shovel-ready site is one where as many obstacles as

possible have been resolved in advance of redevelopment. This is a critical step if you plan to market the property for sale prior to redevelopment because you will minimize regulatory hurdles for potential developers, reducing the efforts on their end and making your site more appealing. This may even include a local government or non-profit development corporation obtaining a brownfields agreement on the property under the NC Brownfields Program or at a minimum educating the developer on how they can do this.

No. 5– Market your site from the beginning

Market your redevelopment project by coordinating with local and state economic development staff who are particularly well-versed in strategies and available avenues for marketing brownfield properties. This may provide the most benefit on the front end of your project, a site that is cleaned up first with the thought that developers will be "knocking at your door" is typically a fallacy. This is known as the "clean it up and they will come" principle, however a developer on board at the beginning of your project will likely result in a successful redevelopment. Understanding and educating developers on how the principles of the NC Brownfields Program can alleviate environmental liability and provide tax incentives is also helpful.

Appendix A

Frequently Asked Questions
North Carolina Brownfields Program

The following frequently asked questions (FAQs) are also provided on the NCBP website at www.ncbrownfields.org. Please see the website for additional information.

1. What is a brownfield site?

A brownfields site is any real property that is abandoned, idled or underutilized where environmental contamination, or perceived environmental contamination, hinders redevelopment. The hindrance comes from the fact that it is very difficult to obtain loans for redevelopment on these properties because they come with potential environmental cleanup liability. The NC Brownfields Program is designed to alleviate that liability for prospective developers of these properties at reasonable cost so as to facilitate the redevelopment of the property.

2. What is a brownfields agreement?

The department will enter into an agreement with the developer that is in effect a covenant not-to-sue contingent on the developer making the site suitable for the reuse proposed. The term "suitable" includes the concept of safety from a public health standpoint for the intended reuse. The brownfields agreement provides both the site-specific actions necessary to make the site suitable for reuse and the covenant not-to-sue once these actions are complete. A brownfields agreement is designed to break environmental liability barriers that hinder a developer's ability to obtain project financing. The agreement specifies actions to be conducted by the developer that are based on making the site suitable for the use intended. These actions can be costed, and then a business decision can be made by the developer and lenders without uncertain liability. By and large, these actions include a wider array of options to choose from and are more cost effective than those afforded to a polluter of the property. See question 6 for more details on the benefits of a brownfields agreement.

3. I hear about the U.S. EPA Brownfields Program (federal level) and the North Carolina Brownfields Program (state level). What's the difference?

The U.S. EPA began the Brownfields Initiative in 1995 and since that time the states have been heavily involved in supporting these actions through passage of supportive state statutes. The federal and state roles in brownfields differ, but they are all designed to encourage the cleanup and reuse of abandoned contaminated properties referred to as brownfields.

The federal program functions to provide funding to states to develop and operate programs such as this. It also provides grants to local governments, on a competitive basis, for assessment and cleanup of brownfields sites. The federal brownfields statute (Small Business Liability Relief and Brownfields Revitalization Act) became effective in 2002. It outlines environmental liability and under what circumstances it is deferred to the state and under what circumstances it remains with the federal government.

The state Brownfields Program operates under state statute (Brownfields Property Reuse Act of 1997) to offer liability protection to noncausative parties in return for actions on the site that make the site suitable for the reuse proposed and for the public benefit of the redevelopment project.

4. Is there any brownfields funding available and from whom?

This is one of the central differences between the federal and state brownfields programs.

Although the state brownfields program has no upfront funding available to private party prospective developers, a brownfields agreement obtained from the program entitles the developer to a property tax exclusion on the improvements made to the property for a period of five years. This exclusion can more than pay for assessment and cleanup activities on many projects. See our Tax Incentive FAQ for more information on how it is applied.

The U.S. Environmental Protection Agency does have competitive brownfields grants for the assessment and cleanup of brownfields properties as well as grants for setting up local revolving loan funds. Limited funds are also available for job training grants, also on a competitive basis. Under this brownfields grants program, North Carolina local government entities have been awarded millions of dollars for brownfields activities. This list includes Charlotte,

Winston-Salem, Fayetteville, Raleigh, Greensboro, Winston-Salem, High Point, Concord, Farmville, Wilmington, Rocky Mount, Hickory, the Land-of-Sky Regional Council of Governments, the Piedmont Triad Council of Governments and others. Deadline for submittal of proposals is generally in the fall of each year. For more information on how to apply please see our Federal Brownfields Program Links. However, it's important to note that the awarding of such a grant is not required to participate in the North Carolina Brownfields Program.

5. What's the difference between the state's Voluntary Cleanup Program, the Inactive Hazardous Sites Program and the Brownfields Program?

The "Voluntary Cleanup Program" is the shorter name for the North Carolina Inactive Hazardous Sites Program. It has existed since 1987 and is designed to encourage cleanups of contaminated properties. Any party may conduct cleanup activities under this program. Most of the parties who do so are responsible parties who caused or contributed to the contamination at the site. The Voluntary Cleanup Program is separate and apart from the state's Brownfields Program, which was authorized by a different statute in 1997. The major differences are that the Brownfields Program, and its associated benefits, are only available to parties who did not cause or contribute to the contamination at the site and who desire to redevelop the property. See the next question to review what those benefits are. Also, a brownfields site by necessity is one that is abandoned, idled or underutilized, and where there is an interest in redevelopment. That may or may not be the case with a Voluntary Cleanup Program Site.

6. For a developer of brownfields properties, what are the benefits of obtaining a brownfields agreement?

In short, a brownfield agreement is designed to provide a tool for developers to handle environmental liability such that they can begin to look at a brownfields property as an opportunity instead of immediately walking away from it. The following are specific benefits:

1) The agreement provides strong liability protection that can be shown to a lender in order to obtain project financing; 2) The site remedies under the program are designed to prevent exposure and make the site suitable for reuse, not to meet environmental standards required of the site polluter in traditional cleanup programs. Thus they are less costly, particularly with respect to groundwater remedies; 3) since remedies are put in the agreement up-front

and therefore represent known costs, a more reliable business decision can be made without much of the uncertainty surrounding environmental liabilities; 4) closure for the prospective developer can be obtained in a matter of six to twelve months, which is typically much less time than for most other cleanup programs; 5) The liability protection passes on to all new owners so long as they adhere to land use restrictions (e.g. don't use the groundwater). This can be a selling point; and 6) The brownfields property tax incentive significantly reduces property taxes for five years after completion of improvements to the property. This benefit typically pays for or at least offsets site environmental assessment or cleanup activities that the developer must conduct in the program.

7. Okay, so if I want a brownfields agreement, what's the process like, how long does it take and how much does it cost?

The process is outlined on our flowchart at the end of this FAQ section. It begins with the application by the prospective developer who needs the program's services submitting a Brownfields Property Application (BPA) with the data that is necessary for the program to determine if the site and the developer are eligible under the Brownfields Property Reuse Act. The flexibility the Act allows makes for a different process than most other programs as DENR and the prospective developer work in partnership toward the brownfields agreement. The process is less adversarial and more of a partnership since there is common interest for DENR and the prospective developer to reach a brownfields agreement that protects public health and the environment and encourages the reuse of the property.

Obviously the process also is dependent on the conditions at each site, as well as the end use proposed by the developer. For example, residential uses generally require more sampling to assure public health protection than does industrial use. At some sites sufficient environmental data already exists and no further assessment data is necessary. This saves time and expense. Some sites require more assessment than others. Many sites have motivated developers who respond to our technical guidance and sample sites without delay. Others respond less quickly and are in a slower development mode. Also, each brownfields agreement has a 30-day public comment period that needs to be factored into project scheduling. Even with this, a motivated developer on a site that is not technically complex can generally obtain a brownfields agreement in six to eight months. When compared to other cleanup programs and the liability protection provided, most developers who have had environmental issues to

deal with on other sites outside the Brownfields Program will say this is exceedingly fast.

The ultimate costs are again specific to the site conditions, the existing site data, and the proposed land use. But the built-in advantages of the Brownfields Property Reuse Act are designed to make costs for noncausative parties both reasonable and well defined before the brownfields agreement is signed. Costs include assessment (often), remediation (if any), and transactional costs (attorney, if necessary, although we have had prospective developers receive brownfields agreements with little or no attorney involvement).

8. What's the operational history of the program?

The program has provided more than 120 brownfields agreements to date and has 150 in the pipeline, resulting in an estimated $3.8 billion invested redevelopment capital across the State. The projects range in size from a $100,000 small business expansion on a neighboring lot to projects valued at more than $500 million in private investment. In addition to the private investment facilitated, these projects had given the state thousands of jobs and returned abandoned eyesores into new tax performers for local governments. An inventory of brownfields projects is available on our web site.

9. Can you give me a list of available brownfields properties?

Not per se. The list would be tens of thousands of properties long and take resources to create beyond the scope or purpose of the program. Perhaps more importantly, the creation of a list of properties would probably have a stigmatizing effect. The misuse of the list of properties that had or might have had contaminant releases for the Superfund Program to investigate, known as the CERCLIS list, was probably one factor why these properties would not transact in the marketplace to begin with. Therefore, we have little interest in repeating such a list. However, some existing lists might have some relevance and use in such a search. There is a list of sites known as the Inactive Hazardous Sites Inventory created under the Inactive Hazardous Sites Program (Voluntary Cleanup Program). It is a list of sites where there have been releases in the state. Though not all the sites on it are brownfields sites (some are very much operating facilities), some of the tens of thousands of potential brownfields are on the list. There is also a list of old landfills that existed prior to the advent of solid waste regulations. Projects have entered into the Brownfields Program that are landfill redevelopments into recreational and/or greenspace. Finally, although not a listing specific to environmentally impacted

properties, you may wish to look at the Department of Commerce's Certified Site Listings. Some buildings or properties on this list may fit the definition of a brownfields property, though it is definitely not a list that is specific to brownfields.

10. What if I redevelop the property and want to sell it afterwards; does the new owner get the liability protection and the tax incentive?

Yes. So long as they did not cause or contribute to the contamination at the site, they get the benefits of liability protection of the agreement just as the prospective developer did. A brownfields agreement should continue to facilitate the transferability of the property into the future. Also note that future owners do have the same responsibility to adhere to any land use restrictions in the agreement (for a hypothetical example, not to use the groundwater). Land use restriction violations are the responsibility of the owner at the time of the violation, so such land use restrictions violations do not come back onto past owners/developers.

And if the new owner wants or needs to change or modify the land use they may to apply to the Brownfields Program to change the land use restrictions on the property. Of course, if contamination is still present, they may need to establish the change of use as suitable and safe through additional work under the Program as necessary.

11. Do I need a brownfields agreement from the U.S. EPA if I get one from the state?

No. The liability protection at the federal level comes via statute and not via contractual agreement. The federal brownfields statute defers jurisdiction of such sites to the state so that, in effect, the brownfields agreement is the agreement that governs the liability from the state and federal level. Should a site be of interest to the federal government (e.g., they have spent emergency response funds at the site in the past) the program would consult with the U.S. EPA on the site's eligibility for the brownfields program. Unless the site is headed for the National Priorities list, it is a likely candidate for the state brownfields program.

12. How can my local government apply for a brownfields grant?

This grant program is administered by the U.S. EPA and information is passed through the EPA brownfields web page. The NC Brownfields Program has links

and announcements as well. Interested North Carolina local governments or councils of government can talk to us or to Michael Norman at the U.S. EPA Region 4 office in Atlanta (404-562-8792, Norman.Michael@epamail.epa.gov) for additional information.

13. Can individual developers apply for federal brownfields grants?

Only local governments, councils of governments, certain coalitions, and in some cases community development corporations can apply for grants. For the criteria please refer to the U.S. EPA's Brownfields Grant Application Guidance which can be found on EPA's brownfields web site.

14. I caused or contributed to the contamination at a brownfields site. How can I take part in this process?

If you caused or contributed, you cannot obtain a brownfields agreement. But the program stands ready to help a prospective developer who desires to buy your brownfields site so that the property can transfer and the asset can be sold (so long as the property is abandoned, idled or underused and the transfer is not a real estate transfer for the purposes of continued operation of an already operating facility). Also, while this might facilitate the sale of this asset, it does not legally alleviate your past or future site liability. The brownfields program is not the program who will be making that determination of future liability and/or enforcement for responsible parties. The program of cleanup jurisdiction will remain in that role regarding any responsible parties.

Of course, the North Carolina Inactive Hazardous Sites Program (IHSP) is aways available to parties who caused or contributed to site contamination and who wish to cleanup prior to or during sale of the property. In fact, we have some projects in the Brownfields Program in which a responsible party for contamination on the property is working to complete a cleanup under the IHSP while the Brownfiels Prgram works with a developer on a brownfields agreement for suitable safe reuse.

15. I already own the site but did not operate it or cause or contribute to the contamination. I may wish to redevelop the site or sell to someone who wants to redevelop. How can I take part in this process?

A prospective developer is defined in the statute as an entity who desires to buy or sell for the purposes of redeveloping the property and did not cause or

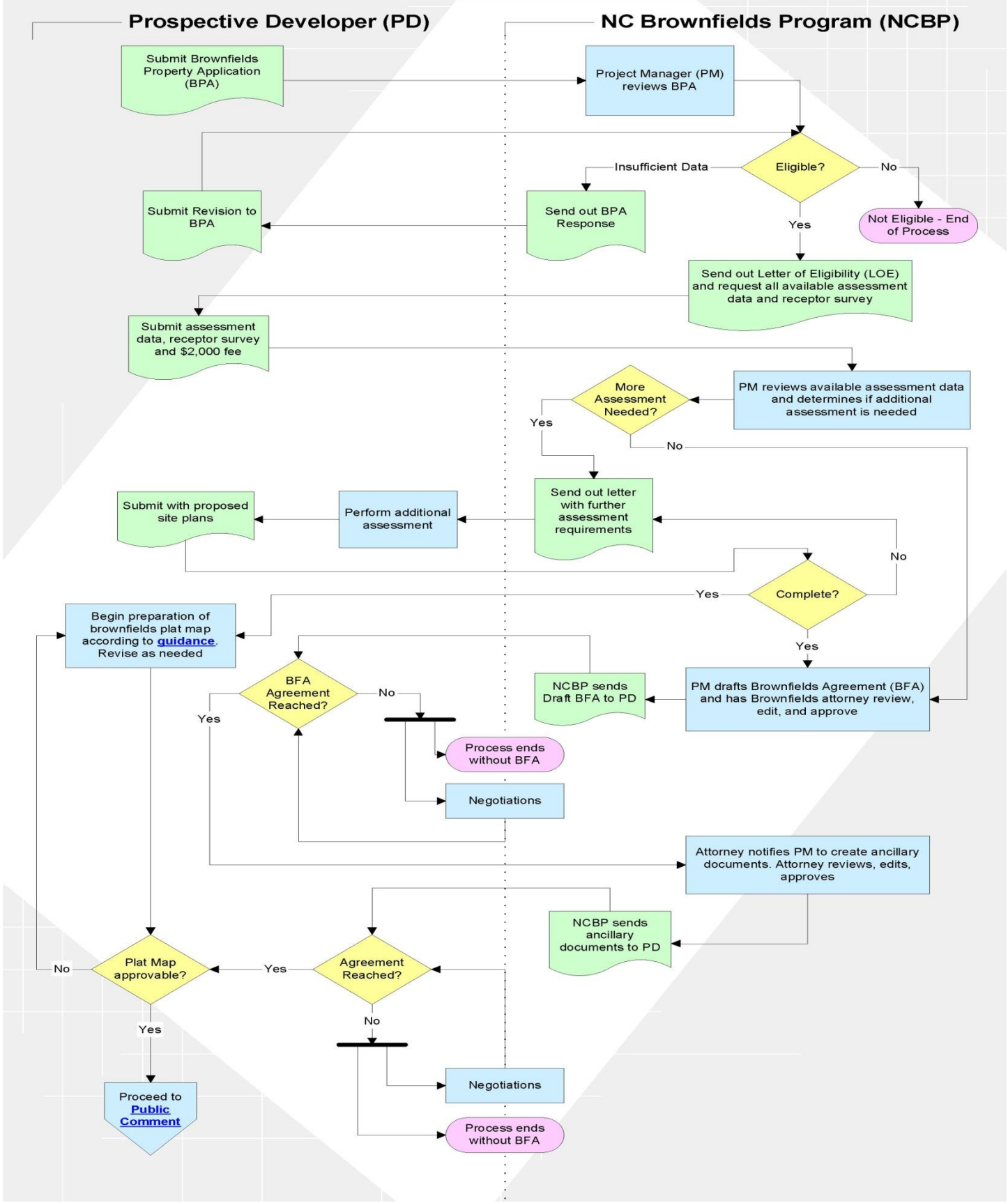
contribute to the contamination. Note that this takes into account sellers as well as buyers. Policy on this is covered under Issue 1 of the Program's Guidance entitled Brownfields Program Guidelines and Issue Resolutions.

16. Are there any sites that are excluded by their nature from getting a brownfields agreement?

Two types of sites are excluded from obtaining a brownfields agreement. The first is National Priorities List sites. These are sites on the federal Superfund program's worst sites list. There are only 29 of these sites in North Carolina. The second type of excluded sites is underground petroleum storage tanks sites that are subject to the Underground Storage Tank Trust Fund, and which are excluded only if that's the only type of contaminant on the site. Mixed contamination sites that include UST contamination with contamination from another source are still eligible for brownfields agreements (as are sites contaminated by releases from aboveground petroleum tanks). If you have questions regarding this point you may refer to Issue 8 under the Brownfields Program Guidelines and Issue Resolutions.

North Carolina Brownfields Program

Brownfields Agreement Process



APPENDIX B

Federal, Nationwide, & Regional Resources

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

U. S. Environmental Protection Agency Brownfields Program (U.S. EPA)
http://www.epa.gov/brownfields/
U.S. EPA provides grants to fund assessments and cleanups of Brownfield sites. Grants are also made to capitalize revolving loan funds to clean up Brownfield sites or fund job training programs.

THINK ABOUT…after identifying sites and evaluating their marketability, using assessment grants to quantify the degree of cleanup needed to get the site "business ready". Speak to your state brownfields program as to the best way to accomplish this. Cleanup grants often need to be pooled with other cleanup funds unless the cleanup is minor. Municipalities and non-profits, such as urban renewal authorities, that have not contributed to contamination at the subject sites are eligible recipients of Brownfield assessment and cleanup grants.

U. S. Environmental Protection Agency CARE Program
http://www.epa.gov/care/

Community Action for a Renewed Environment (CARE) is a competitive grant program that offers an innovative way for a community to organize and take action to reduce toxic pollution in its local environment. Through CARE, a community creates a partnership that implements solutions to reduce releases of toxic pollutants and minimize people's exposure to them. By providing financial and technical assistance, EPA helps CARE communities get on the path to a renewed environment.
THINK ABOUT…using a CARE Grant to help organize a community organization to identify and prioritize environmental issues in your community and to develop a strategy to address them.

U.S. Department of Agriculture (USDA)
Forest Service
http://www.fs.fed.us
The Forest Service provides financial, technical and related assistance in urban and community forestry.

THINK ABOUT…the Forest Service if you would like to include woods as part of the end use of the property.

USDA Rural Development Agency (RDA)
http://www.rurdev.usda.gov

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

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

U.S. Department of Commerce Economic Development Administration (EDA)
http://www.eda.gov/Research/Brownfields.xml
EDA funds infrastructure enhancements in designated redevelopment areas or economic development centers that serve industry and commerce, provides planning grants, offers revolving loan funds and loan guarantees to stimulate private investments.

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

U.S. Department of Defense Army Corps of Engineers (USACE)
http://www.brownfieldstsc.org/

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

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

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

Office of Energy Efficiency and Renewable Energy/Center of Excellence for Sustainable Development
http://www.smartcommunities.ncat.org/

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

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

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

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

U.S. Department of the Interior National Park Service (DOI)
http://www.nature.nps.gov/protectingrestoring/index.cfm

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

THINK ABOUT…enhancing redevelopment projects with parks and open space amenities.

U.S. Department of Justice (DOJ)
Weed and Seed Program
http://www.ojp.gov/ccdo/ws/welcome.html

DOJ's Brownfields Special Emphasis Initiative gives communities unsuccessful in seeking EPA funding a "second chance" to carry out initiatives aimed at site preparation and development, and community outreach and participation (targeted to Weed and Seed program grantees), advises and assists with the use of EPA Brownfields funds to clean up meth labs, and assists in crime prevention and improving the community climate through neighborhood restoration and crime prevention.

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

U.S. Department of Labor (DOL)
http://www.doleta.gov
DOL offers technical assistance linked to job training and workforce development in Brownfields Showcase Communities.

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

US Small Business Administration (SBA)
http://www.sba.gov
SBA provides information and other non-financial technical assistance for redevelopment efforts, offers loan guarantees to support small businesses, and assists in developing management and marketing skills.

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

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

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

U.S. Department of Transportation Federal Highway Administration (FHWA) **http://www.fhwa.dot.gov/environment/bf_disc.htm**
FHWA provides funds that can be used to support eligible roadway and transit enhancement projects related to property redevelopment, targeted to state and local governments and metropolitan planning organizations.

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

U.S. Department of Treasury Oversight - various tax incentives
http://www.treas.gov/press/releases/po3060.htm
http://www.cdfifund.gov/what_we_do/programs_id.asp?programID=5
The Department of Treasury offers tax incentives including the New Markets Tax Credit Program to leverage private investment in contaminated property cleanup and redevelopment targeted to private sector entities.

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

Federal Housing Finance Board (FHFB)
http://www.fhfb.gov/Default.aspx?Page=44&Top=3
FHFB funds community-oriented mortgage lending for targeted economic development funding. Funds are targeted towards a variety of site users and can be accessed through banks. FHFB subsidizes interest rates and loans to increase the supply of affordable housing and funds the purchase of taxable and tax-exempt bonds to support redevelopment.

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

General Services Administration (GSA)
http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_OVERVIEW&contentId=10033&noc=T

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

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

National Oceanic and Atmospheric Administration (NOAA)
http://brownfields.noaa.gov/htmls/about/siteindex.html

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

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

Office of Building Technology, State and Community Programs (BTS)
http://www.eere.energy.gov/

BTS works with government, industry, and communities to integrate energy technologies and practices to make buildings more efficient and communities more livable. The resources available through BTS can help ensure that contaminated property cleanups are connected to energy efficiency and sustainable redevelopment.

Grants.Gov
http://www.grants.gov
This website is the source to find and apply for federal government grants. Grants.gov is a central storehouse for information on over 1,000 grant programs and provides access to approximately $400 billion in annual awards.

THINK ABOUT…using this site as you start searching for funding sources for various aspects of your program.

Appalachian Regional Commission (ARC)
http://www.arc.gov/index.do?nodeId=1765

ARC provides grants for roads and highways (targeted to state and local governments in the 13 Appalachian states), and offers planning and technical assistance to attract private investment to distressed areas to support new uses

(targeted to local governments and development districts/non-profit entities in some cases). The State of North Carolina has 29 counties in the ARC: Alexander, Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Davie, Forsyth, Graham, Haywood, Henderson, Jackson, McDowell, Macon, Madison, Mitchell, Polk, Rutherford, Stokes, Surry, Swain, Transylvania, Watauga, Wilkes, Yadkin, and Yancey.

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

THINK ABOUT…tapping ARC funding to meet site access road and similar infrastructure support needs of projects, including mine scarred lands, or for help in covering planning costs at sites being reused.

International City/County Management Association (ICMA)
http://www.icma.org/main/topic.asp?tpid=19&hsid=10
Since 1914, ICMA has offered a wide range of services to its members and the local government community. The organization is a recognized publisher of information resources ranging from textbooks and survey data to topical newsletters and e-publications. ICMA provides publications, data, information, technical assistance, and training and professional development to thousands of city, town, and county experts and other individuals on a variety of issues including redevelopment of contaminated properties.
THINK ABOUT…using ICMA resource documents to gain additional knowledge on addressing and redeveloping contaminated properties.

National Association of Development Organizations (NADO)
http://www.nado.org/rf/innocenters/brown.php
Since 2001, NADO has been dedicated to assisting regional development organizations across the country. Through their Research Foundation they have sought to raise awareness and examine issues related to contaminated property revitalization and redevelopment in small metropolitan areas and rural America. They have released a series of documents, all of which are available on their website, that specifically address reclaiming such properties in rural

America. Their resource guide is highly recommended reading for brownfields stakeholders and can be found at http://www.nado.org/pubs/rguide04.pdf.

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

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

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

Housing Assistance Council
http://www.ruralhome.org

A nonprofit corporation headquartered in Washington, D.C., the Housing Assistance Council has been helping local public, nonprofit, and private organizations build affordable homes in rural America since 1971. It offers loans, technical assistance, research and information and training.

THINK ABOUT…HAC if your community has a need for affordable housing and if the brownfield could supply it.

National Brownfield Association
http://www.brownfieldassociation.org
The National Brownfield Association (NBA) was established in 1999 as a non-profit, educational organization dedicated to stimulating the responsible redevelopment of brownfields. The NBA represents wide array of brownfield stakeholders – property owners, developers, investors, service professionals and government representatives.

NBA's mission is carried out through three primary conduits – information, education, and events. Through their Web site, email updates and *Brownfield News* magazine, they strive to keep their members well informed of changing market conditions, policy and legislation.

THINK ABOUT…NBA if you want to keep abreast of changes in brownfield redevelopment and to get in touch with other brownfield practitioners.

NewCities Institute
http://www.newcities.org

The NewCities Institute seeks to define and promote the economic and social vitality of what we call the "New City," regardless of its size or location. A "New City" is simply tomorrow's city, including changes in the social and physical environment, the economy, and the children who will become its leaders. The Institute's programs are offered to strengthen local leadership, promote citizenship, and engage citizens in their communities to build civic capacity.

THINK ABOUT…The NewCities Institute for assistance with developing a community vision.

Smart Communities Network
http://www.smartcommunities.ncat.org/

This organization serves as a resource center on sustainable development, including land use planning, transportation, municipal energy, green building, and sustainable businesses. It offers a host of useful information to help you understand the concept of sustainable development. You'll find overview articles, slide shows, links to other sources of information, recommended books and videos, and educational materials and programs.

THINK ABOUT…using this resource to incorporate sustainability features in your redevelopment project.

Sustainable Management Approaches and Revitalization Tools electronic (SMARTe)
http://www.smarte.org

SMARTe is a joint effort of the U.S.-German Bilateral Working Group, the U.S. Environmental Protection Agency, and the Interstate Technology Regulatory Council (ITRC) Brownfields Team. The tool is intended to be used by brownfield project stakeholders for assessing both market and non-market costs and benefits of redevelopment options, clarifying both private and public financing options, evaluating and communicating environmental risks, and easing access to pertinent state-specific information related to specific projects. SMARTe will provide the analytical tools needed to implement and integrate each component of the decision process.

THINK ABOUT…using SMARTe to identify resources and analysis tools for all aspects of the revitalization process including planning, environmental, economic, and social concerns.

The Trust for Public Land
http://www.tpl.org/tier2_pa.cfm?folder_id=945

TPL offers services to communities that wish to revitalize Brownfield sites and transform them into greenspace. TPL assembles park and greenspace funding and provides real estate and technical expertise to secure and clean up these sites on behalf of the public.

APPENDIX C

North Carolina Resources

Brownfield redevelopment in the State of North Carolina falls under the jurisdiction of the North Carolina Department of Environment and Natural Resources (NC DENR) Division of Waste Management (DWM) Brownfields Program. The North Carolina Brownfields Program (NCBP) was established in 1997 by passage of the **Brownfields Property Reuse Act** (http://www.ncbrownfields.org/pdf/Property_Reuse_Act.pdf).

Interagency Partnerships

Coordination between the North Carolina and EPA Brownfields programs has been instrumental in the success of brownfield redevelopment in North Carolina. EPA funding to North Carolina for brownfields redevelopment has been used to develop the NCBP and leverage private funds and governmental grants to effectively redevelop properties throughout the state.

Partnerships and close working relationships with other key development stakeholder groups within the state, such as the regional councils of governments and The North Carolina Rural Economic Development Center (see below) , have also been beneficial in conducting community outreach and providing municipalities and other community groups with the information necessary to succeed in their brownfield redevelopment efforts.

North Carolina Brownfields Program

http://www.ncbrownfields.org/

The NCBP provides technical resources and regulatory oversight to developers and other parties interested in developing contaminated sites under the NC Brownfield Program. It provides a mechanism to treat prospective developers of brownfield sites differently than the parties responsible for contaminating them. Prospective developers negotiate a brownfields agreement with the NCBP staff that defines activities needed to make the site suitable for reuse, rather than cleaning up the site to unrestricted use standards (which responsible parties are required to do).

The benefits of the NCBP program include: 1) strong liability protection that can be shown to a lender in order to obtain project financing; 2) the site remedies

under the program are designed to prevent exposure and make the site suitable for reuse, not to meet environmental standards required of the site polluter in traditional cleanup programs, and therefore are less costly, particularly with respect to groundwater remedies; 3) more confident business decision due to reduced uncertainty of site costs; 4) shortened closure time for the prospective developer; 5) liability protection passes on to all new owners so long as they adhere to land use restrictions; and 6) The brownfields property tax incentive significantly reduces property taxes for five years after completion of improvements to the property. This benefit typically pays for or at least offsets site environmental assessment or cleanup activities that the developer must conduct in the program.

NCBP staff resources are located across the state, with the principal location at the NC DENR DWM Central Office in Raleigh, North Carolina, and additional staff resources in Wilmington, Charlotte, and Asheville, North Carolina. Brownfield contact information is provided online at http://www.ncbrownfields.org/contact_info.asp.

North Carolina Inactive Hazardous Sites Program
http://wastenotnc.org/sfhome/ihsbrnch.htm

Sometimes brownfields redevelopments are more driven by the actions of a responsible party desiring to sell properties than developers who seek to buy them. If the property or developer involved is not eligible for a brownfields agreement (either because they caused or contributed to the contamination at the property, or the property does not meet the statutory definition of a brownfields property), this program is one alternative to achieve cleanup that will facilitate project transactions and redevelopment. Attractive alternatives available to most sites under this program include an option for privatized oversight by a registered environmental consultant. In this way a responsible party can clean up the property on their own timetable with minimal state involvement.

North Carolina Clean Water Management Trust Fund
http://www.cwmtf.net/welcome.html

North Carolina's Clean Water Management Trust Fund (CWMTF) was established by the General Assembly in 1996 (Article 18; Chapter 113A of the North Carolina General Statutes). It is operated under the auspices of the NC DENR. CWMTF receives a direct appropriation from the General Assembly in order to issue grants to local governments, state agencies and conservation

non-profits to help finance projects that specifically address water pollution problems. The 21-member, independent, CWMTF Board of Trustees has full responsibility over the allocation of moneys from the Fund.

CWMTF will fund projects that (1) enhance or restore degraded waters, (2) protect unpolluted waters, and/or (3) contribute toward a network of riparian buffers and greenways for environmental, educational, and recreational benefits. These grants could be used in conjunction with Brownfields redevelopment projects based on demonstrated public and resource protection benefits.

North Carolina DENR, Division of Coastal Management
http://dcm2.enr.state.nc.us/Planning/grants.htm

DCM carries out the state's Coastal Area Management Act (CAMA), the Dredge and Fill Law and the federal Coastal Zone Management Act of 1972 in the 20 coastal counties, using rules and policies of the N.C. Coastal Resources Commission, known as the CRC. The division serves as staff to the CRC.

The NC DENR Division of Coastal Management helps local governments in the 20 coastal counties (Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hertford, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell, & Washington Counties) fund local land-use planning and management projects through the CAMA Local Planning and Management Grants Program.

NC DENR UST Program
http://www.wastenotnc.org/ust/ust_main.html
The NC DENR UST trust funds provide reimbursement for costs incurred during the cleanup of soil and groundwater contamination resulting from a release of petroleum from an underground storage tank. Two funds, the Commercial Trust Fund and the Noncommercial Trust Fund, have been established to reimburse tank owners, operators, and landowners for costs associated with cleanups. Commercial underground storage tanks include USTs containing petroleum products for resale, farm or residential motor fuel tanks with a capacity greater than 1,100 gallons, heating oil tanks greater than 1,100 gallons (unless they serve four or fewer households). Noncommercial underground storage tanks include heating oil tanks with a capacity of 1,100 gallons or less, heating oil

tanks with a capacity greater than 1,100 gallons that serve one to four households, farm or residential motor fuel tanks with a capacity of 1,100 gallons or less

NC DENR Drycleaning Solvent Cleanup Program
http://www.ncdsca.org/

The dry-cleaning solvent cleanup program (DSCA) is designed to provide a fund, administered by the Department of Environment and Natural Resources, to assess and clean contaminated dry-cleaning sites using state-lead contractors. The source for the cleanup fund is a tax on dry-cleaning and dry-cleaning solvents (both perchloroethylene and petroleum-based solvents).

Drycleaners, former drycleaners or dry-cleaning site property owners (current or past owners), wholesale dry-cleaning distribution companies may petition for entry into this program. Once in the program, petitioners are subject to co-payments. The program will manage the assessment and cleanup work. The liability protections provided under this program should facilitate project financing decisions by lenders in much the same way as the NC Brownfields Program.

North Carolina Division of Forest Resources
http://www.dfr.state.nc.us/starting/starting_incentives.htm

The NC Division of Forest Resources (DFR) has implemented financial incentive programs for woodlot owners, which could be used in association with a brownfield redevelopment under certain circumstances. Several of these programs offer cost- sharing payments that reimburse landowners for timber management activities. Other programs provide tax incentives, tax credits, and deductions for reforestation expenses.

The North Carolina Ecosystem Enhancement Program (EEP)
http://www.nceep.net/pages/abouteep.html

Protecting North Carolina's ecosystems is critical to maintaining the state's quality of life, continuing its economic growth, and ensuring the health and well-being of its citizens. The mission of the Ecosystem Enhancement Program

is to "restore, enhance, preserve and protect the functions associated with wetlands, streams and riparian areas, including but not limited to those necessary for the restoration, maintenance and protection of water quality and riparian habitats throughout North Carolina." EEP was created to collaborate with landowners to provide stream and wetland mitigation and restoration to improve water quality and protect wetlands in the state.

North Carolina Department of Commerce
http://www.nccommerce.com/en

The North Carolina Department of Commerce provides links to financial tools and available industrial site information related to locating and developing businesses in the State of North Carolina. These tools include tax credit, discretionary programs, and other cost-savings programs designed to reduce the cost of operating your business in the state.

There is also a jobs creation tax credit known as the Tax Credit Growing Business. Direct web links to this tax incentive are maintained on the Department of Commerce web site.
Statute link - http://www.nccommerce.com/NR/rdonlyres/FE96E19E-50D9-440D-8A7A-D83521C5F246/0/H2170v8.pdf
Summary Article link - http://www.nccommerce.com/NR/rdonlyres/671F9E73-3C18-4005-B1DD-5C22893B4E0E/1826/3JCreditSummary82207.pdf

The Department's *Site Location Toolkit* is particularly useful for those entities looking for industrial property for sale. It is not a list of brownfields properties, but clearly some of the properties on the listing could potentially be brownfields that could benefit from a brownfields redevelopment approach to cleanup. You can find it at
http://www.nccommerce.com/en/BusinessServices/LocateYourBusiness/SiteSelectorsToolkit/

NC SiteSearch
http://www.ncsitesearch.com/defaultcis.asp
The North Carolina Department of Commerce maintains a list of available properties throughout the State of North Carolina. These properties are not necessarily brownfields sites and may or may not have environmental

impact. Some of the sites are designated as Certified Sites, which indicates that Phase I and other information is available on the site.

North Carolina State Historic Preservation Office
http://www.hpo.dcr.state.nc.us/tchome.htm

Additional tax incentives provided for certain historic preservations projects have been additive to the brownfields tax incentives, making these projects extremely attractive. The North Carolina State Historic Preservation Office (SHPO) provides a summary of income tax incentives for the rehabilitation of historic structures, which are important tools for historic preservation and economic development in North Carolina. A federal income tax credit for the rehabilitation of historic structures first appeared in 1976 and today consists of a 20% credit for the qualifying rehabilitation of income-producing historic properties. Since 1998 North Carolina has provided a 20% credit for those taxpayers who receive the federal credit, providing investors with a combined 40% credit against eligible project costs. In addition, the state provides a 30% credit for the rehabilitation of non-income-producing historic properties, including private residences. New State Mill Rehabilitation Tax Credits provide even greater credit amounts for qualifying former industrial sites. Since 1976, over 2,000 completed "certified rehabilitation" projects have been reviewed by the N.C. State Historic Preservation Office, representing over one billion dollars of investment in historic properties. The spin-off from all this activity includes job creation, downtown and neighborhood revitalization, improved community appearance, and greater community pride. Historic preservation is smart growth, and smart investment.

North Carolina Housing Finance Agency
http://www.nchfa.com/

For certain types of residential development in the State of North Carolina, the North Carolina Housing Finance Agency (NCHFA) provides financing through the sale of tax-exempt bonds and management of federal and state tax credit programs, the federal HOME Program, the state Housing Trust Fund, and other programs. NCHFA offers low-cost mortgages and down payment assistance for first-time home buyers; finances affordable homes and apartments developed by local governments, nonprofit organizations, and private owners; finances the development of housing for people with special needs; finances the rehabilitation of substandard owner-occupied homes; and administers HUD rent assistance contracts for 24,000 privately owned apartments statewide.

N.C. Rural Economic Development Center
http://www.ncruralcenter.org/

The North Carolina Rural Economic Development Center's mission is to develop, promote, and implement sound economic strategies to improve the quality of life of rural North Carolinians. The center serves the state's 85 rural counties, with a special focus on individuals with low to moderate incomes and communities with limited resources. As part of that mission, the Rural Center administers their Building Reuse and Restoration Program that assists communities in transforming the potential vacant and underutilized buildings represent into economic reality. Grants help local governments prepare the buildings for reuse by new and expanding businesses. The Rural Center oversees the program as part of the $20 million North Carolina Economic Infrastructure Fund created by the N.C. General Assembly in July 2004.

Two types of grants were created. Predevelopment grants of $25,000 help cover the cost of an initial study or other activity necessary to secure commitments from a business or investors. Development grants of up to $400,000 are awarded to projects ready for renovation and must be matched by at least an equal amount of private and public funds. Awards are limited to local governments in rural counties or the most economically distressed urban areas, with priority given to towns with fewer than 5,000 people. Pre-development and Development grant applications are available at the Rural Center's website (see above.)

North Carolina Electric Cooperatives
http://www.ncelectriccooperatives.com/
NC Electric Cooperatives are heavily involved in overall regional economic development. Activities include small business assistance, establishing industrial parks, and direct funding of local and regional economic development projects. Reportedly, about 55% of cooperative direct community spending supports local industrial and business development, which provides employment and creates goods and services. Programs include low-interest loans and business opportunity grants, including the zero-interest Rural Economic Development loans available to us through the US Department of Agriculture. In the past 10 years, cooperatives' contributions have resulted in more than $570 million in investments in local business and industrial development via these programs. Funding and service also go to county and municipal economic development commission projects, tourism authorities, water and sewer systems, shell buildings, small business incubators and activities such as assisting existing business to expand through refitting buildings and direct assistance for expansion of facilities and workforce development.

Smartsites.org
http://geos1.rti.org/smartsites_beta1/WelcomePages/SmartSitesHome.asp
The Research Triangle Institute (RTI) in Research Triangle Park(NC) provides a Brownfields site-listing service designed to bring together municipalities that want to list potential brownfields sites and developers searching fro redevelopment opportunities, with a smart growth focus.

Appendix D

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

North Carolina Brownfield Tax Incentives

Qualifying improvements on brownfields properties are designated a special class of property law. An owner of land is entitled to a partial tax exclusion on qualifying improvements made after the date of the brownfields agreement for the first five taxable years after the improvements are completed. After the property has qualified for the brownfields tax exclusion, the assessor for the county in which the property is located shall annually appraise the improvements made to the property during the period of time that the owner is entitled to the exclusion.

The percentage of the appraised value of the qualified improvements that is excluded based on the taxable year:

Year	Percent of Appraised Value Excluded
Year 1	90%
Year 2	75%
Year 3	50%
Year 4	30%
Year 5	10%

Tax Increment Financing: A Brief Overview

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

For example, suppose a municipality creates a TIF district to facilitate redevelopment of several adjacent properties, including aging and vacant

industrial buildings and former rail yards. Once the properties within the TIF district are redeveloped, property values will increase, which results in increased tax revenues. Property tax revenues from the TIF district are split into two revenue streams:

1. The first stream (base) is equal to the "As-Is" property tax revenues without redevelopment and goes to the same city, county, school district, and other taxing entities (the base is allowed to increase with the market over time).
2. The second stream (increment) is the net increase in property taxes resulting solely from new development. The increment can be used to fund the redevelopment through Tax Increment Financing, which diverts the increment revenues to pay for annual debt service on construction bonds.

Federal and State Historic Preservation Tax Credits
http://www.hpo.dcr.state.nc.us/tchome.htm

Income tax incentives for the rehabilitation of historic structures are important tools for historic preservation and economic development in North Carolina. A federal income tax credit for the rehabilitation of historic structures first appeared in 1976 and today consists of a **20% credit** for the qualifying rehabilitation of **income-producing** historic properties. Since 1998 North Carolina has provided a 20% credit for those taxpayers who receive the federal credit, providing investors with a **combined 40% credit** against eligible project costs. In addition, the state provides a **30% credit** for the rehabilitation of **nonincome-producing** historic properties, including private residences. New State Mill Rehabilitation Tax Credits provide even greater credit amounts for qualifying former industrial sites. Since 1976, over **2,000** completed "certified rehabilitation" projects have been reviewed by the N.C. State Historic Preservation Office, representing over **one billion dollars** of investment in historic properties. The spinoff from all this activity includes job creation, downtown and neighborhood revitalization, improved community appearance, and greater community pride. Historic preservation is smart growth, and smart investment.

Appendix E

Acronym List

ASTSWMO	Association of State and Territorial Solid Waste Management Officials
BFA	Brownfield Agreement
BPA	Brownfield Property Application
DWM	Division of Waste Management
ESA	Environmental Site Assessment
FAQs	Frequently Asked Questions
IC	Institutional Control
IHSP	Inactive Hazardous Sites Program
LUR	Land Use Restriction
NC DENR	North Carolina Department of Environment and Natural Resources
NCBP	North Carolina Brownfield Program
PD	Prospective Developer
RTI	Research Triangle Institute
US EPA	United States Environmental Protection Agency
UST	Underground Storage Tank

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