

*Brownfields
Information
and
Resource
Guidebook*

**A Resource Manual for
Redeveloping Brownfields in
Cuyahoga County**

*Written and Published by
The Cuyahoga County Planning Commission
and
Neighborhood Progress, Inc.*

October, 1998

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TABLE OF CONTENTS

I. PURPOSE OF THIS GUIDEBOOK	1
II. INTRODUCTION	2
Defining the Challenges	2
The Threat of Environmental Liability	2
Additional Obstacles to Redevelopment	2
Removing the Barriers	3
Changes at the Federal Level	3
New State Programs	3
Cuyahoga County Involvement	3
Cuyahoga ROCS Information System	4
City of Cleveland Initiatives	5
The Benefits of Brownfield Redevelopment	5
III. OHIO'S VOLUNTARY ACTION PROGRAM (VAP)	7
Evolution of the VAP	7
How the Process Works (Figure 1)	8
Qualifying for the Program	9
Important Elements of the VAP	9
Certified Professionals and Laboratories	9
Site Investigations	10
Risk-Based Cleanup Standards	10
Site-Specific Risk Assessment	11
No Further Action (NFA) Letter	11
Generic Soil Cleanup Standards (Figure 2)	12
Covenant Not to Sue (CNS)	13
Urban Setting Designation	13
Participation Fees	14
Ohio EPA Auditing Requirements	14
IV. SOURCES OF FINANCING FOR BROWNFIELD PROJECTS	15
Summary of Funding Sources	15
Table 1 Types of Financing Available	16
Table 2 Uses of Available Funding	17
State of Ohio	18
Brownfield Grant Assistance Program (H.B. 442)	18
Brownfield Tax Credit Program (H.B. 441)	18
Water Pollution Control Loan Fund	18
Ohio Water Development Authority	18
VAP Property Tax Abatement	19
166 Loan Program	19
Ohio Enterprise Bond Fund	19
Community Development Finance Fund	19
UST Financial Assurance Fund	19

Cuyahoga County	20
County Planning Commission Pilot Project	20
Cuyahoga County Brownfields Redevelopment Fund	20
City of Cleveland	21
Neighborhood Development Investment Fund	21
Neighborhood Development Program	21
City Council Ward Funds	21
Empowerment Zone Land Development	22
Federal Government	22
U.S. Environmental Protection Agency	22
Economic Development Administration	22
Commercial / Development Banks	22
Private Brownfield Developers	23
Local Non-Profit Organizations	23
Cleveland Development Partnership Program	23
Neighborhood Progress, Inc.	23
Local Initiatives Support Corporation	23
Insurance Claims Investigators	24
V. GETTING THE COMMUNITY INVOLVED	25
Cleveland's Community Development Corporations	25
What You Can Do to Help	26
VI. SOME PRACTICAL ADVICE	27
Selecting and Working with a Certified Professional	27
Controlling the Costs of Site Investigation and Remediation	27
Packaging Public and Private Sources of Financing	29
The Role of Environmental Insurance	29
Providers of Technical Assistance	30
VII. CONTACTS / ADDITIONAL INFORMATION SOURCES	31
Federal Government	31
State Government	31
Cuyahoga County	32
City of Cleveland	32
Other Private Sector Contacts	33
Further Reading	33
Internet Addresses	33
VIII. GLOSSARY OF TERMS	34

I. PURPOSE OF THIS GUIDEBOOK

Brownfields have recently become one of the nation's top environmental and economic development priorities. Legislative changes at the Federal and State levels are making it easier and more cost-effective to clean up environmental contamination at former commercial and industrial sites and return these properties to productive use. The State of Ohio has taken a leading role in these efforts by establishing new risk-based cleanup standards, liability protection, and financial incentives that promote the redevelopment of environmentally-impaired property.

Nevertheless, brownfield redevelopment remains a complex and often expensive process. Projects require the coordinated involvement of environmental consultants, regulatory agencies, financial service providers, attorneys, real estate professionals, insurance companies, and local government officials. Understanding the entire process and the risks involved can be confusing, especially for those people unfamiliar with changing environmental laws and regulations.

This Guidebook is written for those who want to better understand brownfields and how to successfully clean and reuse them.

It is intended to demystify the redevelopment process and provide answers to common

questions that businesses, developers, land owners and community residents have about these sites. Specifically, the manual is designed to:

- ◆ Raise the level of community awareness about brownfields;
- ◆ Dispel potential misconceptions about contaminated property;
- ◆ Explain the regulatory process for site cleanup and redevelopment;
- ◆ Identify sources of funding for brownfield projects;
- ◆ Provide contact names and other sources of useful information; and
- ◆ Encourage people to explore the many redevelopment opportunities to be found on Cuyahoga County's brownfield sites.

Readers should feel free to contact the Cuyahoga County Planning Commission or Neighborhood Progress, Inc. if they have other questions. In addition, we welcome any suggestions you may have for future updates of the Guidebook.

II. INTRODUCTION

A brownfield is any property with actual or perceived environmental liability associated with it. Most are former commercial and industrial sites where years of often unregulated operations led to the release of petroleum or other hazardous materials. Left vacant or abandoned, these sites detract from the economic vitality of our communities and diminish the quality of life for local residents.

Defining the Challenges

The Threat of Environmental Liability

Ironically, the current problems associated with brownfields are largely an unintended side-effect of Federal and State laws designed to clean up contaminated land. Early legislation such as the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund, established the legal precedent of strict, joint and several liability for environmental problems. Under these laws a property owner or operator can be held legally responsible for the full costs of cleaning up environmental contamination regardless of who caused the problem or when it occurred. An owner of a flower shop, for example, who buys a piece of land next door to expand his environmentally-friendly operation, may be forced to clean up contaminants that were spilled by the previous owners.

Additional Obstacles to Redevelopment

There are often social and economic barriers that must be overcome before private investment in brownfields will take place. Among the most formidable challenges facing urban contaminated land:

- ◆ Property values and rents are typically too low to generate the kind of investment returns that private investors and developers seek.
- ◆ Few large, undeveloped sites are available and therefore must be assembled from multiple small parcels in a costly and time-consuming process.
- ◆ There are perceived disadvantages of doing business in an urban area stemming from concerns over crime, taxes, and inadequate workforce training and availability.
- ◆ Public and private financing for brownfield redevelopment is limited and can be difficult to obtain.
- ◆ Brownfields have to compete against attractive suburban greenfield locations which are often less costly and quicker to build upon.

Successful brownfield redevelopment therefore requires not only environmental solutions. It also demands creative new financing tools, large scale land assembly and new methods to stimulate market demand for older industrial sites.

Removing the Barriers

Federal, State and local governments are making important changes to help overcome these obstacles and reverse the decades of neglect that brownfields have endured. New programs are being implemented at all levels of government to promote the cleanup and reuse of these sites, and private businesses and developers are beginning to respond.

Changes at the Federal Level

Recognizing its role in contributing to the brownfield situation, the Federal government has taken several important steps to reduce the fears of environmental liability and make it easier to redevelop contaminated properties. Starting in 1993, the U.S. EPA launched its Brownfields Economic Redevelopment Initiative in Cuyahoga County. In 1993 the EPA awarded a \$200,000 pilot project grant to the Cuyahoga County Planning Commission to begin developing workable solutions for local brownfield projects. To date there have been a total of 228 pilot projects awarded across the country, totaling nearly \$42 million.

In addition to the pilots, the U.S. EPA removed 28,000 properties from its list of potential Superfund sites in an effort to encourage voluntary clean-up of these properties. The Agency has also issued new guidance documents that limit environmental liability for municipal governments and private lenders who participate in brownfield deals. Increasingly, the EPA has been willing to enter into Prospective Purchaser Agreements whereby the government promises not to sue a new land owner who voluntarily agrees to redevelop a site.

New State Programs

The states have established their own

programs aimed at encouraging brownfield reuse. Thirty-seven states, including Ohio, have adopted voluntary cleanup programs. Most of these programs establish new risk-based cleanup standards and offer liability protection and financial incentives to anyone willing to redevelop a contaminated site. Ohio's program is called the Voluntary Action Program, or VAP. It is administered by the Ohio Environmental Protection Agency.

As part of the VAP, Ohio has created a number of financial incentives for brownfield developers, including tax credits, property tax abatements and a variety of low-interest loans and grants for qualifying property. More detailed information on the VAP and its accompanying sources of financial assistance can be found in the next two sections of this manual.

Cuyahoga County Involvement

In 1992 the Cuyahoga County Planning Commission convened a symposium on brownfield issues. The Board of County Commissioners appointed a committee to follow-up the symposium with a strategic plan for breaking the barriers to brownfield redevelopment. The 42-member Working Group included industry executives, municipal officials, private developers, attorneys, environmental consultants and community representatives. In July of 1993, the Brownfields Working Group published a report containing 75 recommendations covering everything from needed legislative changes to new brownfield information databases. Many of its recommendations have now been implemented, including the passage of the VAP legislation in June of 1994.

Soon after the report was issued, the U.S. EPA awarded Cuyahoga County a \$200,000 pilot grant in November 1993. With this money as well as

other public and private support, the County launched a brownfields technical and financial assistance program. The program's most notable success has been the Sunar-Hauserman demonstration project. Working with the property owners and the Ohio EPA, the County helped develop a plan to convert this contaminated site into a new warehousing and transportation facility. As a result of these efforts, Grant Realty, Inc. now owns the property and runs a warehousing operation paint tote cleaning and truck maintenance employing 170 employees and paying over \$1 million in State, County and local taxes and payroll.

The County's Department of Development is now launching a new Brownfields Redevelopment Fund which will help finance brownfield investigation and cleanup activities throughout our area. Cuyahoga Community College and the Cuyahoga County Welfare-to-Work program also have a range of resources and job training available for technical and environmental careers. The hope is that demand for technical jobs in the environmental field will expand as voluntary cleanup activity intensifies. It is important for residents to have a chance to fill these positions.

Cuyahoga ROCS Information System

Finally, the County Planning Commission, with funding from the Cleveland and George Gund Foundations, has created a comprehensive, centralized property database which contains up-to-date information on known environmental conditions throughout Cuyahoga County. This system, called The Cuyahoga Redevelopment Opportunity Computer System (ROCS), utilizes a geographic information system to spatially

depict relevant environmental data and create linkages with related data sets.

Cuyahoga ROCS is an interactive database which helps users identify potentially attractive redevelopment sites. Developed in conjunction with Spatial Insights, Inc., the new geographic information system has been accessed mainly by developers, consultants, city planners and environmental groups. The system is currently available for public use at the Planning Commission and will be available via the internet starting in March 1999. The system contains more than 40 types of demographic, environmental and development information, including aerial photographs. The data is divided into the following sections: regional demographic, natural features, institutional, regulated sites and land use. Current elements on the menu can provide nearly 85% of the information needed for Phase I property assessments. Additional information and geographic areas may be added to the database to keep the system current for planning and economic development purposes. The following list summarizes the information now contained on Cuyahoga ROCS:

Practical Information

- ▶ Zoning
- ▶ Property Values
- ▶ Utilities
- ▶ Transportation Access
- ▶ Land Use Data
- ▶ Existing Site Features
- ▶ Municipal Boundaries
- ▶ Zip Codes

Significant Environmental Listings

- ▶ CERCLIS Sites
- ▶ NPL Sites
- ▶ TRI Sites
- ▶ RCRIS Sites
- ▶ BUSTR Sites/PUSTR Sites
- ▶ Ohio Master Sites List
- ▶ SARA Title III Properties

History and Physical Features

- ▶ Oil and Gas Wells
- ▶ ODNR Private Well Data
- ▶ Hydrogeologic Data
- ▶ Groundwater Basin Information

Financial and Economic Incentives

- ▶ Tax Data
- ▶ Land Bank Information
- ▶ Work Force Characteristics
- ▶ Economic Incentives
- ▶ County Auditor's Data

Natural Resources

- ▶ Flood Plains
- ▶ Rivers and Streams
- ▶ Wetlands
- ▶ Soils
- ▶ Watershed/Drainage Basin

Contamination

- ▶ Phase I Data (if available)
- ▶ Sampling Data (RI/FS), etc.
- ▶ Ohio EPA Groundwater Classifications
- ▶ Urban Setting Designation Boundaries
- ▶ Monitoring Data

City of Cleveland Initiatives

The City of Cleveland is pursuing its own set

of brownfield redevelopment initiatives. It has committed millions of dollars in State and City funds for the acquisition, cleanup and redevelopment of several large industrial projects, including Collinwood Yards and the Cleveland Business Park located near the airport. In July of 1998, the City was awarded a \$200,000 Brownfield Pilot Project Grant from U.S. EPA for use in two targeted west side industrial areas. In addition, the City has established a land development loan program that targets a portion of its Empowerment Zone funding to be used for large scale land assembly and remediation. Finally, the City has applied to the Ohio EPA for an Urban Setting Designation (USD) on large tracts of developable land within the city limits. This designation will make it easier to redevelop properties with contaminated groundwater. More information about the USD is contained in Section III of this Guidebook.

The Benefits of Brownfield Redevelopment

There is a reason why so much time, attention, and money are being devoted to brownfields. The economic and social benefits to recycling older, industrial properties are enormous:

- ◆ New business expansion and job creation opportunities;
- ◆ Increased property and wage tax base for local government;
- ◆ Safer, more attractive neighborhoods for residents;
- ◆ Restoration of market values in revitalized areas;
- ◆ Reduced pressures for urban sprawl on surrounding communities.

Brownfield redevelopment truly is a win-win opportunity for everyone. Businesses and property owners can clean up land in a sensible and cost-effective manner, allowing them to expand and create new jobs by taking advantage of the existing infrastructure (e.g.; roads, sewers, utilities, transportation) and local workforce availability. Many businesses find brownfield reuse a more economically attractive alternative than new greenfield development. From a public sector point of view, government revenues increase from new property and wage taxes that otherwise would not exist, and community residents have a chance to see their neighborhoods revitalized and restored through much needed new private investment.

III. OHIO'S VOLUNTARY ACTION PROGRAM (VAP)

Evolution of the VAP

In 1994 the Ohio General Assembly passed S.B. 221 authorizing the Ohio EPA to establish and administer the Voluntary Action Program (VAP). The VAP is a comprehensive set of new laws and regulations designed to encourage the cleanup and redevelopment of brownfield properties. It encourages private parties to voluntarily assess and remediate environmental problems without direct oversight from Ohio EPA. The VAP promotes such voluntary action by:

- ◆ Establishing a new set of cleanup standards based on the known risks of certain chemicals to human health and the environment and the intended use of the property in the future;
- ◆ Protecting land owners who voluntarily clean up a property under the strict new guidelines from future liability through a Covenant Not to Sue; and
- ◆ Offering a variety of financial incentives for brownfield projects including tax abatement, tax credits, low-interest loans and grants.

How the Process Works

The Voluntary Action Program is essentially a privatized operation. The State relies on certified environmental consultants to oversee site investigation and cleanup activities. These

Certified Professionals, or CPs as they are known, are responsible for ensuring all work is performed in accordance with VAP guidelines and that the property meets all applicable cleanup standards established by the State.

Anyone can volunteer to enter the program as long as the property qualifies under the VAP rules. (See next section for details). The volunteer is not required to be the legal owner of the property. The first step in the process is to hire one of the State's Certified Professionals (CP). The CP will first conduct a Phase I investigation of the site looking for evidence of potential contamination. If needed, the CP will then perform a Phase II investigation, testing soil and groundwater samples from the property to characterize the nature and extent of the contamination that does exist. The consultant then uses the information gathered to design a remedial action plan that will bring the property into compliance with applicable cleanup standards.

Once the remediation plan is finished, the CP will submit what is called a No Further Action (NFA) letter to the Ohio EPA. The NFA outlines the results of the Phase I and II investigations and tells the agency what will be done on site to correct any unacceptable environmental conditions. The remedial action plan may call for the removal of contaminated soil, the installation of protective caps on site to prevent human exposure to contaminants, or even the creation of new deed restrictions prohibiting certain uses of the property which could expose people to environmental risks. The plan may also detail an Operation and Maintenance

agreement with which the owner promises to abide over a period of years.

The actual cleanup of the site can begin either before or after the NFA is written. The property owner must receive a Covenant Not To Sue (CNS) from the Director of Ohio EPA before becoming eligible for any state financial incentives. The CNS is official recognition by the State of Ohio that the property meets applicable cleanup standards. The flow chart “How The VAP Process Works” shows all the steps in the VAP process, leading up to the final issuance of the Covenant.

Qualifying for the Program

The VAP is designed to apply to any contaminated site that does not pose an imminent or substantial threat to human health or the environment. The most seriously contaminated sites are therefore excluded from the program. Specifically, the VAP excludes all properties or portions thereof that:

- ◆ Are listed on the National Priorities List (e.g.: Superfund sites - approximately 1400 nationwide);
- ◆ Are subject to the Underground Injection Control Program (sites with underground injection wells);
- ◆ Contain petroleum underground storage tank systems administered by Ohio’s Bureau of Underground Storage Tank Regulation (BUSTR);
- ◆ Were operated as solid waste facilities (e.g.: landfills) or hazardous waste storage and disposal facilities;

- ◆ Are subject to oil and gas well closure requirements;
- ◆ Contain hazardous substances subject to the Toxic Substances Control Act (TSCA) cleanup requirements; and
- ◆ Are subject to State or Federal closure requirements or enforcement actions, including administrative or judicial orders, injunctions, or consent decrees.

While the list of exclusions is a long one, most brownfield sites in Cuyahoga County do qualify for the VAP. It is important to note that property can be partitioned to carve out the ineligible portions of a site while the rest of the qualifying property proceeds through the program. Ineligible portions of a property may once again qualify for the VAP with written proof to the Agency that the property is in full compliance with, or no longer subject to, the regulations which made it ineligible.

Important Elements of the VAP

Certified Professionals and Laboratories

The State has established a rigorous set of certification criteria for environmental consultants and analytic laboratories who wish to participate in the VAP. For example, a CP must have at least eight years of experience in the investigation and remediation of hazardous substances, three of which are in a supervisory or managerial role. Because these individuals are being entrusted to oversee the cleanup of potentially hazardous properties without direct oversight from Ohio EPA, a strict code of conduct applies to their activities. If a CP is found to be negligent in his or her duties or circumvents the rules of the program, he or she faces immediate decertification and possible criminal penalties.

A complete listing of Ohio's Certified Professionals may be obtained by calling the Ohio EPA Northeast District Central Office at (330) 425-9171 or in Columbus at (614) 644-3020. Typically, the volunteer is not involved in the selection of the Certified Laboratory, leaving the choice of testing services up to the CP.

Site Investigations

There are two types of environmental site assessments required under the VAP, and they occur sequentially.

The purpose of a Phase I investigation is to determine if there is any reason to believe that a release of hazardous substances or petroleum has or may have occurred on the property. This assessment includes a review of the historic and current uses of the property, the environmental history of the surrounding area, and the documented locations of any underground storage tank systems. A visual inspection of the site must also be conducted. If the Phase I reveals the property to be free of any contamination, the CP can submit a No Further Action (NFA) letter to the State requesting a Covenant be issued. The NFA must demonstrate that:

- ◆ all investigation information is complete and reliable;
- ◆ all of the activities required of the Phase I have been performed in accordance with the VAP; and
- ◆ all investigative activities have been performed within 180 days prior to the issuance of a NFA letter, or if not, that the conditions of the property have not changed significantly since the time of the investigation.

If, on the other hand, there is evidence of suspected contamination revealed in the Phase I, then a Phase II site assessment is required. The Phase II is a more detailed, analytic investigation of the soil and groundwater to determine the physical presence (or lack thereof) of suspected contaminants. The CP will take a number of soil and water samples from the site to be tested by a laboratory. The Phase II assessment determines the type, location and concentration of chemicals found on the property. Again, the CP must follow documented VAP procedures when performing the Phase II and can submit an NFA letter to the Ohio EPA if the contamination levels are found to be below applicable standards. If this is not the case, then a cleanup plan must be developed to bring the site into compliance.

Risk-Based Cleanup Standards

One of the biggest problems with cleaning up property in the past was the lack of numeric standards that people could use to know if their site was clean or not. The Ohio EPA could, if it determined the need, force land owners to eliminate all contamination on site regardless of the toxicity of the chemicals or how the property was to be used in the future. Other times, the EPA might allow certain levels of contamination to remain if it did not pose a significant risk to human health or the environment.

Fortunately, the VAP has reduced the uncertainty in this situation. Using the latest scientific data on public health, safety and environmental protection, the VAP has established generic cleanup standards for contaminated soil, sediment, surface water and groundwater for over 40 of the most common chemical contaminants found in Ohio. These standards, expressed in parts per million (ppm), define the maximum concentrations of chemicals to meet the cleanup standards while ensuring the adequate protection of human health and the environment. Moreover, as

may be seen in the look-up table on the next page, the standards vary according to future use of the property. Residential property standards are higher than those for commercial or industrial uses.

The new standards provide a definitive answer to the once-unanswerable question, "How clean is clean"? If a volunteer discovers he has 50 ppm of arsenic on a property intended for commercial use, that property will be considered "clean" under the VAP. If arsenic levels exceed the 110 ppm standard, the volunteer will have to take whatever actions necessary to reduce arsenic levels below that safety level.

If contamination levels exceed one or more of these generic numerical standards, the volunteer can apply for a variance from the Ohio EPA. To be approved, the CP must conduct a site-specific risk assessment to determine a more appropriate set of standards to apply to the site.

Site-Specific Risk Assessment

Risk assessment is a scientific analysis of the potential dangers to human health and the environment from being exposed to hazardous substances. The methodology takes into account the physical and chemical properties of the contaminants, the various ways people can be exposed to them (e.g., ingestion, inhalation, absorption through the skin), and the actions taken to prevent such exposure.

In cases where a property is contaminated with a chemical compound where no generic standard has been adopted, or the CP believes the applicable standard is not

appropriate to the site conditions, a site-specific risk assessment can be performed to determine what the applicable cleanup standard should be. The VAP provides procedural guidelines for the CP's performance of this analysis.

For example, if an industrial property is found to contain over 68 ppm of benzene in the soil, it clearly exceeds the VAP generic standard. However, if the CP can show through scientific modeling that there is little or no risk that this benzene can cause harm to humans or the environment (i.e.; there is no exposure pathway) the property can be deemed to meet a site-specific cleanup standard.

The good news is that contamination levels on many brownfield sites are below generic standards. The perceived degree of contamination is often worse than the actual levels. And even if chemicals are found in relatively high concentrations, site-specific risk assessment can help determine the true risks of leaving some or all of the contamination on site.

No Further Action (NFA) Letter

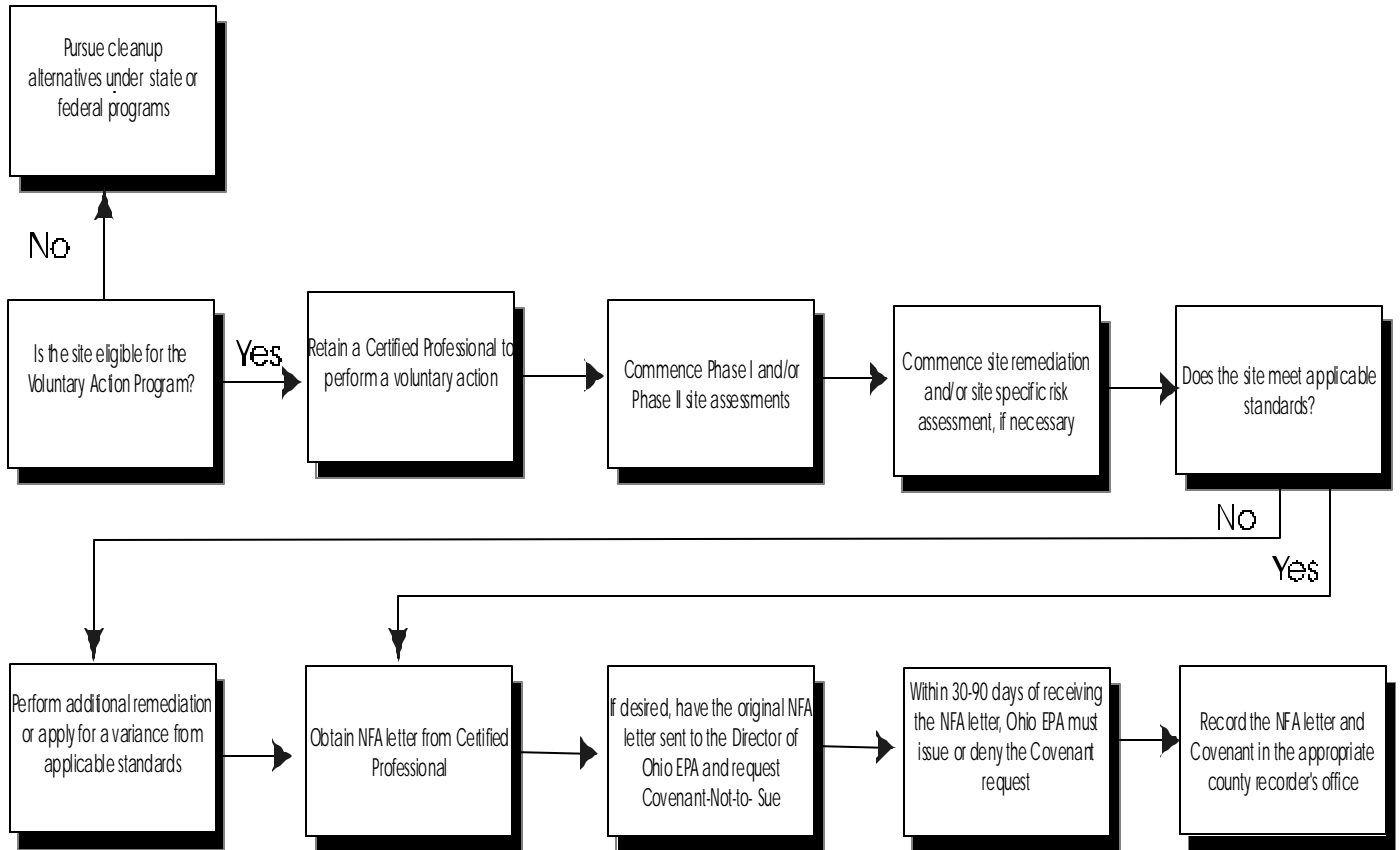
A No Further Action Letter signifies what its name implies - that no further investigative and remedial actions are needed on a site. The letter is written by the CP to the Director of Ohio EPA once it can be shown that the property has met all applicable standards. The NFA is essentially a clean bill of health for a property. With letter in hand, a property owner can usually obtain financing for a brownfield project since lenders can be reasonably assured the property is clean. Once the NFA is received by the State, the Director of Ohio EPA is required to issue a Covenant Not to Sue.

Figure 2

GENERIC SOIL CLEANUP STANDARDS (All measurements in parts per million)			
Chemical of Concern	Land Use Category		
	Residential	Commercial	Industrial
VOLATILE ORGANIC CHEMICALS			
Acetone	4,500.00	59,000.00	55,000.00
Benzene	8.20	68.00	68.00
Carbon Tetrachloride	1.80	15.00	15.00
1,1 Dichloroethane	620.00	2,300.00	2,300.00
1,2 Dichloroethane	9.60	2,500.00	2,500.00
1,1 Dichlorethene	1.50	6.40	6.30
<i>trans</i> -1,2 Dichloroethene	910.00	2,500.00	2,500.00
<i>cis</i> -1,2 Dichloroethene	450.00	1,200.00	1,200.00
Ethylbenzene	230.00	230.00	230.00
<i>n</i> -Hexane	110.00	200.00	200.00
Methylene Chloride (Dichloromethane)	220.00	1,000.00	990.00
Methyl Ethyl Ketone	6,600.00	27,000.00	27,000.00
Methyl Iso-Butyl Ketone	440.00	3,800.00	3,800.00
Styrene	1,700.00	1,700.00	1,700.00
Tetrachloroethene (PCE)	94.00	370.00	370.00
Toluene	520.00	520.00	520.00
1,1,1-Trichloroethane	1,200.00	1,400.00	1,400.00
Trichloroethene (TCE)	77.00	330.00	330.00
Vinyl Chloride	0.58	2.60	2.50
Toptal Xylenes	1,500.00	1,500.00	1,500.00
SEMI-VOLATILE ORGANIC COMPOUNDS			
Acensphthene	1,900.00	19,000.00	18,000.00
Anthracene	9,500.00	94,000.00	89,000.00
Benzo(a)anthracene	5.50	32.00	31.00
Benzo(b)fluoranthne	5.50	32.00	31.00
Benzo(k)fluoranthene	55.00	320.00	310.00
Benzo(a)pvrene	0.55	3.20	3.10
Bis (2-ethylhexyl) phthalate	150.00	870.00	860.00
Chrysene	550.00	3,200.00	3,100.00
Dibenzo(a,h) anthracene	0.55	32.00	31.00
Fluoranthene	1,300.00	13,000.00	12,000.00
Fluorene	1,300.00	13,000.00	12,000.00
Indeno (1,2,3-cd)pyrene	5.50	32.00	31.00
Naphthalene	1,800.00	24,000.00	22,000.00
Phenol	26,000.00	320,000.00	300,000.00
Pyrene	950.00	9,400.00	8,900.00
INORGANIC COMPOUNDS			
Arsenic	6.90	110.00	86.00
Barium	5,000.00	160,000.00	140,000.00
Cadmium	32.00	310.00	300.00
Chromium(III)	8,800.00	65,000.00	63,000.00
Chromium(VI)	230.00	2,900.00	2,800.00
Mercury	16.00	250.00	230.00
Nickel (soluble salts)	450.00	3,800.00	3,700.00
Zinc	29,000.00	420,000.00	370,000.00
OTHER SPECIAL CATEGORIES			
Lead	400.00	1,200.00	2,800.00
Poly chlorinated byphenals (PCB's)	1.00	1.00	25.00

Figure 1

HOW THE VAP PROCESS WORKS



Source: "Brownfields: A Comprehensive Guide to Redeveloping Contaminated Property"
Todd S. Davis and Kevin D. Margolis, American Bar Association, 1997

Covenant Not to Sue (CNS)

A Covenant Not to Sue is issued for a property

based on the satisfactory completion of the requirements outlined in the NFA letter. The

Covenant, which is issued on a specific parcel or parcels and runs with the land regardless of changes in ownership, provides the owner with immunity from future State environmental enforcement actions. The Covenant protects all current and future owners and operators of a site from State civil liability for additional cleanup activity associated with past or undiscovered contamination. This protection exists even if the State decides to change the current cleanup standards.

The Covenant does not protect land owners, however, from Federal enforcement actions or third-party lawsuits. The U.S. EPA still maintains the right in Ohio to force additional cleanup requirements on a VAP property. This is extremely unlikely, however, since the Agency is more concerned with the largest, most highly contaminated sites across the nation. Third parties such as adjacent land-owners can also sue if they believe contamination emanating from a volunteer's site has adversely impacted their property. There is insurance available now that offers protection against such third-party lawsuits. (See section VI for more information).

The CNS will remain in place permanently unless revoked for cause. Grounds for such revocation could include the failure to maintain agreed-upon engineering or institutional controls, a change in the use of the property (e.g.: from commercial to residential), or the failure of the property to pass an agency audit. The Covenant is recorded in the County Recorder's office along with any legal restrictions on the use of the property that may be part of the NFA.

Urban Setting Designation

Properties located in metropolitan areas served by public drinking water systems can apply for a

special Urban Setting Designation from the Ohio EPA. The USD establishes a different set of cleanup standards for certain categories of contaminated groundwater when it can be shown that no one nearby is drinking the underground water from wells.

In order to qualify for the USD, a CP must show that a property meets five criteria:

1. The property must lie within the boundaries of an incorporated municipality;
2. Ninety percent of that city's parcels must be hooked up to a public water supply;
3. The property cannot be located within a well-head protection area;
4. No drinking water wells can be located within a half mile of the site;
and
5. The property cannot be located over a sole source aquifer (e.g.: high-volume source of underground water).

It is expected that many properties located in Cuyahoga County will qualify for the Urban Setting Designation. Already, the City of Cleveland and Cuyahoga County are applying for a "blanket" USD on several large target redevelopment areas encompassing over 11,000 acres of publicly and privately-owned land. Their intention is to secure the USD on high potential brownfield sites in advance so that private developers can make use of the advantageous groundwater cleanup requirements when redeveloping their land.

Participation Fees

The VAP is a self-supporting program. The Ohio EPA charges fees to cover the costs of administering the VAP. Certified Professionals and Laboratories have to pay for their initial certification and an annual renewal for the VAP. Volunteers must pay to enter the program according to the following fee schedule:

CNS based on Phase I NFA	\$ 950.00
CNS involving Phase I and II investigations	\$ 4,950.00
Surcharge for approval of Operation and Maintenance agreement	\$ 2,950.00
Variance from applicable standards	\$18,500.00
Agency Technical Assistance	\$20-40 Hour

The volunteer also pays for time and materials charged by the Certified Professional and any laboratory fees that are incurred.

Ohio EPA Auditing Requirements

Twenty-five percent of all properties in the VAP are required to be audited each year. Audits are performed to determine whether properties which have received Covenants have followed the NFA plan and met the work standards for Certified Professionals and Laboratories.

The Ohio EPA has two level of audits. Level One reviews documents related to the NFA letter. Level Two requires the Agency to physically inspect the subject property. Level Two audits begin if the Ohio EPA believes that documentation is not adequate or if the NFA letter is based on inaccurate information. All investigations related to the audit must be completed within a year after the cleanup is

performed. Audit findings are issued in writing by March 1 of the following calendar year.

IV. SOURCES OF FINANCING FOR BROWNFIELD PROJECTS

There are numerous sources of funding available for brownfield projects from both the public and private sectors. Funds are available in a variety of different forms, from outright grants to low-interest loans to special tax incentives. Some of the financing is restricted to specific redevelopment activities such as planning, environmental assessment, land acquisition, or project construction. This section of the Guidebook is designed to inform readers about the various types of funding, their terms and conditions and whom to contact for more information.

Summary of Funding Sources

The tables printed on pages 16 and 17 contain over two dozen public and private sources of brownfield financial assistance. Table 1 lists the various programs by the type of financing they provide: grants, loans, equity or other forms of assistance. Table 2 lists the same sources according to what the funds can be used for: predevelopment planning, site assessments, remediation, etc. Using these two tables, readers should be able to scan quickly down the list of sources to find those most applicable to their projects. The rest of this section is dedicated to providing more detailed information on each of the different financing programs.

**Table 1
Types of Financing Available**

Source	Grants		Debt		Equity	Other		
	Recoverable	Unrecoverable	Market Rate	Dis-counted	Market Rate	Tax Incentive	Cost Recovery	Loan Guarantee
STATE OF OHIO								
Brownfield Grant Assistance Program		X					X	
Brownfield Tax Credit Program						X		
Water Pollution Control Loan Fund				X				
Ohio Water Development Authority			X					X
VAP Property Tax Abatement						X		
166 Loan Program				X				
Ohio Enterprise Bond Fund			X					
Community Development Finance Fund		X						
UST Financial Assurance Fund							X	
CUYAHOGA COUNTY								
County Planning Commission Pilot Project		X						
County Brownfields Redevelopment Fund		X ①	X	X				
CITY OF CLEVELAND								
Neighborhood Development Investment Fund		X		X				
Neighborhood Development Program		X						
City Council Ward Funds		X		X				
Empowerment Zone Land Development Loans				X				
FEDERAL GOVERNMENT								
U.S. Environmental Protection Agency		X						
Economic Development Administration		X						
BANKS								
Commercial/Development Banks			X		X			
DEVELOPERS								
Private Brownfield Developers			X		X			
NON-PROFIT ORGANIZATIONS								
Cleveland Development Partnership Program			X	X	X			X
Neighborhood Progress, Inc.	X			X				
Local Initiatives Support Corporation	X			X				
OTHER								

Table 1 Types of Financing Available							
Insurance Investigators							X

① *Cuyahoga County Brownfields Redevelopment Fund provides partial grants to municipalities.*

Table 2 Uses of Available Funding						
Source of Funds	Predevelopment Planning	Environmental Investigation	Land Acquisition	Remediation/ Cleanup	Project Construction	Project Refinancing
STATE OF OHIO						
Brownfield Grant Assistance Program			X	X	X	
Brownfield Tax Credit Program		X		X		
Water Pollution Control Loan Fund		X		X		
Ohio Water Development Authority	X	X		X	X	
VAP Property Tax Abatement	X	X		X	X	
166 Loan Program			X	?	X	X
Ohio Enterprise Bond Fund			X	X	X	
Community Development Finance Fund	X	X	X(Options)			
UST Financial Assurance Fund				X		
CUYAHOGA COUNTY						
County Planning Commission Pilot Project	X	X		X		
County Brownfields Redevelopment Fund		X	X	X	X①	
CITY OF CLEVELAND						
Neighborhood Development Investment Fund		X	X	X	X	
Neighborhood Development Program	X	X		X		
City Council Ward Funds	X	X	X	X	X	
Empowerment Zone Land Development Loans		X	X	X		
FEDERAL GOVERNMENT						
U. S. Environmental Protection Agency	X	X				
Economic Development Administration				X	X	
BANKS						
Commercial/Development Banks			X	X	X	X
DEVELOPERS						
Private Brownfield Developers	X	X	X	X	X	X
NON-PROFIT ORGANIZATIONS						
Cleveland Development Partnership Program			X	X	X	X

Table 2 Uses of Available Funding						
Neighborhood Progress, Inc.	X	X	X	X	X	
Local Initiatives Support Corporation	X	X	X	X	X	
OTHER						
Insurance Investigators		X		X		

① Limited funds for project additions

State of Ohio

Brownfield Grant Assistance Program (H.B. 442)

H.B. 442 authorized the Ohio Department of Development to offer grants up to \$500,000 to non-profit organizations and municipalities working alone or with private sector partners to redevelop brownfield property. The money can be used for land acquisition, environmental remediation, infrastructure improvements and the renovation or demolition of existing buildings. To qualify, the project site must be located in Cleveland or East Cleveland (defined in the legislation to be distressed communities) and must be used in the future for manufacturing, distribution, high technology or other related industrial purposes. The grant requires at least a 25% matching amount from local sources, and the applicant must proceed through the VAP and receive a Covenant Not to Sue. The program requires the volunteer to complete cleanup before the funds are disbursed, so, in essence, it is a cost-reimbursement program. Cleveland has been awarded \$4.2 million. From this source; however, funding for this program was depleted in April 1998. More funds may become available in the future. *For more information contact Lori Sweeney at the Department of Development, (614) 466-4551.*

Brownfield Tax Credit Program (H.B. 441)

A volunteer can offset the costs of environmental investigation and remediation by applying to the Ohio Department of Development for a tax credit against Ohio corporate franchise or income taxes. In Cleveland the level of the tax credit is 15% of eligible costs up to \$750,000 while properties in the rest of Cuyahoga County are eligible for a tax credit of 10% or \$500,000, whichever is less. To qualify, the taxpayer must participate in the VAP and receive a Covenant Not to Sue from the State. The credit is applied to taxes owed over a period of five years. The program is authorized to issue up to \$30 million of tax credits through June of 1999. *For more information, contact Bob Stempfer at the Department of Development, (614) 466-4551.*

Water Pollution Control Loan Fund (WPCLF)

Anyone taking responsibility for the cleanup of an eligible property under the VAP may apply to the Ohio EPA for a low-interest WPCLF loan. Any site assessment or remediation activity that will result in water quality benefits to surface and/or groundwater is eligible for financing. Loans are available up to \$3 million per project. For 20 year loans, the interest rate is indexed at 175 basis points below the 20-year G.O. bond market rate and is adjusted every April 1 and October 1. A 3.2% fixed rate is available for short-term loans up to 5 years. In reviewing the loan applications, Ohio EPA will consider the extent of the proposed water quality improvements as well as the source of

repayment, including the nature and amount of collateral offered to secure the loan. *For more information contact David Reiff at Ohio EPA, (614) 644-3646.*

Ohio Water Development Authority(OWDA)

The OWDA offers planning and construction loans at market rates of interest to any public or private entity undertaking a brownfield remediation project. In addition, the Authority offers loan guarantees and other credit enhancements that allow volunteers to more easily qualify for conventional bank financing. In addition to long term loans for cleanup and construction activities, the OWDA makes short-term loans of up to \$500,000 for planning activities and Phase I and II site investigations. Interest rates are pegged to market levels, and interest payments are due at maturity in a balloon payment along with the principal amount. *For more information contact Steve Grossman at OWDA, (614) 644-5822.*

VAP Property Tax Abatement

Under the VAP, volunteers who receive a Covenant Not to Sue are eligible for an automatic 10-year property tax abatement on the increased value of their real property. Upon receiving notice from the Ohio EPA that a Covenant has been issued, the Department of Taxation grants a tax exemption to the owner of the remediated site. This automatic abatement exempts the owner from real property taxes on the increased value of the real property and improvements, buildings, fixtures and structures that exist at the time the order is granted. In addition, volunteers have the right to petition their local municipality for additional tax abatement if they so choose. *For more information contact Jim Bonk at the Ohio EPA, (614) 644-2798.*

166 Loan Program

The Ohio Department of Development administers the 166 Direct Loan Program that provides debt financing at 5% interest for terms of 5-15 years. The minimum loan amount \$350,000 up to a maximum of \$1 million. A minimum 10% private equity and 25% conventional bank financing are required. The redevelopment project must create one job for every \$15,000 of 166 funds received. The money can be used to finance land acquisition, new construction and the renovation or expansion of existing facilities. *For more information contact Bill Field at the Department of Development, (614) 644-6107.*

Ohio Enterprise Bond Fund

The Enterprise Bond Fund provides market rate debt financing to credit worthy development projects that help create jobs in Ohio. Private developers are eligible for up to \$15 million of loans for commercial and industrial projects. Terms vary but can extend up to 25 years at interest rates fixed at the S&P A-minus bond rating. The financing can be used for land and building acquisition, new construction and environmental remediation. *For more information contact Fran Migliorino at the Fund, (216) 787-3240.*

Community Development Finance Fund

CDFE provides predevelopment grants to non-profit organizations undertaking community and economic development projects. The funds can be used for almost all predevelopment activities including project design, legal review, environmental assessments and options to acquire land. CDFE also provides "linked deposit" funding to write down interest expenses of related project debt financing. The maximum grant amount is \$12,000, and a 20% match is required from local sources. *For more information contact James Klein at CDFE, (800) 959-2333.*

UST Financial Assurance Fund

The Petroleum Underground Storage Tank Release Compensation Board (PUSTR) maintains a fund to reimburse tank owners and operators for the costs of cleaning up accidental releases of petroleum products from underground tanks. For most brownfield sites withholder, abandoned (i.e.: "orphan") tanks, the Financial Assurance Fund will not be of much assistance. Only tanks that are currently being used and whose owners are paying insurance fees into the fund are eligible. For these sites, the fund will cover the costs of cleanup beyond a specified deductible amount -- in most cases \$11,000. While the Fund has limited applicability for the typical brownfield site, it may still be worthwhile investigating, especially if a site's tanks were recently in use. *For more information contact Dave Reeder at PUSTR, (614) 752-8963.*

Cuyahoga County

County Planning Commission Pilot Project

The County Planning Commission provides technical and financial assistance to a number of brownfield "demonstration" projects. Funding is available typically in the form of a grant and can be used for site investigation and remedial plan design. The County coordinates demonstration projects where the lessons learned at a particular site can be applied more broadly to other properties throughout Cuyahoga County. *For more information contact Virginia Aveni at the Planning Commission, (216) 443-3700.*

Cuyahoga County Brownfields Redevelopment Fund

The Brownfields Fund (BRF) is specifically designed to help "first-ring" suburban communities overcome environmental barriers

to reuse and full utilization of under-used or abandoned commercial/industrial properties.

The BRF totals about \$26 million through a partnership among the Board of County Commissioners, private lending institutions, foundations, the Ohio Water Development Authority and the Ohio Environmental Protection Agency. It is financed by \$15 million bond issuance, backed by the County's non-tax revenues and augmented with grants from the foundations as well as loans from banks and the Ohio Water Development Authority. All BRF loans are issued through the Cuyahoga County Department of Development.

Features of the Program

Eligible applicants are municipalities of Cuyahoga County, City of Cleveland, Cuyahoga County, non-profit community development corporations and private developers/businesses. The applicant must have a completed Phase I assessment and may require Phase II as well.

Only sites with prior commercial or industrial usage are eligible for the program. Locations with housing or no prior development do not qualify.

Loans may not exceed \$1,000,000 per project. It is anticipated that County financing will be supplemented with other funding sources.

Maximum loan terms are up to 15 years. Early loan pay downs are not penalized and are highly encouraged. Municipalities receive a portion of the loan as a subsidy through the payback arrangement. Private development loans will not involve a subsidy. They will require the passage of a municipal resolution in support of the project before BRF financing is provided.

Eligible activities include:

- ▶ Property appraisals
 - ▶ Land acquisition
 - ▶ Phase I and Phase II Assessment
 - ▶ Remediation
- ▶ Site clearance, demolition
 - ▶ VAP fees

Note: Unlike most of the state financing mechanisms, the BRF does not require a Covenant Not to Sue.

Funding Priority

Funding consideration is determined on succeeding six-month periods with the initial six-month period commencing October 1, 1998. First consideration during each six-month period will be accepted from suburbs that are contiguous to the city of Cleveland on a first come/first serve basis. Second consideration during each six-month period will be given to the remaining communities on a first come/first serve basis.

Loan Approval Process

Applicants are approved by the BRF Loan Advisory Committee, composed of two representatives of the County and representatives of all of the private member partners from the lending institutions.

Pre-Application/Interview Process

A pre-application interview is required which will facilitate the formal financing process and maximize the use of staff resources. *Contact at the County Department of Development is James P. Herron, Development Specialist, at (216) 443-7260.*

City of Cleveland

Neighborhood Development Investment Fund

NDIF is a \$40 million revolving loan fund administered by the City of Cleveland to help finance strategic residential, commercial and industrial developments throughout the City. The fund makes loans at a 4% fixed rate for up to 20 years. The city will invest up to 25% of the total project costs with a maximum limit of \$2 million. Private and non-profit developers are eligible for funding so long as the project benefits the residents of Cleveland and creates at least one new job for every \$10,000 of NDIF funding received. 10% private equity in the project is usually required. The Department of Economic Development can also authorize grants from the NDIF pool of funds to assist non-profit organizations and developers. In either case, the money can be used for site assessment, land acquisition, demolition, new construction, and almost any other development activity. *For more information contact Chris Warren at the City's Department of Economic Development, (216) 664-3611.*

Neighborhood Development Program

The City's NDP program provides operating support and project grants to non-profit community development organizations. Funds are distributed as available and can be used for project planning activities, site investigation and environmental

cleanup. Grant amounts are typically small (i.e.: under \$20,000). *For more information contact Nora McNamara at the City's Department of Community Development, (216) 644-4032.*

City Council Ward Funds

their wards. These funds are made available as grants or loans in amounts up to \$200,000. The individual Council members have sole discretion for how the funds are to be used and who is eligible to receive them. To qualify, however, a project must meet one of three CDBG federally-mandated objectives: 1) directly benefits low and moderate income persons, 2) eliminates and prevents blight and property deterioration, or 3) serves an urgent community need. *For more information, contact the Cleveland City Council at (216) 664-2848 to get the name of your local Council representative.*

Empowerment Zone Land Development Loans

The Federal Department of Housing and Urban Development (HUD) awarded Cleveland over \$110 million in Empowerment Zone funding in December 1994. The EZ program now makes interest free loans up to \$2 million to help develop land for new residential, retail and commercial projects. Any organization can qualify for funding so long as the project lies within the Empowerment Zone and at least 25% of the total project costs are funded through non-City sources. Projects also have to be of significant scale to qualify (e.g.: 10 acres or more for commercial and industrial developments, 75,000 square feet of retail space). There are no interest payments required, and at least 60% of the principal is due at the end of five years. *For more*

Cleveland City Council members each receive an allocation of Federal Community Development Block Grant (CDBG) funding to be used to advance development projects in

information contact Roland Osborn at the EZ program, (216) 664-2804.

Federal Government

U.S. Environmental Protection Agency

The U.S. EPA is still taking pilot grant applications from municipal and other public authorities interested in launching brownfield redevelopment projects in their communities. These funds, up to \$200,000, can be used for planning, administrative and site investigation purposes only. They cannot be used to pay for property remediation. In addition to the pilot program, the Agency can direct interested developers to other sources of Federal funding. As described in Section II, over a dozen Federal departments have pledged millions of dollars for brownfield cleanup and reuse. Representatives from the U.S. EPA are in the best position to put volunteers in touch with those agencies that could be of most assistance. *For more information contact James Van der Kloot at U.S. EPA - Region 5, (312) 353-3121.*

Economic Development Administration

The EDA, a division of the U.S. Department of Commerce, makes grants available to public and private non-profit organizations for completing economic development projects in distressed communities. EDA awards these grants through their Public Works Program in amounts averaging \$1 million. The money can be used to help finance new construction, roads and other forms of

infrastructure improvement. *For more information contact Robert Hickey at EDA, (614) 469-7314.*

Commercial / Development Banks

Conventional bank loans are usually a part of every brownfield financing package. To qualify

acquisition and construction loans are the most common form of bank lending for brownfield redevelopment. Terms vary, but developers should expect to pay up to several percentage points above prime, especially for a risky real estate venture.

Banks may also ask for a personal or corporate guarantee to repay the loan if the project does not succeed, or they may require the developer to pledge other tangible assets as collateral for the loan. Some may even insist that an environmental insurance policy be taken out in order to protect their investment against unforeseen cleanup cost overruns. In some instances, banks may be willing to make an equity investment in a project. Loans are the most common form of financing available.

Private Brownfield Developers

There are a number of local and national developers who specialize in brownfield properties. These developers are often willing to invest their own private equity in promising deals and can contribute valuable planning and design expertise, construction capabilities, and existing tenant relationships to the project. Like most developers, they are looking for as large an ownership interest in a project for as little up-front equity as possible. Private developers are typically willing to invest up to 10% of the project's costs and are looking for 30-50% returns on their money. Their relationships with

for a loan the applicant must have a thorough Phase I and possibly Phase II investigation that documents the nature and extent of contamination present on the property. Banks will normally insist on having the first mortgage position on a project or a property and will usually only lend up to 75% of the total project value. Real estate

other lenders can be extremely helpful in structuring the remaining financing that is required.

Local Non-Profit Organizations

Cleveland Development Partnership Program

Administered by Cleveland Tomorrow, the CDP Program makes low-interest loans to neighborhood community and economic development projects in Cleveland. Their focus is primarily on housing and retail development with a secondary interest in industrial projects. The funds are available to private and non-profit developers and can be used for property acquisition, remediation, renovation and new construction. Terms up to 20 years are negotiable with the minimum interest rate tied to the five-year treasury note. On occasion, CDP will make equity investments in highly catalytic projects and may be willing to provide loan guarantees to help a developer secure other sources of financing. *For more information, contact Steve Strnisha at Cleveland Tomorrow, (216) 574-6276.*

Neighborhood Progress, Inc.

NPI provides technical and financial assistance to brownfield projects with the potential to help revitalize Cleveland's inner-city neighborhoods. Through its Village Capital Corporation subsidiary, NPI administers a \$10 million revolving loan fund for residential, retail, commercial and industrial projects. VCC typically provides front-end, bridge or gap financing that enables projects to

move forward. To qualify, a project must be located in the City of Cleveland and have a non-profit community-based organization involved as co-developer. Loans up to \$500,000 are available at flexible terms around 6% for 15 years or less. In addition, NPI provides site assessment grants to non-profit developers through their Brownfield Redevelopment Initiative. *For more information call Debra Jamk or Paul Christensen at NPI, (216) 268-6240.*

Local Initiatives Support Corporation

LISC provides recoverable grants up to \$50,000 and low-interest loans to any real estate project that supports the mission of a local community development corporation. The funds can be used for almost any development activity including project planning, site investigation and land acquisition. Only non-profit organizations can apply. Here in Cleveland, LISC staff work closely with Neighborhood Progress, Inc. to coordinate their mutual investment activities. Interest rates for loans are 6%, and grant money must be repaid only if the project is successfully completed. *For more information contact India Lee at LISC, (216) 268-6244.*

Insurance Claims Investigators

An often overlooked source of brownfield financing is general liability insurance. In the past, before pollution exclusion clauses were invented, these policies often insured property owners against losses suffered as a result of environmental contamination. If an owner can prove such a policy existed at the time the contamination occurred, he can file a claim against the insurer for the costs of cleaning up the site. Such a claim is possible

even if the policy is no longer in effect and the contamination occurred decades ago. There are at least two firms in Northeast Ohio which specialize in researching old policies and filing claims on behalf of their brownfield clients.

V. GETTING THE COMMUNITY INVOLVED

Community participation is often a prerequisite for successfully redeveloping a brownfield site. Why? Because people want to be involved with what is happening in their local community and because the social and economic barriers to brownfield reuse are too complex for any one organization, public or private, to solve on their own.

The list of community participants is a broad one. The average brownfield project will require the involvement of city planning and development officials, local city council representatives, community residents, non-profit development organizations, and local land owners and businesses involved in the project.

For example, a brownfield project now underway in Cleveland has a large, multi-organizational development team working on the project. Two community development corporations are working with a private developer to design site plans and raise the funding needed to complete the project. They hold periodic community input meetings. Local residents are asked for their suggestions and reactions to proposed development plans. The City is actively involved in helping to acquire the vacant land, changing the current zoning, and providing predevelopment funding to get the project started. The local City Council member is contributing funding and making sure that the project ties into existing development strategies in the ward. A non-profit environmental group is helping to design compatible-use park space within

the development and providing low-cost

financing for the acquisition of private parcels. And a non-profit development agency is providing technical assistance and oversight of the environmental assessment and cleanup activities on site. It is a coordinated effort that requires the assistance of many parties. Leaving any one of the groups out would create a missing link that could ultimately limit the project's success.

As this example demonstrates, community involvement in brownfields has many advantages. It assembles the skills and multiple perspectives that are needed. It brings additional resources, both technical and financial, to the table. It builds local support for the project and limits opposition that may be based on unfounded fears or misconceptions. And most importantly, it leads to the most feasible and highest value development for the community.

Cleveland's Community Development Corporations

There are over 40 non-profit community development corporations (CDCs) in Cleveland. The mission of these organizations is to help revitalize their neighborhoods through physical redevelopment projects, community organizing, business retention and expansion services and other related programs. In the past three years, these organizations have been responsible for building or renovating hundreds of new residential units and tens of thousands of square feet of new commercial, retail, and industrial space. They bring the resources, expertise, and community input needed to make redevelopment projects successful.

These same elements apply to brownfields. Whether one is a private developer, a local land owner, or simply a concerned citizen, it makes sense to contact the local CDC to see how they

may be able to help. One can find these groups and the people who represent them through an organization called the Cleveland Neighborhood Development Corporation (CNDC). CNDC is an umbrella group or trade association representing nearly all the CDCs operating in Cleveland. *For more information, contact Mikelann Ward Rensel at CNDC, (216) 268-3130.*

What You Can Do to Help

There are a number of ways for the average citizen to get involved in brownfield cleanup projects. In addition to contacting your local CDC, you can attend public meetings held by the Ohio EPA. These meetings take place whenever a property owner requests a variance from the generic cleanup standards, a site-

specific risk assessment has been performed, or the volunteer applies for an Urban Setting Designation. Anyone can attend the public meetings to find out more about the nature and extent of existing contamination or ask questions about the status of future development plans.

If you have other concerns about a specific property in your neighborhood, you can also contact your local city government, the County health department, or the Ohio EPA. Sometimes these governmental units have information available to the public about the history of a site and what, if any, contaminants have been discovered there. For more information about who to contact, see the list of references in Section VII.

VI. SOME PRACTICAL ADVICE

Selecting and Working with a Certified Professional

As previously mentioned, the Voluntary Action Program requires a volunteer to use a State-certified environmental consultant for all investigation and cleanup activities.

Finding a consultant whom you trust and feel comfortable with is probably the most important factor in selecting an environmental consultant. Stick with a firm which has done work for you in the past if you have been pleased with their performance. If you have not worked with any of the CPs before, ask other people in your field whom they would recommend.

If you are working on a relatively large and potentially expensive cleanup project, it may be best to solicit bids from a number of CPs. Although environmental engineering is a well-defined science, there are usually substantial differences among firms in their cost and approach to projects. Today's marketplace for environmental consulting is highly competitive, so getting four or five bids for a large project should not be difficult. When evaluating the bids, look at the consultant's experience with similar types of projects, their familiarity with the VAP, and their willingness to work with you as a partner on the project. Compare the scope of proposed work and the estimated costs across bids, and remember that environmental consulting is not a commodity. The lowest cost proposal may not always be the best.

Choosing the right consultant for a project is very important. The consultant's unique approach to addressing the contamination on your site may, in large part, determine the final costs of cleaning up the property. Make sure

you ask questions and know exactly what is going to be done and why. Understand what circumstances could cause the cost of the project to exceed the estimate being provided. In the end, one must feel comfortable that the CP selected is going to be working in your best interest to get the property cleaned up as quickly, inexpensively and safely as possible.

Controlling the Costs of Site Investigation and Remediation

There are typically three phases of work required to clean up a brownfield site. Some properties may only need to go through one or two of the phases, but it is important to understand what each of the phases is intended to accomplish.

- ◆ Phase I is a thorough review of the historical use of a site and nearby properties. In a Phase I investigation, the CP is required to visually inspect the property, document any known or suspected releases of petroleum or hazardous materials in the area, identify any underground storage tanks that may exist, analyze historical property maps and other records of the site, and interview former owners and operators of the property if they can be found. The purpose of the Phase I investigation is to determine if the site is clean or requires further investigation. The typical cost of a VAP Phase I is \$2,500 - \$5,000 depending on the size of the property.
- ◆ Phase II is a subsurface investigation of the soil and groundwater to determine the presence of any suspected contaminants. Consultants or their subcontractors will dig test pits, drill borings, and take soil and

groundwater samples that are analyzed by a Certified Laboratory equipped to detect minuscule traces of hazardous materials. The cost of a Phase II investigation can vary greatly depending on the size of the property and the degree of suspected contamination. Costs can often exceed \$10,000 - \$20,000.

- ◆ Phase III is the final step in the process when the CP designs a Remedial Action Plan to address the contamination discovered on site. During this last phase of work, the CP works closely with the client to create a remediation plan to clean the soil and/or groundwater to applicable standards defined by the State. Some brownfields may already meet these standards without having to perform any additional cleanup activities. Others will require various types of remedial solutions to bring them into compliance. The costs of the actual cleanup will depend on what is in the ground and the specific remedies chosen.

Controlling costs throughout this process can be extremely difficult. The reason for this is that there is no way to predict what might be found in the soil before sampling the actual conditions. The key to cost control is to define the appropriate scope of work at each stage of the process. If you are just starting out, you will clearly need a Phase I completed and most likely a partial Phase II. The goal of your Phase II investigation should be to find out as much about the suspected contamination on the site at the least possible cost. The CP should take only enough samples initially to be able to determine the order of magnitude of the problems on site. If the initial results look promising, you can proceed with a full-blown

Phase II investigation that complies with VAP requirements. If significant and costly cleanup activities appear likely, it may be time to reconsider the economic feasibility of proceeding with the project.

Your consultant and Ohio EPA's Technical Assistance Program can help you identify other ways of saving money during the cleanup process. Oftentimes, institutional or engineering controls (e.g.: deed restrictions, clay caps, or other protective barriers) are a cost-effective alternative to remediation. The choice of remediation technology can also affect costs. For example, bioremediation (the acceleration of natural degradation processes) can be significantly less expensive than soil removal and disposal.

The other thing to consider is conducting the investigation and cleanup outside the Voluntary Action Program. Volunteers are not required to pursue their cleanup activities through the VAP which can add additional costs to the process. So long as your financial institution is willing to accept a non-VAP cleanup and you or the prospective purchaser are willing to forego the Covenant Not to Sue, you could be better off financially not going through the VAP.

There are several things you can do contractually to limit cost overruns and protect yourself from unnecessary risks. In particular, the consulting contract should:

- ◆ Stipulate that the consultant will ask your permission before performing any work outside the original scope of services;
- ◆ Ensure that all work performed by the CP will be in full compliance with VAP rules and procedures;

- ◆ Quote prices for work to be performed on a lump sum or not-to-exceed basis (at least for those elements of the work that can be reasonably estimated);
- ◆ Indicate that the CP is covered by at least \$1 million of general liability insurance; and
- ◆ Establish a limitation of liability for the consultant that is fair to both parties but adequate to protect your investment in the project.

Packaging Public and Private Sources of Financing

Few brownfield deals can be financed exclusively with one source of funding. More often than not, you will need multiple sources of financing including grants, low-interest loans, other forms of borrowing and developer's equity. This Guidebook can help you identify the most appropriate funding sources for your project; however, you will have to know how to put the pieces together into a total financing package.

There are some important things to keep in mind as you put your financing deal together. First, make sure you spend your lowest cost resources first (e.g.: grant money or deferred interest loans). You do not want to be accruing interest costs over a longer time period than is necessary. Remember that commercial banks will want primary mortgage position for most of their loans. This means you will have to work with other lenders to ensure they are comfortable making their debt instruments subordinate to the bank loan. Many public brownfield funds require matching amounts from other local sources, with the exception of

Cuyahoga County Brownfields Redevelopment Fund. Know what sources you have available to demonstrate this matching requirement. Almost all lenders, whether public or private, will want to see private equity of about 10% in the deal. This demonstrates the developer's commitment to the project and puts their equity at stake in making sure the deal is completed successfully. Finally, be prepared for lots of reporting to your various funding sources. Make sure you have good systems in place to track project budgets and expenditures. These will be critical for reporting project and budget status to your funding sources.

The Role of Environmental Insurance

Environmental insurance is a relatively new product. It can be extremely valuable to a brownfield developer or prospective purchaser, especially those who are risk-averse. Coverage is available for a host of unexpected losses that could be incurred while working on a brownfield site. You can buy insurance protection for cleanup cost overruns, third-party lawsuits, property damage or personal injury that occurs on site, and even for undiscovered contamination that requires cleanup in the future. Comprehensive packages are available to insure against all of these risks, or you can buy single coverage for specific events.

Policies are only available for properties that have been thoroughly investigated. Insurance providers require complete Phase I and Phase II testing before they will insure a site. The cost of these policies varies considerably but usually averages between 5-10% of the expected cleanup costs. The insurance policy usually carries a "buffer layer," or deductible amount, over the anticipated cleanup costs for which the insured party is responsible. Any unanticipated costs over that amount are covered by the insurance.

Several large companies now offer

environmental insurance policies. AIG Environmental (a division of American International Companies), The ERIC Group, Zurich American, United Coastal, Environmental Compliance Services, and ECI, Inc. all underwrite insurance products in this area. Usually a volunteer will purchase a policy through an insurance broker.

No one can say whether environmental insurance is right for your project. It depends on your project budget and your

tolerance for financial risk. In general, however, if your cleanup costs are substantial and you can afford the premiums, it is definitely worth looking into purchasing some coverage.

Providers of Technical Assistance

There are a number of real estate professionals and local attorneys who can answer brownfield questions and help direct you through the VAP cleanup process. In addition, do not be afraid to call Ohio EPA and talk to someone in the Voluntary Action Program. VAP staff are always available to discuss your project and offer suggestions for completing cleanup under their program. Most CPs will also be willing to sit down with you and discuss strategies for how best to proceed with your project. You can also contact the County Planning Commission and Neighborhood Progress, Inc. for technical assistance. Both organizations have staff members who have been through the process before and can work closely with you to see a project through to completion. The best advice is to find someone who has already completed a voluntary cleanup project and learn from them what works well and what does not.

VII. CONTACTS / ADDITIONAL INFORMATION SOURCES

The following list of information sources is provided for the general use of our readers. Any omission of names, publications or other sources of brownfield information is unintentional.

Federal Government

Joseph P. Dufficy
Program Manager
Brownfields and Environmental Justice
U.S. EPA, Region V
77 W. Jackson Boulevard, HSRM-6J
Chicago, IL 60604
(312) 886-1960

Louise Fabinski
Agency for Toxic Substances Disease
Registry
United States Department of Health
ATSDR-4J Room 413
77 West Jackson Boulevard
Chicago, IL 60604
(312) 886-0840

Rich Winkelhofer
Manager, Cleveland Office, U.S.EPA
25089 Center Ridge Road
Westlake, Ohio 44145
(216) 835-5200

RCRA/Superfund Hotline
(800) 424-9346
(703) 412-9810

State Government

Rodney Beals
Manager, Northeast District Office
Ohio EPA, DERR
2110 East Aurora Road
Twinsburg, OH 44087
(330) 963-1218

Jennifer Kwasniewski
Manager, Voluntary Action Program
Ohio EPA, DERR
P.O. Box 1049
1800 WaterMark Drive
Columbus, OH 43216
(614) 644-2279

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County Planning Commission
323 Lakeside Avenue
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(216) 443-3700

Steven Sims
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Cleveland, OH 44114
(216) 443-7260

Scott Frank
Cuyahoga County Board of Health
1375 Euclid Avenue
Cleveland, Ohio 44115
(216) 443-7500

City of Cleveland

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City of Cleveland
601 Lakeside Ave., Room 501
Cleveland, OH 44114
(216) 664-3467

Bill Ondrey Gruber
Chief Assistant Director
Department of Law
City of Cleveland
601 Lakeside Ave., Room 106
Cleveland, OH 44114
(216) 664-2693

Terri Hamilton
Director of Community Development
City of Cleveland
601 Lakeside Ave., Room 320
Cleveland, OH 44114
(216) 664-4288

Robert Staib
Director of Health
City of Cleveland
1925 St. Clair Avenue
Cleveland, OH 44114
(216) 664-4370

Chris Warren
Director of Economic Development
City of Cleveland
601 Lakeside Ave., Room 210
Cleveland, OH 44114
(216) 664-2406

Cleveland City Council
Clerk's Office
(216) 664-2848

Other Private Sector Contacts

There are a number of local developers, banks, real estate professionals and attorneys who specialize in brownfield redevelopment projects. Interested readers can call Neighborhood Progress, Inc. or The Cuyahoga County Planning Commission to get information about the firms doing work in these areas. NPI and the County can provide general information but do not support or endorse any specific individuals or companies.

Further Reading

Brownfields: A Comprehensive Guide to Redeveloping Contaminated Property. Todd S. Davis and Kevin D. Margolis. American Bar Association, 1997.

Brownfields '96: A New Environmental Frontier. Conference in Pittsburgh, PA., September 20 and 21, 1996.

Brownfields Forum: Recycling Land for Chicago's Future. Final Report and Action Plan. City of Chicago, November 1995.

Brownfields Reuse Strategies: A Local Development Symposium. Cuyahoga County Planning Commission, October 30, 1992.

Cleaning Up the Urban Environment: How to Get the Deals Done. American Bar Association, March 7, 1996.

Coming Clean for Economic Development: A Resource Book on Environmental Cleanup and Economic Development Opportunities.

Northeast-Midwest Institute, November 1995.

Industrial Site Reuse, Contamination and Urban Redevelopment: Coping With the Challenges of Brownfields. Northeast-Midwest Institute, November 1995.

Lessons from the Field: 20 Brownfield Case Studies. Northeast-Midwest Institute, 1997.

State Brownfields Policy and Practice. A Report of an IRM Conference for State Officials in Baltimore, MD. Institute for Responsible Management, June 27-28, 1994.

State of the States on Brownfields: Programs for Cleanup and Reuse of Contaminated Sites. Congress of the United States. Office of Technology Assessment, June 1993.

The Brownfields Report. Cuyahoga County Planning Commission, January 1995.

Internet Addresses

There is a wealth of state and national brownfields information now available on the world wide web. Listed below are five of the most helpful brownfield internet sites. Each contains linkages to other home pages that readers may also find useful.

www.epa.ohio.gov/derr/volunt.html
Ohio EPA's Voluntary Action Program

www.epa.gov/swerosps/bf
U.S. EPA's Brownfield Home Page

www.epa.gov/rsbrownfields
U.S. EPA Region 5

www.nemw.org/envqual.htm

Northeast-Midwest Institute's Brownfield
Home Page

planning.co.cuyahoga.oh.us/brownfields
This manual

VIII. GLOSSARY OF TERMS

Applicable standards are the cleanup level requirements established under the Voluntary Action Program according to the generic numeric standards that apply to all properties or by a property-specific risk assessment.

ASTM is the American Society of Testing and Materials.

Audits are the annual inspection by Ohio EPA of randomly selected properties which have requested Covenants Not to Sue during the previous year. During the audit, Agency personnel review the quality of work performed by the Certified Professionals and Laboratories and ensure the site complies with all applicable standards under the Voluntary Cleanup Program.

Brownfields are abandoned, idle or under-used industrial and commercial sites where expansion or redevelopment is complicated by potential environmental contamination.

The **Brownfield Working Group** is a group of 42 stakeholders convened by the Cuyahoga County Planning Commission which identifies barriers to remediation and redevelopment, investigates new technology and financing mechanisms, and makes recommendations for ways to improve the brownfield redevelopment process.

Carcinogen is a substance or agent that has been shown to cause cancer in humans.

Certified Professional is a person certified by the Director of Ohio EPA to perform site

investigation and cleanup activities under the Voluntary Action Program.

Certified Laboratory is a laboratory certified by the Director of Ohio EPA to perform analytic testing services in connection with voluntary cleanup actions.

Commercial land use is a category of potential property uses that includes office buildings, retail stores, and other non-residential and non-industrial facilities. Cleanup standards for commercial land use assume a potential exposure to contaminants by adult workers during a business day and by adults and children who are customers or patrons of such facilities. Exposure levels are assumed to be short and infrequent.

Comprehensive Environmental Response, Conservation, and Liability Act (CERCLA), also known as Superfund, was enacted by Congress in 1982. CERCLA and other state laws based on the Federal legislation govern the cleanup of the most contaminated sites in the country. Under CERCLA, any party in the chain of title of a contaminated site can be held liable for the entire cost of the cleaning up the property. The legislation included authorization to establish a new fund (i.e.: the Superfund) to pay for the cleanup of abandoned toxic and hazardous waste sites where no Potentially Responsible Parties (PRPs) can be found.

Consolidation standards permit allows a site owner to bundle permits that are required under other environmental laws such as air emissions permits, water discharge permits, etc.

Covenant Not to Sue (CNS) is an official

release from State civil liability for further cleanup activity on a property. The CNS protects land owners from State enforcement actions once a property is cleaned up under the Voluntary Action Program, but it does not protect owners from Federal enforcement actions or third-party lawsuits.

CPC is County Planning Commission of Cuyahoga County.

De minimus releases of a hazardous substances or petroleum are defined as a relatively small amounts of contamination confined to surface soils and not exceeding residential land use cleanup standards. The release cannot be the result of repeated disposal or mismanagement. The release must be less than nine square feet in surface area and may not exceed one foot in depth.

Empowerment Zone is the area of Cleveland designated by the Federal government to receive social funding and tax incentives to encourage community and economic development.

Engineering controls are methods of meeting applicable standards by placing a barrier between the contamination and the rest of the site, thus limiting exposure pathways (i.e.; a fence or a wall).

Exposure pathway is the technical term describing how an individual or population can be exposed to chemicals located on a contaminated site. Exposure pathways of concern include ingestion, inhalation, or absorption through the skin.

Generic Standards are the required cleanup levels established by the Ohio EPA that apply to

all residential, commercial, and industrial land uses.

Greenfields are the opposite of brownfields. They are undeveloped sites with no history of commercial or industrial use that can be developed without fear of environmental liability.

Groundwater is water that exists underneath the surface of a property. The technical definition of groundwater under the Voluntary Action Program includes any underground water source that yields at least 1.5 gallons of water or more in eight hours and whose hydraulic conductivity is a minimum of 5.0×10^{-6} cm/sec.

Industrial land use is a category of potential property uses that includes all manufacturing, assembly, distribution and related business operations. Cleanup standards for industrial land use assume exposure to contaminants by adult workers during the business day. Children and the general public are assumed not to have access to such facilities and therefore are at no exposure risk.

Institutional controls are methods of meeting applicable standards by the imposition of deed restrictions and other limitations on the use of a property to prevent human exposure to potentially harmful contaminants.

No Further Action (NFA) is a letter that verifies that a property complies with applicable standards under the Voluntary Action Program and is clean enough for its intended future use.

NPL is the National Priorities List, an inventory of the 1,400 most highly contaminated hazardous waste sites in the United States considered to be of urgent cleanup priority by the U.S. EPA.

Operation and Maintenance Plan describes the activities a property owner must perform over a period of years to ensure compliance with applicable standards under the Voluntary Action Program. Such a plan may require frequent testing of soil or groundwater samples or the ongoing maintenance of a remediation system installed on site.

Phase I site assessment is the non-intrusive investigation of a property through historical property records to determine the possible presence of petroleum or other hazardous substances on site.

Phase II site assessment is physical testing of subsurface conditions to determine the type, location and concentrations of chemical contaminants found on a property.

PRP is the acronym for a Potentially Responsible Party who shares liability under CERCLA for the cost of cleaning up a site.

Remediation is the cumulative set of actions taken on a property to treat, remove, dispose of, contain, or otherwise control hazardous substances or petroleum found on site in a way that is protective of public health and the environment.

Residential land use is a category of potential property uses that includes homes, apartments, multi-family dwellings or any other structure where people live. Cleanup standards for residential land use are the most conservative and assume a high frequency of potential exposure to contaminants by adults and children through skin contact, inhalation of harmful vapors and ingestion of dirt particles.

Resource Conservation and Recovery

Act, RCRA requires EPA to track hazardous chemicals and substances from inception to their final disposal. RCRA requires permits for companies storing, transporting, treating, or disposing of hazardous waste and can levy fines or hold individuals criminally liable for improperly disposing of such wastes.

Risk is the probability that a hazardous material, when released into the environment, will cause adverse effects on humans or other living organisms.

Risk assessment is the scientific methodology of determining the potentially harmful effects of chemical contaminants on humans and the environment. A risk assessment analysis takes into account the toxicity of different chemicals, the exposure pathways by which people could come into contact with them, and the actions taken to prevent such exposure.

Liability in the context of a contaminated property is the legal responsibility to pay for the assessment and cleanup of the site.

Tax abatement is exemption from real estate taxes on the value of land, buildings, fixtures, improvements or portions thereof.

Urban Setting Designation is a special provision under the Voluntary Action Program that establishes a different set of groundwater cleanup requirements for properties in urban areas served by public drinking water systems.

Voluntary action is the set of activities undertaken to identify and address potential contamination of property by hazardous substances or petroleum and to establish that the property complies with applicable standards.

VAP is the Voluntary Action Program which establishes a new set of rules and regulations governing the cleanup of contaminated land in

Ohio. The VAP was created under Senate Bill 221 passed in June 1994 and incorporated in the Ohio Revised Code, Chapter 3746.