

Redeveloping Polluted Property: A Primer for Local Government and Economic Development

By Jim Joyce

CONTENTS

The Trouble with Contaminated Property ... 2

Identification and Assessment of

Brownfields Properties ... 3

Contamination Issues for Redevelopment ... 4

Environmental Cleanup Liability
under Federal and State Law ... 4

Federal Law ... 4

State Law ... 7

Third Party Liability ... 8

Federal and State Brownfields Programs ... 8

The U.S. Environmental Protection Agency
Brownfields Grant Program ... 10

Assessment Grants ... 11

Cleanup Grants ... 11

Multipurpose Grants ... 11

Revolving Loan Fund Program ... 13

North Carolina Brownfields Program ... 13

Eligibility ... 13

Remediation and Agreement ... 14

Other Programs Relevant to

Brownfields Redevelopment ... 14

State Economic Development Programs ... 14

Alternatives to Brownfields Programs ... 15

*Programs Related to Dry Cleaning and
Petroleum Storage Tanks ... 15*

*North Carolina Registered Environmental
Consultant Program ... 15*

Benefits and Challenges of Brownfields Programs ... 16

Benefits ... 18

Risk-Based Remediation ... 18

Limited Liability Protection ... 18

Tax Exclusion ... 19

Challenges ... 19

Costs ... 21

Time to Completion ... 21

Restrictions ... 22

Factors Contributing to Project Success ... 23

Coordination with Stakeholders ... 23

Property Value ... 23

Wise Use of Time ... 24

Conclusion ... 24

[Jim Joyce](#) is an assistant professor of public law and government at the School of Government. He specializes in land use and development regulation and local environmental regulation. The author is deeply grateful to School of Government Development Finance Initiative Associate Director Eric Thomas and Professors Adam Lovelady and C. Tyler Mulligan, who made significant contributions to this bulletin.

The Trouble with Contaminated Property

Picture an abandoned mill or factory site in the middle of town. It's in a great location and occupies acres of space, but no local builders or developers are willing to try to redevelop it. Why? Because the site could be contaminated by hazardous waste, and the potential cleanup cost and project delays related to that contamination could destroy the economic potential of the property.

In many North Carolina communities, deserted or underused former industrial sites are eyesores that can inhibit new growth and development. Examples include abandoned factories in the City of Washington and the Town of Garner, a crumbling parking deck on Wilmington's waterfront, and an old warehouse and bus facility in downtown Raleigh. (See the case study sidebars in this bulletin for more details about the redevelopment of these sites.) Such properties are often referred to as "brownfields," in contrast to the undeveloped "greenfields" typically used for new development.¹

Redeveloping—and sometimes even owning—brownfields sites can involve responsibility for assessing and cleaning up soil and water that has been contaminated with harmful substances. Just assessing the property may mean sampling soil and groundwater, testing indoor air quality, conducting chemical analyses, and obtaining engineering analyses of contaminant plumes. Cleanup can take myriad forms as well, including excavating and properly disposing of contaminated soil, carefully disposing of other potential contaminants, chemically or biologically treating groundwater, installing vapor or groundwater barriers, or even just monitoring the site on an ongoing basis. Most of these processes are time-intensive and costly, and the results are unpredictable. Consequently, potential buyers and developers may be reluctant to take on an otherwise appealing project without some assistance from a public partner. At the same time, the public may have an interest in putting property to its highest and best use—for example, by maximizing the productivity of land and providing property tax revenue. The public also has an interest in property being safe for its intended use. For these reasons the North Carolina and federal government have both established programs to assist in redeveloping brownfields sites.

This bulletin explores issues associated with brownfields sites and how various programs can make these sites in North Carolina more attractive for redevelopment. Five case studies will illustrate the successful application of both state and federal brownfields programs. Although these programs offer substantial potential benefits, they are not an option for all projects. Just as contamination can scuttle an otherwise beneficial redevelopment, the time and cost involved in federal grants and state brownfields agreement processes may complicate a project's economic viability.

1. North Carolina state law and federal law use a functionally similar definition for "brownfields." North Carolina brownfields statutes define a *brownfields property or brownfields site* as "abandoned, idled, or underused property at which expansion or redevelopment is hindered by actual environmental contamination or the possibility of environmental contamination and that is or may be subject to remediation under any State remedial program or that is or may be subject to remediation under [the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), except for sites listed on the National Priorities List]." Section 130A-310.31(b)(3) of the North Carolina General Statutes (hereinafter G.S). Federal brownfields statutes define *brownfield site* as "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." 42 U.S.C. § 9601(39)(A).

Identification and Assessment of Brownfields Properties

How do property owners discover that their property is contaminated? Sometimes a history of contamination is well known, as in the case of a high-profile accident. Often, however, contamination is discovered through on-site investigations. Even where property is not known to be contaminated, certain historic uses make contaminated soil or water more likely. Some of these uses include chemical or electronics manufacturing, automotive service stations and maintenance facilities, junkyards and recycling centers, and dry cleaners that used older perchloroethylene products.²

The first step in evaluating potentially contaminated property is to investigate whether there has been a “release” of hazardous substances into the environment on the site. A release typically involves one or more hazardous chemicals coming into contact with soil, groundwater, or surface water.³

Evaluating the possibility of contamination at a given location begins with a basic assessment of the property’s environmental condition through a Phase I Environmental Site Assessment (Phase I). This assessment is performed by a licensed professional from an engineering or consulting firm and includes a database review and a noninvasive site visit. A Phase I is completed in accordance with uniform national standards and often takes three to six weeks, depending on the consultant and the property assessed.⁴ If the Phase I identifies known or suspected contamination (referred to as a “recognized environmental condition”), a further investigation may be needed to identify whether soil or water on the site is actually contaminated. If the Phase I reveals no recognized environmental conditions, the chance of a release having occurred on the property is rather low.

The follow-up investigation for sites with recognized environmental conditions is known as a Phase II Environmental Site Assessment (Phase II). The scope, timing, and cost of a Phase II depend on a variety of factors, including the site to be investigated, the extent of possible contamination, and the nature of potential contaminants, among others. A Phase II also often involves laboratory testing of soil, groundwater, or other media from areas where contamination is suspected or documented.

A completed Phase II presents a much more precise description of the potential scope of contamination, including what types of contaminants are present, where they are located, and in what concentrations. One cannot comprehensively identify all contamination without

2. The U.S. Environmental Protection Agency (US EPA) provides a useful brochure describing the types of contamination most likely present at various kinds of sites. See [Past Property Uses May Result in a Brownfield Site](#), U.S. ENV’T PROT. AGENCY (Sept. 2019).

3. Federal and state environmental laws characterize a “release” to be just about any time a hazardous substance—commonly oil, petroleum-related chemicals, or chlorinated solvents—is released into the environment. Specifically, federal law defines a *release* as “any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant),” with some exceptions. 42 U.S.C. § 9601(22); *incorporated by reference* at G.S. 130A-310(6).

4. In addition to providing an initial assessment of a site, a Phase I is an important qualification criterion for several “innocent landowner” protections under state and federal contaminated property law. North Carolina innocent landowner provisions are in the Inactive Hazardous Sites Response Act at G.S. 130A-310 through G.S. 130A-310.13. Federal protections can be found at 42 U.S.C. §§ 9601(35) and 9607(b)(3) (innocent landowners), 9601(40) and 9607(r) (bona fide prospective purchasers), and 9607(q) (contiguous property owners).

sampling every bit of dirt and water on the property—an impractical task at best—but competent Phase I and Phase II assessments will provide the most reliable picture of the site’s potential contamination. These investigation results will also define the scope of further action.

Contamination Issues for Redevelopment

A parcel of otherwise valuable property is impacted by contamination that occurred years ago under a previous owner. What sort of problem does this contamination present for redevelopment today? Most often, the answer is cleanup liability risk. State and federal laws typically make owners and operators of contaminated property liable for remediating contamination, including owners who might not have been directly responsible for it.⁵ This strict liability principle ensures that someone is “on the hook” for cleaning up a potentially toxic mess. It also greatly increases the uncertainty associated with developing a given piece of property. Land development is risky in the best of times. Permitting processes, interest rates, conflicting visions and goals in the development partnership, fluctuations in demand and input costs, and even the weather can significantly affect a project. Thus, everyone involved in the process—developers, investors, lenders, and local governments—has an incentive to identify potential risks and minimize them where possible. This is why most developers will seek undeveloped “greenfields” properties before taking on brownfields. Even the possibility of an environmental regulatory burden adds to a project’s risk factor. This potential for liability can take several forms, which are described below.

In addition to possible liability, contamination (even when contained or partially remediated) can limit the options for future development. For instance, a site that has residual low-level contamination may be safe for use as an office or warehouse but not for a residential use.

Environmental Cleanup Liability under Federal and State Law

Depending on the pollutants and the media (soil or water) involved, several provisions of federal or state law may apply to a particular contaminated area. In addition to the cleanup programs described below, there are specific state rules and cleanup assistance programs for underground storage tanks⁶ and dry-cleaning facilities.⁷

Federal Law

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), also known as the “Superfund” law,⁸ was designed to facilitate cleanup of sites

5. The burden is often on property owners to demonstrate that they took precautions (called “all appropriate inquiries” in the federal CERCLA statutes) to identify potential environmental contaminants on the property before they can be free of liability. As a result, commercial property buyers frequently undertake the kind of Phase I and Phase II assessments discussed above. *See, e.g.*, 42 U.S.C. §§ 9601(35), 9601(40), and 9607 (referencing “all appropriate inquiries” as a prerequisite for innocent landowner liability protections).

6. *See* G.S. 143-215.94A.

7. *See* G.S. 143-215.104A. This program sunsets January 1, 2032.

8. Pub. L. No. 96–510, 42 U.S.C. §§ 9601–9675. The North Carolina Department of Environmental Quality (NC DEQ) is also authorized to work with the US EPA to address Superfund sites. *See* G.S. 130A-310.20 through -310.29.

contaminated with hazardous substances and requires parties potentially responsible for contamination to contribute to the cost of cleaning it up.

CERCLA arose in part out of the Love Canal incident in Niagara Falls, New York. A canal, dug as part of a planned community development, later became a dump site for the City of Niagara Falls and the Hooker Chemical Company.⁹ After Hooker ceased using the canal, it was sold to the local school board with language in the deed seeking to absolve Hooker of any future liability.¹⁰ A neighborhood and school were built nearby, and by the late 1970s several wet winters had caused chemicals and contaminated groundwater to leach into residents' homes and yards. The immense environmental and health impacts of this contamination led to the passage of CERCLA to address sites like Love Canal.¹¹

CERCLA liability is "strict," meaning that the current owner or operator, as well as anyone else who may have contributed to the existing contamination, may be liable for the cleanup. It is also "joint and several"; every potentially responsible party¹² is liable for up to the full amount of required remediation. Thus, anyone who owned or operated the property or contributed to its contamination may be liable for the full cleanup cost.

CERCLA does, however, provide protections for several categories of landowners and land purchasers who acquire contaminated property that they were not responsible for polluting. These include landowners who did not know (or have reason to know) that a hazardous substance was disposed of on site,¹³ arms-length purchasers of the property who were not responsible for causing or contributing to contamination,¹⁴ and owners of property contiguous to where a release of hazardous substances occurred.¹⁵ To qualify for one of these defenses, the property owner must have made "all appropriate inquiries" into the condition of the property and its history prior to acquiring it.¹⁶ Obtaining a Phase I Environmental Site Assessment, discussed above, is an important part of making all appropriate inquiries but may not be sufficient on its own. Here again, environmental professionals (engineers and particularly attorneys) can assist in ensuring that an owner who needs and qualifies for one of these protections takes the necessary steps to secure it.

9. Eckardt C. Beck, *The Love Canal Tragedy*, EPA J., Jan. 1979.

10. Jordan Kleiman, *Love Canal: A Brief History*, SUNY GENESEO.

11. Superfund Site: Love Canal, Niagara Falls, NY, *Cleanup Activities*, U.S. ENV'T PROT. AGENCY.

12. Potentially responsible parties include the current owner or operator of the site, any person who owned or operated the site when a release occurred, any person who arranged for disposal or treatment of hazardous substances at the site, and any person who accepted hazardous substances for transport to the site for disposal or treatment. 42 U.S.C. § 9607(a).

13. 42 U.S.C. § 9601(35)(A).

14. 42 U.S.C. § 9601(40).

15. 42 U.S.C. § 9607(q).

16. 42 U.S.C. § 9601(B) (referenced in 42 U.S.C. §§ 9601(40)(B)(ii), 9607(q)(1)(viii)).

From Tragedy to Employment Hub

Garner, Wake County

History: Jones Sausage Road in Garner is named for the Jesse Jones Sausage Company, whose main production facility had been located on the road since the 1960s.¹ The plant operated for over four decades, although it changed hands and undoubtedly underwent significant modification over the years. In 2009, the facility employed approximately seven hundred workers. That year, a natural gas explosion occurred at the plant, killing three workers and hospitalizing dozens more.² The plant's owner attempted to continue operation at a reduced level before finally shutting the plant down in 2011. The owner then donated the plant to the town, which established the Garner Economic Development Corporation (EDC) to hold the property and plan for its redevelopment.³

Key elements: The Garner EDC secured state brownfields protections prior to identifying a development partner.⁴ By moving ahead with contamination assessment and working with the NC DEQ Brownfields Section, the EDC identified areas of contamination on the site. As a result, a private entity considering development of the property had a much clearer picture of the nature of site contamination than would have been the case if that entity had begun the process on its own. The groundwork of the Garner EDC provided the private developer a significant head start on managing the complexities of this contaminated site.

Status: A private developer purchased the property from the EDC⁵ and constructed a state-of-the-art, 2.6 million square foot warehouse and distribution facility. The facility's owner, a global sales and shipping company, soon began recruiting for over three thousand positions.⁶



Damage caused by the 2009 explosion at the ConAgra plant in Garner. Photo from *Safety Bulletin: Dangers of Purging Gas Piping into Buildings*, U.S. Chemical Safety and Hazard Investigation Board.



Redevelopment of the old ConAgra site into a state-of-the-art warehouse and distribution center. Photo by Indy beetle, Wikimedia Commons.

1. See Kimberly Cataudella, [Jones Sausage to Glascock: The history behind some of Raleigh's funny-sounding road names](#), THE NEWS & OBSERVER, Nov. 6, 2023; Tracy Jones, [Historic Roads of Raleigh](#), RALEIGH MAGAZINE, July 1, 2018.

2. [Safety Bulletin: Dangers of Purging Gas Piping into Buildings](#), U.S. CHEMICAL SAFETY AND HAZARD INVESTIGATION Bd. (Sept. 2009); Josh Shaffer, Thomasi McDonald, and Sarah Nagem, [ConAgra explosion kills two; dozens hurt](#), THE NEWS & OBSERVER, June 10, 2009.

3. See David Bracken & Alan M. Wolf, [Closure of Slim Jim plant looms](#), THE NEWS & OBSERVER, Feb. 22, 2011, at 1B; David Bracken, [Garner forms nonprofit to accept ConAgra donation of Slim Jim plant](#), THE NEWS & OBSERVER: BLOGS, Jan. 21, 2011; Wake County, N.C., REGISTER OF DEEDS BOOK 14572, at 2740; ConAgra Brownfields Property Application, NC DEQ file ID 1088798, facility program ID 15036-11-092 (Feb 2012), obtained from NC DEQ Laserfiche database records, at 11.

4. See Wake County, N.C., [Notice of Brownfields Property](#), REGISTER OF DEEDS BOOK 15443, at 730 (listing Garner Economic Development Corporation as owner of property and party to brownfields agreement).

5. See Wake County, N.C., REGISTER OF DEEDS BOOK 17211, at 1194.

6. Scott Bolejack, [Signs point to Garner getting Amazon distribution center](#), THE NEWS & OBSERVER, July 11, 2018, at 1A; Zachery Eanes, [Amazon now hiring 3,000 at Garner fulfillment center](#), THE NEWS & OBSERVER, July 22, 2020, at 6A.

State Law

Oil Pollution and Hazardous Substances Control Act (OPHSCA)

The Oil Pollution and Hazardous Substances Control Act (OPHSCA) prohibits unpermitted discharges of oil and other hazardous substances in North Carolina.¹⁷ OPHSCA liability applies strictly to anyone who has control over oil or another hazardous substance prior to its discharge into the environment.¹⁸ The act requires these entities to inform environmental authorities of any discharge, remove the contaminants, and restore the property to its condition prior to the discharge.¹⁹ For example, landowners occasionally find old and potentially leaking heating-oil tanks on their property. Once discovered, these tanks must be removed, along with any contaminated soil, even if the owner was not previously aware of the leak. Under OPHSCA, however, such “innocent landowners” may be able to avoid civil and criminal liability for the pollution if they can prove the discharge was caused by a third party; resulted from a law enforcement order; or was caused by government negligence or an act of God, war, or sabotage.²⁰

Inactive Hazardous Sites Response Act

The Inactive Hazardous Sites Response Act²¹ is a North Carolina law that in some ways parallels CERCLA.²² Like CERCLA, it allocates responsibility for cleanup of releases of hazardous substances.²³ This act requires property owners, operators, and other responsible parties to notify the NC DEQ Inactive Hazardous Sites Branch (the Branch) of any “inactive hazardous substance or waste disposal site.”²⁴ Once such a site is identified, NC DEQ can order monitoring, testing, analysis, and reporting as is “reasonable and necessary” in its discretion.²⁵

Today most inactive hazardous sites are managed through the Recognized Environmental Consultant (REC) program,²⁶ a voluntary cleanup program administered by the Branch and

17. G.S. 143-215.83(a). The term “discharge” used in OPHSCA has a similar meaning to the term “release” used in other hazardous waste regulations. *See* G.S. 143-215.77(4) (defining *discharge* for OPHSCA purposes). While OPHSCA and the Inactive Hazardous Sites Response Act may appear to overlap with CERCLA and some releases may be regulated under both state and federal law, the US EPA has authorized North Carolina to enforce its own hazardous waste regulatory program. *See* 42 U.S.C. § 6926(b) (authorization of state programs); 84 Fed. Reg. 54,516 (Oct. 10, 2019) (updated authorization of North Carolina hazardous waste program).

18. G.S. 143-215.83(a).

19. *See* G.S. 143-215.85(a) (requiring notification of environmental authorities) and -215.84(a) (requiring owners and operators to “collect and remove the discharge and to restore the area. . . as nearly as may be to the condition existing prior to the discharge.”).

20. G.S. 143-215.84(b).

21. G.S. 130A-310 through -310.19.

22. In addition to the Inactive Hazardous Sites Response Act, North Carolina also has enacted legislation to administer certain parts of CERCLA in the state. *See* G.S. 130A-310.20 through -310.29).

23. The Inactive Hazardous Sites Response Act and its implementing regulations are administered by the NC DEQ. For more detailed technical information, see Division of Waste Management, Inactive Hazardous Sites Branch, [Guidelines for Assessment and Cleanup of Contaminated Sites](#), N.C. DEPT. OF ENV'T QUALITY (Sept. 2023).

24. G.S. 130A-310.1(b); Title15A, Chapter 13C, Section .0101 of the North Carolina administrative Code (hereinafter N.C.A.C.).

25. G.S. 130A-310.1(c).

26. *See* Division of Waste Management, Inactive Hazardous Sites Branch, [How to Initiate a Voluntary Cleanup](#), N.C. DEPT. OF ENV'T QUALITY.

operated by third-party registered environmental consultants.²⁷ This program is discussed in more detail under “Alternatives to Brownfields Programs,” below. NC DEQ also is authorized to lead its own cleanup activities but typically only does so for the highest-hazard sites and those where a responsible party cannot be identified.²⁸ As with CERCLA and OPHSCA, certain property owners are exempt from the definition of responsible party and thus not liable for cleanup costs. The most common exceptions to the Inactive Hazardous Sites Response Act requirements apply to arms-length buyers with no knowledge or reason to know of the hazardous substances and to parties whose interest in the property is based on a security interest (i.e., a creditor).²⁹

Third Party Liability

Although it is not addressed by most brownfields regulations or programs, tort liability to third parties is a possible risk for any property owner, public or private. Most commonly, tort claims are for bodily injury or property damage. In the hazardous waste context, a bodily injury claim might arise where someone on the site comes into contact with contaminated soil, groundwater, or other media (like asbestos fibers or lead-based paint) and suffers some injury or illness as a result.³⁰ Property damage claims typically result from contamination—usually in groundwater—moving from one site to another. If pollutants migrate from Site A to Site B, for example, the owner of Site B might claim that their property has been damaged by the contamination entering from Site A. These risks are sometimes covered by private environmental insurance but not generally by regulatory shields such as a North Carolina brownfields agreement or “bona fide prospective purchaser” status. Third-party claims are much less common than regulatory actions, but nevertheless the risk can be substantial.

Federal and State Brownfields Programs

With the implementation of brownfields programs and grants, lawmakers have attempted to mitigate the risks and costs of environmental cleanup that keep many properties from being put to productive use. State and federal programs take different approaches: the North Carolina Brownfields Program focuses on liability protection and development incentives, while the federal brownfields program is based on a variety of assessment and remediation grants. These programs are described in more detail below.

27. The Registered Environmental Consultant (REC) program rules can be found at 15A N.C.A.C. 13C, § .0300. The Inactive Hazardous Sites Branch administers cleanup at the highest-priority sites.

28. See G.S. 130A-310.3, -310.5, -310.6, and -310.7. NC DEQ has traditionally received an annual appropriation of \$400,000 to address imminent hazards and high-risk sites where no responsible party able to pay for cleanup can be identified. See Div. of Waste Management, DIV. OF ENV'T ASSISTANCE & CUSTOMER SERV.: [ANNUAL REPORT TO THE N.C. GENERAL ASSEMBLY](#), N.C. DEPT. OF ENV'T QUALITY (2022), at 44–45.

29. G.S. 130A-310.7(a).

30. See, e.g., *Stahle v. CTS Corp.*, 817 F.3d 96 (4th Cir. 2016) (plaintiff alleged that his leukemia was caused by exposure to toxic solvents dumped by defendant corporation).

Industrial Eyesore Becomes a Government Center

Washington, Beaufort County



Empty lot on the site of the old Dr. Pepper bottling facility near the Washington waterfront. Photo courtesy of Mid-Atlantic Associates, Inc.



Washington's new police department facility occupies the previously vacant downtown lot. Photo courtesy of Mid-Atlantic Associates, Inc.

History: Founded in 1776, Washington was the first city to be named for George Washington. Between 1857 and 1947, a manufactured gas plant was located downtown, one block from the waterfront.¹ That facility was demolished and replaced with a soft-drink-bottling plant in the mid-twentieth century.² In 2006, with the bottling facility no longer operating, the plant and other structures on the site were razed.³ For over a decade, only concrete slab remnants surrounded by a chain-link fence remained on the site.⁴ To make matters worse, the derelict site was located at the gateway to Washington's downtown.⁵

Key Elements: The city identified a use for the property early in the brownfields process. By the time it submitted its application to the North Carolina Brownfields Program, the city had planned to redevelop the site as a public safety and emergency services complex.⁶ Because the project was a public building, the city likely avoided some of the limits and restrictions applicable to other types of redevelopment projects. The city also combined benefits from the North Carolina brownfields program with funding from two different federal Environmental Protection Agency grants.⁷

Status: As of spring 2023, the city was nearing completion of a new police station building on the site. The police station, which had been operating out of temporary space, would now have a new home.⁸

1. City of Washington, N.C., [Former Dr. Pepper Plant/Washington MGP Site](#), CURRENT PROPERTIES IN THE PROGRAM; see also Dr. Pepper Plant Brownfields Property Application (hereinafter Washington BPA), NC DEQ file ID 1285503, facility program ID 22082-18-007 (Dec 2018), obtained from NC DEQ Laserfiche database records at 10.

2. City of Washington, N.C., *supra* note 1.

3. City of Washington, N.C., *supra* note 1.

4. Washington BPA, *supra* note 1, at 10.

5. *Id.* at 11.

6. *Id.* at 10.

7. *Id.* at 7.

8. See Brandon Tester, [New Washington police station nearing completion](#), WNCT9, March 2, 2023; Erin Jenkins, [Washington cuts ribbon on new police department](#), WNCT9, May 7, 2023.

The U.S. Environmental Protection Agency Brownfields Grant Program

The US EPA Brownfields and Land Revitalization Program³¹ focuses on grants to help manage the costs associated with brownfields redevelopment.³² The program offers a variety of brownfields grants, including:³³

- assessment grants, for assessment, planning, and outreach purposes;
- cleanup grants, for planning and remediation activities;
- multipurpose grants, to cover both assessment and cleanup activities;
- revolving-loan-fund grants, to provide capital so grantees can make loans and subgrants to individual redevelopment projects;
- Environmental Workforce Development and Job Training grants, to provide for training for residents impacted by brownfields sites;
- technical assistance, training, and research grants; and
- state and tribal response program grants, which can be used to establish or enhance state and tribal brownfields response programs.³⁴

A variety of governmental and nonprofit organizations can directly apply for and receive US EPA brownfields grants, but private entities cannot.³⁵ In theory, once a government or nonprofit organization obtains one of these grants, that grantee could in turn grant some of those funds to a private entity as an economic development incentive. However, such a subgrant or re-grant in North Carolina would raise concerns about illegal emoluments under the North Carolina constitution. Subgrants or re-grants to private parties would be illegal unless the project meets particular standards stipulated in applicable case law.³⁶

Grant applications are usually due in November of each year, with grants awarded in the late spring. The process can be competitive; in fiscal year 2023, the US EPA received 477 applications for multipurpose, assessment, revolving-loan-fund, and cleanup grants and issued 267 grants.³⁷ These types of grants are described in more detail below. This bulletin will not discuss the

31. [Brownfields: About](#), U.S. ENV'T PROT. AGENCY (Feb. 12, 2024).

32. The US EPA Brownfields Program was authorized by the Small Business Liability Relief and Brownfields Revitalization Act, Pub. L. No. 107-118, as amended and reauthorized by the 2018 Brownfields Utilization, Investment, and Local Development (BUILD) Act, Division N of the 2018 Consolidated Appropriations Act, Pub. L. No. 115-141; [Division N—BUILD Act](#), U.S. ENV'L PROT. AGENCY.

33. For more information on other US EPA brownfields-related grants, see Brownfields, [Grants and Funding](#), U.S. ENV'T PROT. AGENCY (April 4, 2024).

34. General authorization for these programs is provided in 42 U.S.C. § 9604(k) (assessment, remediation, revolving-loan-fund, multipurpose, and technical-assistance grants) and 42 U.S.C. § 9628(a) (response program grants). For grant program summaries, see Brownfields, [Grants and Funding: Types of Funding](#), U.S. ENV'T PROT. AGENCY.

35. See 42 U.S.C. § 9604(k)(1) (defining the scope of entities eligible for brownfields grants to include a variety of units of tribal, state, and local government; nonprofit organizations; and qualified community development entities).

36. See *Maready v. City of Winston-Salem*, 342 N.C. 708 (1996) (noting that “direct state aid to a private enterprise, with only limited benefit accruing to the public, contravenes fundamental constitutional precepts” but declaring certain economic incentives constitutional) and *Haugh v. County of Durham*, 208 N.C. App. 304 (2010) (upholding incentives that are “parallel to *Maready*”); see also Tyler Mulligan, [Local Government Economic Development Powers “Clarified,”](#) COATES CANONS N.C. LOC. GOV'T L. BLOG (Oct. 26, 2015); Tyler Mulligan, *Economic Development Incentives and North Carolina Local Governments: A Framework for Analysis*, 91 N.C. L. REV. 2021 (2013).

37. [Fiscal Year 2024 Frequently Asked Questions for Brownfield Multipurpose, Assessment, RLE, and Cleanup \(MARC\) Grants](#), U.S. ENV'L PROT. AGENCY (hereinafter US EPA FAQs), at 16.

workforce-development, training-and-technical-assistance, or state and tribal response program grants. Although important, these grants address issues other than the redevelopment of specific sites and are thus outside the scope of this bulletin.

Assessment Grants

Assessment grants cover the cost of environmental assessments (Phase I, Phase II, asbestos survey, lead-based paint inspection, and additional investigation) as well as for the planning of redevelopment and cleanup activities.³⁸ Assessment grants are generally issued for a four-year period and can be for up to \$500,000 or \$1 million, depending on the type of grant.³⁹ These grants are available for individual sites or to a group of sites on a community-wide basis. A coalition of applicants can apply if more than one qualifying party is involved.⁴⁰

Cleanup Grants

US EPA cleanup grants are issued for a four-year period for funding requests of up to \$500,000, up to \$2 million, and up to \$5 million.⁴¹ In contrast to the assessment grants that fund the identification and assessment phases of the project, cleanup grants pay for the actual cleanup. Example activities include cleanup planning, design and installation of vapor mitigation measures, and active remediation. Because these grants are for cleanup activities, the applicant must have completed a Phase II Environmental Site Assessment before submitting a grant application and must own fee simple title to the property. Finally, cleanup grants, unlike some other brownfields grants, typically require the applicant to cover 20 percent of cleanup costs.⁴²

Multipurpose Grants

With an assessment grant, a site owner has help with gathering the resources to assess a site but then may have to search for funds again when it is time to pay for remediation. On the other hand, cleanup grants can assist with remediation costs but do not address the sometimes-substantial cost of assessing site conditions. To allow property owners to obtain grants for both the assessment and cleanup phases, the US EPA administers the Multipurpose Grant Program. Multipurpose grants are for a longer period than assessment or cleanup grants (five years) and, as of fiscal year 2024, could be in amounts of up to \$1 million.⁴³ The multipurpose grant can be used for assessment, planning, community involvement, inventory, prioritization, cleanup planning, redevelopment planning, and actual cleanup activities.⁴⁴

38. For further details regarding what tasks and activities can be funded with brownfields assessment grants, see US EPA FACs, *supra* note 37, at 52–53.

39. Brownfields, [Brownfields Assessment Grants](#), U.S. ENV'L PROT. AGENCY, Jan. 30, 2024; *see also* [EPA Brownfields Assessment Grants: Interested in Applying for Funding?](#), U.S. ENV'T PROT. AGENCY (hereinafter US EPA Funding) (Aug. 2022). Grant amounts for fiscal year 2023 were authorized by the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, Division J Title VI, 135 Stat. 429, 1403 (2021).

40. US EPA Funding, *supra* note 39; US EPA FAQs, *supra* note 37, at 54–55. *See also, e.g.*, City of South Portland (ME) EPA FY2019 Brownfields Community-Wide Assessment Grant Application, document ID R01-19-A-031, obtained from NC DEQ Laserfiche Records.

41. US EPA FAQs, *supra* note 37, at 11. Grant amount authorization comes from the Infrastructure Investment and Jobs Act, *supra* note 39.

42. *See* US EPA Funding, *supra* note 39.

43. *See* [FY24 Guidelines for Brownfield Multipurpose \(MP\) Grants](#), U.S. ENV'L PROT. AGENCY, at 12.

44. *See* 42 U.S.C. § 9604(k); [FY24 Guidelines for Brownfield Multipurpose \(MP\) Grants](#), *supra* note 43, at 67–68.

Replacing a Crumbling Parking Deck with a Mixed-Use Showpiece

Wilmington, New Hanover County

History: Water Street runs beside the Cape Fear River in historic downtown Wilmington. Between 1884 and 1966, a two-block stretch of property along this street hosted a variety of uses, including warehouses; a rice mill; a filling station; and cider, vinegar, and liquor manufacturing. In 1966, the site was redeveloped with a large parking structure.¹ By the time the City of Wilmington acquired it decades later, the parking deck was in poor condition and contaminated with petroleum-related chemicals from its earlier uses.² The site, in an otherwise valuable and desirable area, was unattractive and included a possibly dangerous structure. For several years the city sought unsuccessfully to partner with a private entity to redevelop the property. A collaboration with the UNC-Chapel Hill School of Government Development Finance Initiative (DFI) finally helped the city achieve its goals for the site.

Key Elements: This project involved a team of actors and a variety of resources: the City of Wilmington, DFI,³ a private development partner, a North Carolina brownfields agreement, and funds from Wilmington's US EPA Community-Wide Brownfields Assessment Grant.⁴ Stakeholder collaboration, development consultation, and federal grant funding helped offset the liability risks that had hampered many prior development efforts.⁵

Status: By early 2020, commercial tenant upfits were underway,⁶ and the first residents moved into the development's condominiums.⁷ The site also features restaurants, shops, and a "Grand Staircase" at the end of Chestnut Street, which had previously come to a dead end halfway across the parking deck.⁸



A dilapidated parking deck near Wilmington's waterfront occupied an area contaminated with hazardous waste. Photo from Division of Waste Management, [Success Stories: Water Street Deck Project](#), N.C. Department of Environmental Quality.



The redeveloped Water Street property features condominiums, restaurants, and shops. Photo courtesy of UNC-Chapel Hill School of Government Development Finance Initiative.

1. See Tim Buckland, [Project Tracker: Water Street parking deck redevelopment](#), WILMINGTON STARNEWS ONLINE, Aug. 26, 2017; see also Water Street Deck Brownfields Property Application (hereinafter Wilmington BPA), NC DEQ file ID 682438, facility program ID 19046-15-065 (June 2015), obtained from NC DEQ Laserfiche database records, at 10.

2. See Wilmington BPA, *supra* note 1, at 10-11; J. Elias O'Neal, [Council Talks Parking Deck, Future Growth](#), WILMINGTONBIZ, Aug. 6, 2012.

3. The City of Wilmington hired the UNC-Chapel Hill Development Finance Initiative in 2013. See Dev. Fin. Initiative, [Building Reuse and Downtown Revitalization \(Wilmington, NC\)](#), UNC SCH. OF GOV'T.; Dev. Fin. Initiative, [Wilmington, North Carolina: Water Street Parking Deck](#), UNC SCH. OF GOV'T.

4. See Wilmington BPA, *supra* note 1, at 4 (identifying private development partner), 8 (relationship between city government and private partner; utilization of US EPA community-wide assessment grant).

5. Wilmington BPA, *supra* note 1, at 11 (stating that potential developers seeking to acquire the property were "reluctant because of the risks associated with the contamination present").

6. Cece Nunn, [For Downtown Wilmington Apartments, Another Step Forward](#), WILMINGTONBIZ, Feb. 4, 2020.

7. Caroline Rutledge, [River Place: Unveiling The Port City's newest gem](#), WILMINGTON MAGAZINE July 7, 2021.

8. *Id.*

Revolving Loan Fund Program

Revolving Loan Fund grants allow local governments to make low interest loans and subgrants to carry out cleanup activities at brownfields properties. Grants from this fund can be for up to \$1 million per grant, with a five-year grant period.⁴⁵ They are applied for and administered by the grantee to provide low-interest loans (or subgrants to nonprofit organizations) for cleanup activities. This is the only type of US EPA brownfields grant that allows money to flow to private parties. Because the loans issued under this program must be repaid, they are less likely to run afoul of North Carolina emoluments considerations.⁴⁶

North Carolina Brownfields Program

The approach of the [North Carolina Brownfields Program](#), administered by the NC DEQ, is to provide limited regulatory liability protection, an alternative standard for cleanup, and a partial property tax exemption for the first few years after redevelopment.⁴⁷ This program, which arose out of the North Carolina Brownfields Property Reuse Act of 1997,⁴⁸ has facilitated the redevelopment of over 700 properties.⁴⁹

Eligibility

The North Carolina Brownfields Program is not available to every site. Eligibility is generally not a high bar—for instance, the threat of contamination might be all that is needed to qualify—but the program has certain limitations. The first step of the process is for the owner or developer of a brownfields property—referred to in the statutes as a “prospective developer”—to apply for inclusion in the Brownfields Program, which includes providing assessments of the property and some evidence that the prospective developer and the site meet eligibility standards.

North Carolina brownfields statutes require that:

- the prospective developer demonstrate that it is not responsible for site contamination;
- the implementation of a brownfields agreement will make the property suitable for its intended use while fully protecting public health and the environment;
- there is a public benefit “commensurate with the liability protection provided” by the program; and
- the prospective developer can obtain the financial, managerial, and technical means to fully implement the brownfields agreement and ensure safe use of the property.⁵⁰

45. [FY23 Guidelines for Brownfield Revolving Loan Fund Grants](#), U.S. ENV’L PROT. AGENCY, at 11–12; *see also* 42 U.S.C. § 9604(k)(3).

46. For more on the limitations of loans and the illegality of grants as economic development tools, see Tyler Mulligan, [Cash Grants for Real Estate Developers without Competition for Jobs—A Constitutional Quandary](#), CMTY. AND ECON. DEV. IN N.C. AND BEYOND, UNC SCH. OF GOV’T BLOG (Sept. 15, 2015).

47. Statutory authorization and program laws are in G.S. Chapter 130A, art. 9, part 5.

48. S.L. 1997-357, § 2; codified at G.S. Chapter 130A, art. 9, part 5.

49. DIV. OF WASTE MANAGEMENT, DIV. OF ENV’T ASSISTANCE & CUSTOMER SERV.: [ANNUAL REPORT TO THE N.C. GENERAL ASSEMBLY](#), N.C. DEPT. OF ENV’T QUALITY (2023), at 10.

50. *See* G.S. 130A-310.32(a) (allowing NC DEQ to enter into a brownfields agreement with a prospective developer who meets the suitability, public benefit, and expertise requirements) and -310.31(b)(10) (defining *prospective developer* in part as one who did not cause or contribute to contamination of the property).

Qualifying properties obtain a “letter of eligibility.” The letter of eligibility does not confer any rights or benefits but is often required by investors or lenders to show that the property qualifies for designation as a brownfields property.

Another way to qualify for the North Carolina brownfields program is through the Ready for Reuse option. This method allows a local government or other brownfields owner that has not yet found a development partner to start the brownfields process as a “proxy prospective developer” and obtain a preliminary brownfields agreement. When the owner does find a developer, the developer applies for a revision to the brownfields agreement to replace the proxy prospective developer.⁵¹ If the preliminary agreement aligns sufficiently with the new developer’s project, this option can reduce the time a developer spends in the brownfields agreement application and negotiation processes.

Remediation and Agreement

Once a project is determined to be eligible for inclusion in the program, Brownfields Redevelopment Section staff review the available data, request any additional assessment they require, and negotiate with the prospective developer an appropriate level of cleanup and the necessary measures to mitigate or prevent further harm. These measures are often described in some detail in an environmental management plan, or EMP. In addition to the EMP, the main products of this process are the brownfields agreement, which describes the condition of the property and the measures to be taken;⁵² a plat showing the property’s layout and the location of any remaining contamination;⁵³ and a Notice of Brownfields Property, a document outlining the requirements of the agreement, which is recorded with the register of deeds of the county where the property is located.⁵⁴ The process also involves a public comment period once the terms of the agreement have been reached.⁵⁵

Other Programs Relevant to Brownfields Redevelopment

The federal and state brownfields programs can be helpful, but other funding sources or alternative methods of site remediation may be necessary.

State Economic Development Programs

In addition to coordinating with other parties, owners pursuing brownfields redevelopment may also look to resources outside of the North Carolina or federal brownfields programs. Brownfields agreements and grants do not disqualify properties from most other economic development initiatives. To obtain grants and other assistance, North Carolina local governments may participate in the Building Reuse Initiative and the Main Street Program, both within the

51. See [Brownfields Program Guidelines and Issue Resolutions](#), N.C. DEP’T OF ENV. QUALITY (Dec. 2017), at 7. For further information about the Ready for Reuse Program, see Brownfields Redevelopment Section, [How to Apply for Entry](#), N.C. DEP’T OF ENV. QUALITY.

52. See G.S. 130A-310.32(c).

53. *Id.*

54. G.S. 130A-310.35.

55. G.S. 130A-310.34.

North Carolina Department of Commerce.⁵⁶ The UNC-Chapel Hill School of Government Development Finance Initiative also has information about applying financing tools to enhance project success.

Alternatives to Brownfields Programs

Programs Related to Dry Cleaning and Petroleum Storage Tanks

The state and federal brownfields programs are not the only programs available to assist North Carolina property owners with cleanup of environmental contamination. The NC DEQ Dry-Cleaning Solvent Cleanup Act Program⁵⁷ and underground storage tank programs⁵⁸ address particular kinds of sites on which low-level environmental contamination is commonly found. These programs may offset remediation costs at sites with contamination related to dry-cleaning solvents or underground petroleum storage tanks.

North Carolina Registered Environmental Consultant Program

The Registered Environmental Consultant (REC) Program allows risk-based remediation as a cleanup option at certain contaminated sites.⁵⁹ In risk-based remediation, cleanup requirements are based on what is appropriate for the conditions at a particular site rather than on more stringent “unrestricted use” standards. In addition, the owner’s liability is limited to \$5 million.⁶⁰ In this program, the prospective developer or property owner selects a consultant that qualifies as a REC and enters into an administrative agreement with NC DEQ. This agreement operates much like a brownfields agreement and includes land use restrictions or engineering controls to manage exposure risks.⁶¹ The REC Program differs from the brownfields program in a few key ways:

- Its agreement process is somewhat more streamlined than that for brownfields programs.
- It does not include the liability protection or tax incentives that accompany a brownfields agreement.⁶²
- Its remediations are most often used at sites where groundwater contamination is stable or predictable and health and environmental risks can be mitigated solely through engineering and land-use controls.⁶³

56. For more information on the Building Reuse Initiative, see [Building Reuse|State Rural Grants](#), N.C. DEP’T OF COM. For information on the Main Street Program, see N.C. Main St. & Rural Plan. Ctr., [North Carolina Main Street Program](#), N.C. DEP’T OF COM.

57. G.S. Chapter 143, art. 21A, part 6.

58. G.S. Chapter 143, art. 21A, parts 1–2.

59. Risk-based remediation statutes can be found at G.S. 130A-310.65 through -310.77, and implementing rules are at 15A N.C.A.C. 13C .0301.

60. G.S. 130A-310.9. A final option available to some sites is a “quick-clean” procedure in cases “where soil is the only medium affected and the contamination is limited in extent and/or contaminant levels.” [How to Initiate a Voluntary Cleanup](#), N.C. DEP’T OF ENV. QUALITY.

61. See generally G.S. 130A-310.68 through -310.74. See also G.S. 130A-310.9 and 15A N.C.A.C. 13C .0302 (administrative agreements); G.S. 130A-310.4(c)(2) and 15A N.C.A.C. 13C .0306(l) (public notice); and 15A N.C.A.C. 13C .0306(c) (yearly reporting requirement).

62. Compare G.S. 130A-310.33 (exclusion from remediation liability) with G.S. 130A-310.73A(c) (responsible party can be deemed liable for additional remediation). Also, the REC Program has no provision comparable to the tax exclusion at G.S. 105-277.13.

63. See [Revised Technical Guidance for Risk-Based Environmental Remediation of Sites](#), N.C. DEP’T OF ENV. QUALITY, at 4; see also G.S. 130A-310.68(b), -310.71(b), (d).

The REC process may make some properties safe for their intended uses (and thus developable) without the additional time and processes involved in obtaining a brownfields agreement. On the other hand, sites that need more remediation, where the tax exclusion is significant, and whose investors or lenders require the liability protection may be better suited for the state brownfields program.

Benefits and Challenges of Brownfields Programs

Multiple options are available to local governments and other landowners who wish to redevelop contaminated property. Should an entity pursue a US EPA brownfields grant or a state brownfields agreement? Or neither? Or even both?⁶⁴ Each program has its benefits and challenges, and a few key factors can determine a brownfields project's success. When evaluating the suitability of a brownfields program, developers and other stakeholders should consider:

- **Operating restrictions.** Federal grants may have a number of prerequisites or impose conditions on the project, such as following federal procurement standards for hiring contractors.⁶⁵ If the project cannot easily incorporate or comply with these requirements, a grant may not be worth the time and effort. North Carolina brownfields projects will often require land use restrictions, but these can be more flexible and tailored to a particular site than the federal limitations.⁶⁶
- **Property tax benefit.** Will the owner benefit from the North Carolina brownfields tax incentive? Property tax exclusions will be more valuable to some kinds of developers and property owners than others.
- **Liability protection.** In some cases, the North Carolina Brownfields Program's liability protection is a prerequisite for obtaining financing.⁶⁷ Where a site has unknown but likely low-level contamination, federal assistance may not be as important as a brownfields agreement's liability protection.
- **Prospective use of funds.** Different types of federal grants focus on distinct aspects of a redevelopment project, so owners and developers should pursue the grant that best meets their needs. A large site or abandoned industrial park may require assessment of many samples, making an assessment grant particularly

64. For instance, the Wilmington Water Street project benefitted from both federal assessment grants and the North Carolina Brownfields Program. *See* Water Street Deck Brownfields Property Application (hereinafter Wilmington BPA), NC DEQ file ID 682438, facility program ID 19046-15-065 (June 2015), obtained from NC DEQ Laserfiche database records, at 8.

65. *See* 2 C.F.R. § 1500.10(b).

66. *See* New Hanover County, N.C., *Water Street Deck Notice of Brownfields Property*, REGISTER OF DEEDS BOOK 6015, at 985–87 (restricting property to retail, high-density residential, and office uses and limiting soil disturbance, among other provisions).

67. The prospective developer of the Dillon Station Redevelopment Project, a successful brownfields redevelopment in downtown Raleigh, stated that “the liability protection provided by the Brownfields Agreement” was a prerequisite to obtaining financing and would be “vital” to securing commercial tenants. Dillon Station Redevelopment Brownfields Property Application, NC DEQ file ID 688437, facility program ID 18056-14-092 (Nov 2014), obtained from NC DEQ Laserfiche database records.

Warehouse and Bus Facility Becomes New Food Hall

Raleigh, Wake County



The old Stone's Warehouse and bus maintenance facility in downtown Raleigh. Photo from Division of Waste Management, [Success Stories: Stone's Warehouse Project](#), N.C. Department of Environmental Quality.



As part of Raleigh's downtown revitalization efforts, the old warehouse site was remediated and converted into Transfer Food Hall. Photo by Shaun Horton.

History: Raleigh's downtown has undergone a twenty-first century renaissance. For many years the central business district experienced blight and neglect, but between 2003 and 2014, investors stepped in and spent billions of dollars to rehabilitate and modernize the downtown area.¹ Prior to that time, the Stone's Warehouse property on the southeast side of Raleigh's downtown was historically used for storage and as an intercity bus maintenance facility.² The site's previous uses made project investors wary of potential environmental contamination.³ The city used a request for proposal process to identify a development partner. When applying to the North Carolina Brownfields Program, the developer identified the program's liability protection as a key that would unlock funding from a major bank and other potential investors.⁴

Key Elements: The City of Raleigh performed much of the environmental remediation using federal Environmental Protection Agency assessment and cleanup assistance, giving the developer a head start on redeveloping the property.⁵ The city also rezoned the property from a planned development district (related to a prior project that never materialized) to a mixed-use district that would provide greater flexibility for the development and be consistent with the city's comprehensive plan.⁶ The city then sought proposals from developers rather than attempting to devise its own development strategy.

Status: The request for proposal winner redeveloped Stone's Warehouse into Transfer Food Hall, now a popular home to several small food businesses in Raleigh's Moore Square District. The surrounding district has been a recent focus of some of Raleigh's overall downtown revitalization efforts.⁷

1. See City of Raleigh, Request for Proposals for the Purchase and Redevelopment of City-Owned Property in Downtown Raleigh, NC: The Stone's Warehouse Site, NC DEQ file ID 273190, facility program ID 20044-16-092 (August 2014), obtained from NC DEQ Laserfiche database records, at 6.

2. Wake County, N.C., *Stone's Warehouse Brownfields Agreement, Exhibit A to Stone's Warehouse Notice of Brownfield Property*, at 4, REGISTER OF DEEDS BOOK 17153, at 1900.

3. See Stone's Warehouse Brownfields Property Application, NC DEQ file ID 273197, facility program ID 20044-16-092 (June 2016), obtained from NC DEQ Laserfiche database records, at 11 (noting failure of an earlier development effort).

4. *Id.* at 12.

5. Wake County, N.C., *supra* note 2, at 6–7, REGISTER OF DEEDS BOOK 17153, at 1900.

6. City of Raleigh, *supra* note 1, at 4–5.

7. See [Moore Square](#), DOWNTOWN RALEIGH ALLIANCE.

attractive. Another site already may have well-defined areas of contamination but need remediation assistance to make the project economically viable.

- **Timing of the federal brownfields grant cycle.** There is a limited time frame for applications and awards each year for federal brownfields grants. If a project is not at the proper stage when US EPA deadlines arrive, potential applicants will have to wait another year to apply for a grant.

These and other factors are discussed in more detail below.

Benefits

The benefits of obtaining a federal brownfields grant are probably obvious: the injection of these funds will offset the increased cost of developing property that is environmentally contaminated. The benefits of a North Carolina brownfields agreement may not be as immediately apparent but can directly improve project economics and enhance investor interest. These benefits include risk-based remediation, limited liability protection, and a tax exclusion.

Risk-Based Remediation

Participating in a brownfields agreement allows a project to utilize risk-based remediation: contamination on the brownfields site must be remediated to a standard that is safe for its intended use rather than to more stringent “unrestricted use” standards.⁶⁸ Because any properties in the North Carolina Brownfields Program must be safe for their intended use, the appropriate level of cleanup will vary greatly from one project to the next. For example, the site of a former electronics manufacturer will require less cleanup to be safe for reuse as a warehouse than would be required to make it safe to redevelop as a garden apartment complex. Risk-based remediation can present a significant cost savings to the prospective developer without creating a significant risk of harm to the public or the environment.⁶⁹

Limited Liability Protection

Another benefit of participating in a brownfields program is limited liability protection. A prospective developer is not liable to the state for remediation beyond what is required by the brownfields agreement as long as that developer complies with all of its agreement obligations and does not conduct or direct any activities that would increase risks to public health or the environment.⁷⁰ This liability protection is limited, however; it does not extend to third-party claims such as those for property damage or personal injury. In addition, it applies only to the contamination identified in the agreement; any newly discovered contamination may require revisiting the brownfields agreement and further cleanup.⁷¹ Despite these limitations, the liability protection provided by the brownfields program can be of great value in addressing the risks of developing a property that has been—or is suspected to be—contaminated.

68. G.S. 130A-310.32(a)(2) (prospective developer to demonstrate property will be safe for its intended use rather than submit to unrestricted use standards) and 130A-310.31(5) (defining *unrestricted use standards*). North Carolina groundwater standards are found at 15A N.C.A.C. 02L .0202.

69. For more on the basics of risk-based cleanup, see [Cleaning Up Brownfield Sites](#), U.S. ENV. PROT. AGENCY.

70. G.S. 130A-310.33.

71. See G.S. 130A-310.33(c)(2).

Limited liability protection, combined with assessment and planning during the brownfields program process, reduces the risk of unforeseen cleanup costs. As discussed above, risk is a key element of a developer's calculus, as land development is an uncertain business where most anything can happen over the course of a project.⁷² If a project is considered too risky, lenders and investors will avoid it and seek something with fewer unknowns. Brownfields assessment and liability protection shrink the scope of the unknown in property redevelopment. Other parties can access a reliable and reasonably fulsome description of site conditions and see that an environmental management plan is in place to remediate any remaining contamination. In broad terms, the risks are more evident and the deal is easier to underwrite, making it more appealing to lenders and investors. Brownfields program applicants often cite this exact factor in their applications. As the prospective developer for the Water Street project in Wilmington put it:

“Potential developers looking to take ownership of the site have been reluctant because of the risks associated with the contamination present By acquiring a Brownfields Agreement the financial responsibilities associated with the contamination can be quantified . . . thereby allowing the successful redevelopment of this property.”⁷³

Similarly, when applying for a brownfields agreement for the site of the former Kesler Mill, the City of Salisbury stated that “[o]btaining political and capital support for redevelopment would be difficult or impossible without quantification of risk afforded by the Brownfields assessment. . . .”⁷⁴ See the project summaries in the call-out boxes throughout this publication for more details about these and other redevelopment projects.

Tax Exclusion

Improvements made to brownfields properties under a North Carolina brownfields agreement qualify for a partial exclusion from ad valorem property taxes. This exclusion lasts for a period of five years once the improvements are completed or the brownfields agreement is finalized, whichever is later. In the first year for which the property qualifies for the partial exemption, 90 percent of the value of the improvements made to the property can be excluded. This exemption drops to 75 percent in the second year, 50 percent in the third year, 30 percent in the fourth year, and 10 percent in the fifth year.⁷⁵ This exclusion has real value, particularly for large commercial properties that will otherwise bear significant tax burdens once the exclusion expires.

Challenges

Although brownfields agreements can offer important benefits to many properties, they are not appropriate for every project. Participation in the North Carolina Brownfields Program involves additional cost and time that not every project can absorb. The US EPA awards brownfields grants on a particular schedule that might not match a project's schedule. Furthermore, the grants include additional regulatory requirements that can interfere with project timing and potentially increase costs.

72. For just a few examples of development mishaps, see Neal Hefferren, [Commercial Real Estate Deals Gone Bad and CRE Horror Stories](#), PROPERTYMETRICS BLOG, July 14, 2017.

73. Wilmington BPA, *supra* note 64, at 11.

74. Kesler Mill Brownfields Property Application (hereinafter Kesler Mill BPA), NC DEQ file ID 732632, facility program ID 19050-15-080 (July 2015), obtained from NC DEQ Laserfiche database records.

75. See G.S. 105-277.13.

Replacing the Old Mill

Salisbury, Rowan County

History: The former Kesler Mill/Fieldcrest Cannon Plant #7 textile mill, including a mechanical and woodworking shop and paint storage facility, operated in Salisbury from 1895 until its closure in 2000.¹ The mill, once an economic driver for the area, was demolished and the property remained unused for years.² It had become an eyesore and a haven for stray animals and criminal activity³ by the time the City of Salisbury acquired it in 2019.

Key Elements: The city worked with the UNC-Chapel Hill School of Government Development Finance Initiative (DFI) to plan for reuse of the site and applied to participate in the North Carolina Brownfields Program. It has also taken advantage of federal Environmental Protection Agency assessment and remediation grants to remove large amounts of debris and contaminants and begin a community outreach process.⁴

Status: The city engaged DFI in January 2023.⁵ As of late that year, the city had completed cleanup and held community input sessions to assist with plans for the site.⁶ The city's goal is to return the site to a productive use that benefits the community and attracts investment.⁷

*Note: The Kesler Mills redevelopment project remains in progress at publication time.*⁸



Vacant lot that was previously the site of the Kesler Mills textile plant in Salisbury.
Photo by Ncpappy, Wikimedia Commons.

1. See Kesler Mill Brownfields Property Application (hereinafter Kesler Mill BPA), NC DEQ file ID 732632, facility program ID 19050-15-080 (July 2015), obtained from NC DEQ Laserfiche database records, at 9-11; Theo Buerbaum, [Kesler Cotton Mill](#), EDITH CLARK HISTORY ROOM.

2. Kesler Mill BPA, *supra* note 1, at 11–12.

3. Kesler Mill BPA, *supra* note 1, at 12.

4. Liz Moomey, [Salisbury secures \\$500,000 EPA grant to clean up former mill](#), SALISBURY POST, May 6, 2020. See also Kesler Mill BPA, *supra* note 2, at 7.

5. [Kesler Mill Redevelopment Project](#), THE CITY OF SALISBURY, N.C.; Brad Dountz, [Salisbury to work with outside partners on Kesler Mill redevelopment project](#), SALISBURY POST, Jan. 5, 2023.

6. Kesler Mill Redevelopment Project, *supra* note 5.

7. Kesler Mill BPA, *supra* note 1, at 12.

8. For a video about the project, see City of Salisbury, N.C., [City of Salisbury Brownfields Program—Kesler Mill](#), VIMEO.

Costs

North Carolina brownfields projects include at least two significant costs that standard development projects do not:

- **Program fees.** The North Carolina program charges \$8,000 in total fees for its standard process. Many applicants, however, take advantage of the expedited review under the Brownfields Redevelopment Section's Redevelopment Now option, which costs an additional \$22,000 (for a total of \$30,000) for entry into the program.⁷⁶
- **Assessment and remediation.** Hiring an environmental consultant to review and assist with the remediation and brownfields process can cost approximately \$40,000 to \$60,000 for the least-contaminated sites to hundreds of thousands of dollars for larger or more heavily contaminated sites.

Time to Completion

In the world of land development, time is literally money. Because successful brownfields projects often take years to get from drawing board to completion, they incur inconveniences and costs that other infill projects do not. Several factors contribute to the additional time necessary for brownfields redevelopment:

- **Financing and carrying costs.** Developers often rely on a combination of equity investment and debt financing to fund their projects. Because they are subject to significant “carrying costs”—debt service (i.e., paying off the loan), option agreements, and property taxes, for example—developers usually are spending money on a project whether it is progressing or not. This additional time can make these projects more economically complicated than would otherwise be the case.
- **Processing time.** Obtaining a letter of eligibility from the NC DEQ Brownfields Redevelopment Section takes weeks or months, and development of the EMP and complete brownfields agreement can take over a year. This is in addition to the time needed for completion of any development project. The benefits of the brownfields program help offset the cost of the extra time required, but the challenge of added delays remains significant.
- **Grant application and award cycles.** As discussed above, the US EPA generally accepts grant proposals and awards those grants in one cycle per year. Thus, an application that just misses the deadline could mean no grant, and failure to obtain a grant could collapse a public project or public-private partnership that relies on obtaining grant funding. Similarly, a discrepancy between the project schedule and the brownfields application cycle could result in significant delays or worse. Aligning a potential project timeline with the grant cycle calendar is therefore vital when planning a brownfields redevelopment.

Two of the case study projects illustrate the often-extensive length of time needed to complete these redevelopments. The developer of Wilmington's Water Street parking deck

⁷⁶ See [Brownfields Program Guidelines and Issue Resolutions](#), *supra* note 51, at 3–5. See also G.S. 130A-310.39 (authority for setting fees for brownfields program).

submitted its brownfields application in June 2015 and signed the brownfields agreement in September and October 2016, but the first apartment residents did not move in until spring 2020.⁷⁷ The Garner Economic Development Corporation acquired its property in 2011,⁷⁸ executed its brownfields agreement in September 2013,⁷⁹ and finally had a finished project with an owner ready to hire workers in 2020.⁸⁰

Restrictions

The federal brownfields program includes the following significant operational and procedural requirements:

- quality assurance requirements for assessment sampling,⁸¹
- consultation with the US EPA regarding potential effects on historic resources and threatened or endangered species,⁸²
- assessment of property in accordance with “all appropriate inquiries” standards for environmental assessment,⁸³
- compliance with federal procurement standards,⁸⁴
- preparation of documents related to analysis of alternatives and community-involvement planning,
- compliance with Occupational Health and Safety standards, and
- progress reports to be submitted to the US EPA.⁸⁵

Even under the broad umbrellas of assessment, remediation, and so forth, the purposes for which brownfields grant funds can be used are limited.⁸⁶ These regulatory burdens may be negligible for some projects but for others may outweigh the grant’s benefits.

A North Carolina brownfields agreement typically includes land use restrictions, requires a post-agreement annual update, and may include other land use or engineered controls. These burdens are often less demanding than those of federal grants, but they should still be considered in any assessment of a brownfields redevelopment project.

77. See Caroline Rutledge, [River Place: Unveiling the Port City’s Newest Gem](#), WILMINGTON MAGAZINE, July 7, 2021; New Hanover County, N.C., Water Street Deck Brownfields Agreement, Exhibit A to Notice of Brownfields Property, at 5, 20, REGISTER OF DEEDS BOOK 6015, at 984.

78. Wake County, N.C., REGISTER OF DEEDS BOOK 14572, at 2740.

79. Wake County, N.C., *Exhibit A to Notice of Brownfields Property*, at 26, REGISTER OF DEEDS BOOK 15443, at 730.

80. Zachery Eanes, *Amazon now hiring 3,000 at Garner fulfillment center*, THE NEWS & OBSERVER, July 22, 2020, at 6A.

81. See 2 C.F.R. § 1500.12.

82. See Endangered Species Act § 7(a), 16 U.S.C. § 1536; National Historic Preservation Act § 106, 54 U.S.C. § 306108; see also Brownfields, [Programmatic Requirements for Brownfield Grants](#), U.S. ENV. PROT. AGENCY.

83. See 40 C.F.R. part 312. “[A]ll appropriate inquiries” is also the standard federal law requires a property owner to meet to qualify for innocent landowner protections under CERCLA. See *supra* note 14 and accompanying text.

84. See 2 C.F.R. § 1500.10 and part 200, subpart D.

85. See [Programmatic Requirements for Brownfield Grants](#), *supra* note 82.

86. See US EPA FAQs, *supra* note 37, at 43.

Factors Contributing to Project Success

What separates successful brownfields projects from those that fail? The projects described in this bulletin and other successful redevelopments share a few common characteristics: stakeholder coordination, an attractive property, and a project schedule and budget that can absorb the time commitments required by brownfields program processes.

Coordination with Stakeholders

Any development project requires a team of professionals—engineers, consultants, project managers, lawyers, contractors, and others. Some of these professionals may be available in house, but for brownfields redevelopments local governments typically must find a suitable development partner. Various brownfields and economic development programs offer multiple sources of aid for a particular project. Some communities, such as the City of Wilmington, have partnered with the UNC-Chapel Hill School of Government Development Finance Initiative.⁸⁷ Others have used private partners, as in the redevelopment of Stone’s Warehouse in Raleigh.⁸⁸ Many local governments identify these partners at different times and by different means. The Town of Garner, for instance, began remediation on its own and engaged its development partner later, while the City of Raleigh found its partner for the Transfer Station/Stone’s Warehouse project through a request for proposal process prior to beginning the brownfields application process.⁸⁹ For more details about these projects, see the case study summaries. A local government should ensure that it and a potential partner share similar goals for and approaches to redeveloping a brownfields site; failure to do so sets the stage for unmet expectations and project collapse.

Property Value

If a brownfields property would be substantially valuable if not for the presence of environmental contamination, project success is far more likely. The case studies in this bulletin include several projects that were located either on a waterfront (in Wilmington and Washington) or in or near a downtown area (in Raleigh and Salisbury). Downtown areas and waterfronts are not the only possible locations for successful redevelopment, however; the former snack factory property in Garner was valuable in part because of its proximity to a major interstate.⁹⁰

87. See Dev. Fin. Initiative, [Building Reuse and Downtown Revitalization \(Wilmington, NC\)](#), UNC SCH. OF GOV’T.

88. See generally Stone’s Warehouse Brownfields Property Application (hereinafter Stone’s Warehouse BPA), NC DEQ file ID 273197, facility program ID 20044-16-092 (June 2016), obtained from NC DEQ Laserfiche database records.

89. Compare Notice of Pending Change of Ownership, Former ConAgra Foods, Inc., Facility, NC DEQ file ID 1088798, facility program ID 15036-11-092 (March 2018), obtained from NC DEQ Laserfiche database records (notifying NC DEQ of transfer of brownfields site to private entity that would resume development under existing 2013 brownfields agreement), with Stone’s Warehouse BPA, *supra* note 88, at 7-8 (referencing City of Raleigh’s request for proposals for a development partner to serve as prospective developer).

90. See ConAgra Brownfields Property Application Appendix B (Wake County Economic Development “Shovel Ready Sites” brochure), NC DEQ file ID 1088798, facility program ID 15036-11-092 (Feb 2012), obtained from NC DEQ Laserfiche database records.

Wise Use of Time

As discussed above, time is money in the development realm, and brownfields projects typically demand a lot of time. One of the most efficient ways to make a project more economically feasible, particularly when other partners may be involved, is to begin assessment, remediation, and planning efforts as soon as the decision is made to redevelop the property. This process includes looking for partners and professionals, applying for US EPA brownfields grants, and working with the NC DEQ Brownfields Redevelopment Section. The Town of Garner, for example, began its redevelopment of an old snack factory site when the town's Economic Development Corporation acquired the property in 2011.⁹¹ NC DEQ and the town executed the brownfields agreement in 2013.⁹² When the town eventually found a development partner in 2018, that partner developed the property and was in a position to begin hiring by July 2020.⁹³ Because the town started the remediation and redevelopment process on its own, it absorbed two years of brownfields assessment, negotiation, and remediation planning time. The time savings enhanced the project's appeal to investors and reduced the developer's schedule by half. The development that resulted from Garner's efforts has created a new source of jobs, tax revenue, and economic growth for the region.

Conclusion

A brownfields property can be a real problem for both developers and local governments. Contamination by hazardous materials creates the prospect of extensive remediation and a risk of liability that inhibits potential redevelopment. State and federal brownfields redevelopment programs can help address these issues. Each program has its virtues and drawbacks; whether to pursue a brownfields program (and if so, which one) will depend on site location and characteristics, local finances, and time constraints. When successful, brownfields redevelopment projects can turn eyesores into treasures. Even in the best of circumstances, however, redevelopment of a contaminated site can be a time-consuming and laborious process. Ultimately, each owner of a brownfields site must examine the benefits and disadvantages of state and federal programs to determine which program—if any—is right for a particular project.

91. Wake County, N.C., *supra* note 78, at 2740.

92. *See* Wake County, N.C., *Exhibit A*, *supra* note 79.

93. *See* Wake County, N.C., REGISTER OF DEEDS BOOK 17211, at 1194 (deed transferring property from Town Economic Development Corporation to project developer); Eanes, *supra* note 80, at 6A (regarding announcement of hiring).