REMEDIATING & REDEVELOPING BROWNFIELDS IN NEW JERSEY

A GUIDE FOR MUNICIPALITIES & COMMUNITY ORGANIZATIONS

2021 EDITION
Remediating and Redeveloping Brownfields in New Jersey
The Center for Creative Land Recycling and the Association of New Jersey Environmental Commission have teamed up to update our 2014 Remediating and Redeveloping Brownfields in New Jersey publication. At this time of dual economic and health pandemics, we strive to support better brownfield redevelopment. This means working to understand historic and contemporary inequities and taking action towards climate mitigation, developing the tools and practitioner networks that support holistic land reuse approaches, and delivering timely and contextual information so that we can stay ahead of the curve and move forward together. Please be in touch with CCLR or ANJEC if you have any questions or if we can support your redevelopment efforts.

About the Center for Creative Land Recycling (CCLR)
The Center for Creative Land Recycling is the leading national nonprofit dedicated to transforming communities through land recycling. This means converting abandoned or vacant commercial and industrial properties to assets that benefit the community, create jobs, and generate new tax revenues. We help transformations happen by educating and convening communities, government agencies, and the private sector to create optimal conditions for reinvestment. Over the past 20 years, we have assisted in bringing millions of dollars in grants to places across the U.S. and trained nearly 10,000 community-oriented specialists through our professional workshops. For more information contact Jean Hamerman at jean.hamerman@cclr.org or visit www.cclr.org.

About the Association of New Jersey Environmental Commissions (ANJEC)
For over fifty years, the Association of New Jersey Environmental Commissions has been a statewide organization that provides leadership, education, and support for environmental commissions and other local boards and public officials, and partners with other organizations to advocate for strong state and regional environmental policy. For more information visit anjec.org.
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All live links are available in the PDF version of this document, which can be found at cclr.org/anjec-2021
Introduction to Redevelopment

Let’s Start at the Beginning: What is a Brownfield?

Brownfields are found across the Garden State in urban, suburban, and rural communities. Many of us drive or walk past them every day, often without knowing. Like many unoccupied properties, brownfields may contain deteriorating buildings with broken glass and litter, becoming unsafe places for children to congregate or an eyesore and economic drag on the neighborhood and municipal tax base. This guide will examine the activities and laws that are involved in transforming brownfields into productive local assets.

NJ state law (N.J.S.A. 58:10B-23.d) defines a brownfield as “any former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of a contaminant.” A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. (Note: Brownfields are a large class of properties, not to be confused with Superfund/National Priority List sites. Superfund sites generally have more complex or dangerous contamination problems and are overseen by the U.S. Environmental Protection Agency (U.S. EPA)). The 220+ Superfund sites in New Jersey, in various stages of assessment, cleanup, delisting or monitoring, are listed on EPA’s website.

Common examples of brownfield properties are former manufacturing, processing or transportation facilities, dumps, gas stations, and dry cleaners. The unknown extent of the contamination, and therefore the liability and cleanup costs, make the property unattractive to potential buyers and redevelopers.

Impacts of Brownfields

Brownfields have many negative effects:
- Pollutants on a particular site may affect air, water, and soil and may present a risk to the surrounding area.
- Activity that disturbs the site can expose workers, visitors, nearby residents, or trespassers to toxic substances through contact, inhalation, or ingestion.
- Unsafe structures and conditions present physical health hazards, especially for children who may use the site as a place to play or explore.
- The property is a drain on the local economy since it generates limited or no tax revenue. The vacant or deteriorating condition of the site may also have a negative economic and social impact on the surrounding neighborhood and municipality.

Brownfields Redevelopment Benefits

Neighborhoods and municipalities benefit when brownfields are cleaned up and redeveloped. In addition to the health and ecological benefits of removing hazardous substances, the cleanup and reuse of sites that have already been disturbed takes development pressure off open lands that perform important ecological, agricultural, or recreational functions for the community. In addition, a brownfields site in a community that is lacking open space or recreational resources might be converted, after cleanup, into a much needed municipal park or public space.

Many older manufacturing and commercial facilities have good redevelopment potential because of their commercial-scale water and sewer infrastructure and proximity to transportation systems and a workforce. Reinvesting in these properties can be a catalyst to improve the quality of life for the surrounding neighborhoods, providing job opportunities, removing blight, and increasing the tax base.

An EPA-sponsored study by the George Washington University, (Public Policies and Private Decisions
Affecting the Redevelopment of Brownfields: An Analysis of Critical Factors, Relative Weights and Area Differentials; 2001) found that for every one acre of brownfields that are redeveloped, 4.5 acres of greenfields are saved from development. An EPA-sponsored study by Duke University School of Economics (Estimating the Impacts of Brownfield Remediation on Housing Property Values; 2012) concluded that when brownfield sites are remediated, local property values adjacent to the remediated property may increase as much as 12.8%.

Brownfields and Open Space

While many brownfields remediation projects result in residential and commercial building, state and local officials have shown a growing interest in turning brownfields into green spaces. Urban parks and playgrounds serve as economic assets since they make neighborhoods more attractive, increase local property values and attract additional property investments from residents and businesses. Former industrial and waste disposal sites are often located along rivers, and these types of brownfields offer potential as, for example, part of a river greenway for trails and wildlife habitat. Despite their contamination, many waterfront sites have grown over and are already providing scarce habitat in urban areas.

When brownfields sites are “recycled” into parks or preserved open space, communities can benefit from improved water quality and community health, increased recreation and tourism, and an improved quality of life. In the NY/NJ Baykeepers’ Brownfields to Greenfields paper, the Wildlife Habitat Council cites over a dozen benefits of implementing ecological enhancements during the remedial process and as a final end use: attracting wildlife, enhancing natural attenuation and biodegradation remedies, controlling dust, buffering stream banks, improving groundwater discharge, providing habitat or harvestable resources (e.g., community gardens), and providing environmental education opportunities.

The Redevelopment Process

It is important to understand that brownfield redevelopment has two distinct components – the remediation (cleanup) and planning and development of a new use on the site. Although these two processes are usually combined into one redevelopment project and can often influence each other in important ways (e.g., the type of proposed use can dictate cleanup levels and site controls), they are regulated by different laws and entities. The site contamination investigation, cleanup plan, implementation, and final closeout are carried out under State of New Jersey regulations, now implemented for the most part by private NJ Licensed Site Remediation Professionals.

What can be built on the site after cleanup, and how, is largely determined by municipal zoning ordinances and/or a redevelopment area plan (under the State’s Local Redevelopment and Housing Law). The municipal land use board (and redevelopment agency, in a redevelopment area) will review the site use, and development will be overseen by local building officials.

Key Stakeholders & Their Roles

Who Are the Key Players in Brownfield Redevelopment?

- Person responsible for conducting remediation (PRCR) or non-liable voluntary party undertaking remediation for redevelopment or other purposes
- Neighbors, local citizens, and community groups
- Property owners
- Licensed Site Remediation Professionals (LSRPs)
- Prospective buyers and developers
- Lenders and investors
- Other professional support (attorneys, realtors, planners, architects, PR firms)
- Government (municipal, county, and state)
Role of Municipalities

Municipal Land Use Planning

New Jersey’s Municipal Land Use Law gives municipalities the power to develop their vision for future land use in their towns through the municipal master plan, adopted by the planning/land use board. The municipal government implements that vision by passing zoning ordinances, which specify the uses and intensity of development permitted in districts. Through this process a municipality can analyze some or all of its brownfields properties, develop a vision for their reuse, and adopt zoning that helps to implement that vision. For example, a former industrial site or cluster of sites could be rezoned so that any future development would be consistent with surrounding uses – such as a particular type of residential or commercial use.

Designation of Redevelopment Areas

The New Jersey Local Redevelopment and Housing Law allows municipalities to designate blighted properties or clusters of properties as an “area in need of redevelopment.” The designation is meant to facilitate the redevelopment of properties that have conditions that make them unlikely to be developed through normal market processes. The law allows a municipality much greater latitude to specify what uses it desires in the area, to designate redevelopers for individual projects, and to provide financial incentives in the form of tax abatements and Redevelopment Area Bonds for the redeveloper(s). Many brownfields areas in New Jersey are designated as, or incorporated into, redevelopment areas.

Public-Private Partnerships

Municipalities can work out a cooperative agreement with a private developer to provide a source of income that will help the developer recoup his/her outlay in some aspect of the project. For example, a municipality could contract with a developer who builds a municipal public parking structure to receive income from the use of the deck. Or a developer might build a facility that will be leased by the municipality. A municipality can also contribute a parcel of land to a redeveloper or sell it at a reduced price, in “trade” for the developer incorporating a desired public benefit into a project.

Property Owner Outreach

Where brownfield properties have not been abandoned, the property owner should be brought into discussions about future use. Property owners can stall any plans envisioned by others for the property, so it is worth the time and effort to work cooperatively with them when possible.

If the site is contaminated, the owner most likely has an “affirmative” obligation under the Site Remediation Reform Act (SRRA) of 2009 to remediate any contamination that exists on the site within a prescribed timeframe, but the owner may not have resources to conduct the required environmental work. The property itself may be the owner’s largest asset, and he/she may believe that continuing a marginal use, or no use, of the property is the best strategy for the present time. Unless the property is the subject of municipal or county eminent domain, the property owner must be included in discussions about the site’s future, covering topics such as compliance with taxes and local ordinances, cleanup funding, community issues, and potential redevelopment area designation.

Acquire Properties

A municipality can, of course, decide to obtain or retain ownership of a brownfield, remediate it and develop it for a municipal and/or public use – as a park, civic facility, parking structure, municipal public works building, library, or public housing. The municipality might also elect to acquire a derelict property through either redevelopment law via eminent domain proceedings or through tax foreclosure, or clean it up and offer it for sale to a developer.
Access Government Resources and Assistance

A municipality or its redevelopment agency can be a great asset in networking and accessing government resources that will facilitate cleanup and redevelopment of a brownfield. Local governments are eligible for most, if not all, U.S. EPA and state brownfields grants. In communities where both private sector interest and land values are low, access to public funds can put the local government and the community in the driver’s seat, not only for the assessment and cleanup of a property, but also ultimately for the identification and selection of a developer.

Role of Licensed Site Remediation Professionals (LSRPs)

The Site Remediation Reform Act (SRRA) of 2009 gave the responsibility for planning and implementing remediation projects in the state of New Jersey, with some exceptions (e.g., Federal facilities, EPA or NJDEP lead Superfund sites) to LSRPs. The LSRP is hired by the remediating party (Person Responsible for Conducting Remediation or “PRCR”) to oversee all day-to-day evaluation, planning and implementation of cleanups.

By statute the LSRP must comply with the SRRA's implementing regulations, the Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C), the Technical Requirements for Site Remediation (N.J.A.C. 7-26E) and the Regulations of the New Jersey Site Remediation Professional Licensing Board (N.J.A.C. 7:26I).

Keeping protection of public health, safety and the environment as their top priority, the LSRP will shepherd the site all the way through to issuance of the completion report, called a Response Action Outcome (RAO) which certifies the remediation was conducted in accordance with all applicable rules, regulations and guidance. In addition to retaining and paying the LSRP for their services, the remediating party must also pay certain fees to the state. Fees are based on site-specific characteristics (number of areas of concern and environmental media impacted). Fees can be up to a few thousand dollars per year for the duration of the cleanup, though municipalities may request a waiver due to budget constraints.

How to Hire an LSRP

The NJDEP has a list of LSRPs. The LSRPA also has a Member Directory and Lookup Search for assistance finding a LSRP. A directory of New Jersey's Licensed Site Remediation Professionals is located here. It is important to interview eligible candidates to find out their past experience on similar projects, professional credentials and certifications, hourly fees, communication skills, references, and insurance coverage. The LSRP can prepare a case file, review an environmental permit, research environmental concerns and conduct a preliminary assessment (PA) to determine if contamination is an issue. An LSRP should also be able to guide you through the regulatory maze and address inquiries from the public about the cleanup. Request that the consulting firm prepare a written proposal (including a detailed cost estimate and schedule) so you know exactly what will be accomplished during the project. If a consulting firm is not willing to prepare a written proposal, shop around for another firm. A number of small and large consulting firms located around the state can perform environmental site assessments and investigations.

Role of Community Groups

While brownfields redevelopment requires an array of professional players, equally critical is the involvement of people who live and work in the area. In rare situations, a community nonprofit organization raises funds or partners with other entities to acquire a
brownfield site, clean it up, and develop it into a community resource such as a park or affordable housing. But in most cases, the community organization’s role is to give voice to the problem and collaborate with the municipality, calling attention to the potential impacts of a brownfield area and pressing for action. This collaboration includes participating in municipal land use planning—visioning and discussions about the appropriate reuse of the brownfield once remediated. Through zoning designation of redevelopment areas, and acquisition, a municipality has the power to be an active player in what becomes of its brownfields. Ideally, this process is informed by an active, involved community.

Community-building organizations, regardless of their current activities, can use brownfields as an issue to bring disparate groups to a common table to promote long-range, comprehensive redevelopment planning. Brownfields can be the reason that government, community groups, and private interests such as developers and banks work together for a common good. Collaborative approaches include community visioning, strategic planning, and charrettes that involve all stakeholders, in discussing development scenarios. A strong community vision and plan can result in a project that benefits the neighborhood.

All local land use (zoning) and redevelopment planning in New Jersey must have public notice and hearings, but the community has to be vigilant and proactive to be aware and involved when these processes are occurring. If a municipality has not already developed specific redevelopment areas or plans for its brownfield sites, community groups and the public can work to promote and have input into these plans. By not doing so, they miss an opportunity to improve their community, and they may be unhappy with the outcome of the redevelopment that occurs.

Brownfields reuse planning is a collaborative process that engages diverse stakeholders and facilitates the process of identifying a proposed re-use for a brownfields site, and getting community buy-in. All neighborhood assets are considered in order to develop a recommendation that enhances livability, prosperity, and equity. Effective planning builds a vision of where the community wants to head, not where it currently is or where it has been in the past. Review Groundwork USA’s resource, Planning with an Eye Toward Implementation: What All Communities Can Learn from Using a Brownfields Area-Wide Planning Approach to help you develop your plan.

Public Notice and Contaminated Sites

The NJ Department of Environmental Protection (NJDEP) has established rules for public notification within the Administrative Requirements for the Remediation of Sites (ARRCS). ARRCS requires that public notification be conducted 14 days prior to commencing field activities associated with the Remedial Action (RA). However, NJDEP strongly encourages earlier public notice in the Remediation Investigation (RI) phase, and intends to amend the ARRCS rule accordingly. Public Notification includes signs or notification letters, and in some cases where contamination has migrated off site into the soil or into groundwater, fact sheets are required. Public notice must include contact information for the remediating party and the LSRP.

Pursuant to ARRCS (N.J.A.C. 7:26C-1.7(o)), the Responsible Party for a contaminated site and the LSRP for the site, if designated as the responder by the Responsible Party, are required to respond to public inquiries either received by them directly or received by NJDEP and sent to them. Complaints about lack of response to inquiries are handled through NJDEP’s Office of Community Relations. Failure of the Responsible Party to conduct public outreach when required can result in a notice of Violation and a penalty of $10,000. If the designated LSRP does not respond appropriately, the LSRP may be referred to the Site Remediation Professional Licensing Board. Full guidance from NJDEP on complying with public inquiry requirements is available on their website.
Case Study: Trenton, NJ

Community Involvement in Redevelopment of Former Magic Marker/Gould Battery Site

Community efforts to revitalize the Magic Marker site in Trenton, NJ, began soon after the plant shut down in 1989. Isles, Inc., a local nonprofit organization concerned about community health, worked with residents to call attention to the site’s blight, dangers, and potential health threats. The partnership between Isles and local citizens, and their subsequent outreach efforts, drew the attention of the local, state and federal governments. In 1992, NJDEP conducted the first investigation, identifying lead and many other contaminants in soil, surface water, groundwater and sediments.

The Northwest Community Improvement Assn. was formed in 1995 and mobilized additional residents in the area, conducting monthly meetings to address issues and monitor progress. The resulting partnership between the community and local, state and federal government maintained significant momentum, raising awareness and conducting outreach programs with the goal of educating and empowering the community. The City of Trenton foreclosed on the site in 1997 for site control and to allow for access to significant state and federal resources for assessment, investigation and remediation. The city engaged with the community to plan for the future development of the site, resulting in a community-based redevelopment plan for residential and open space. From 2002 to 2008 the City of Trenton managed the remediation of the site, as a Chapter 11 bankruptcy filing relieved Exide, the last viable responsible party, of its liability. In 2003, the neighborhood was designated as a U.S. EPA Environmental Justice Community, and also designated as one of the first Brownfields Development Areas (BDA) by NJDEP. Starting in 2004, 18,000 tons of contaminated soil were removed, mostly hazardous waste due to soluble lead.

There were many challenges associated with this site: land acquisition, redevelopment planning, remediation funding, regulatory compliance, and construction issues. The greatest challenge was accumulating sufficient remediation funding. Funding from numerous sources were used for this project: two U.S. EPA Brownfields Cleanup Revolving Loan Fund grants ($575,000); U.S. EPA Cleanup grant ($200,000); three New Jersey Hazardous Discharge Site Remediation Fund (HDSRF) grants (>222,000); a New Jersey HDSRF Cleanup Grant ($2,522,651); capital funds (>400,000) and 319H (water quality improvement) grant funds ($1,370,000). Designation of the site as a BDA by the State of New Jersey allowed for the final grant of over $2.5 million for hazardous soil disposal.

This project ultimately resulted in the construction of 42 new mixed-income residences on 4.4 acres of land meeting stringent state residential soil cleanup criteria (Catherine S. Graham Square). Approximately 2 acres of clean, revegetated open space and floodway was created that will reduce local flooding by increasing the holding capacity of a new, well-designed Petty’s Run. Project costs for construction ($11.52M), remediation ($3.65M), and stream restoration ($1.57M) totaled $16,540,000. The economic development created by the project is further enhanced by new tax ratables for the 44 new houses. The site won the U.S. EPA Region 2 Phoenix Award in 2011.

This long process demonstrates the value of partnerships, and how the motivation of local residents in a low-income neighborhood can generate momentum that can accomplish great things. The events that led to the cleanup and redevelopment of this site provide an excellent case study in patience and perseverance. The partnership between community and local, state and federal government agencies made a lasting and positive difference. For further information, contact Trenton Brownfields Coordinator J.R. Capasso (jcapasso@trentonnj.org).
Identifying Redevelopment Sites

Preliminary Research

What if the site being considered for redevelopment is suspected of being a brownfield but is not listed on the NJDEP Known Contaminated Sites List? Some preliminary research may help determine the complexity of the site and the feasibility of redeveloping it. Given that the site is a suspected brownfield, there are a number of sources that may reveal preliminary environmental information, including local government records and private database searches. Getting this kind of information can be time-consuming and costly but needs to be done if a municipality or community organization is interested in redeveloping the property on its own. Obtaining this information in advance can also be useful for developing a scope of work and contracting for environmental services. If gathered in accordance with state standards, the contracted consultant can sometimes use the information in the preparation of the Preliminary Assessment and Site Investigation reports. It should also be noted that data sources are not always updated in a timely and accurate manner, and errors and omissions do occur. Finally, one must also be aware that there are contaminated sites yet to be discovered and some sites may exhibit no evidence of prior environmental history, environmental compliance, permits, violations or other records.

Public Information

There are a number of public sources for gaining additional information on environmental conditions. Information on previous investigations and/or reported incidents that may have impacted the site can be obtained from local agencies, such as city or county health departments, fire departments, building departments.

Database Service Providers

Purchasable environmental reports are also available that can later be included as part of the assessment. These services gather risk management information from a variety of sources including government agencies, libraries and public and proprietary services. One of the largest such providers is Environmental Data Resources. The services can also provide historic information, such as historic aerial photographs, Sanborn Fire Insurance Maps, and city directories. These resources should be reviewed in 10 year intervals back to when the site was undeveloped and can reveal extensive details about past uses and/or the environmental impacts to property.

Conducting a Brownfields Inventory

A Brownfields Inventory is an important land use tool. Conducting a comprehensive Brownfields Inventory can serve the following functions:

- Verify that sites of suspected contamination are brownfield sites in need of clean-up;
- As an indicator of areas suitable for specific types of development;
- As a resource during review of planning or zoning requests, and development and other local permits and approvals;
- As a marketing tool to bring redevelopment to a community;
- As a way to prioritize preparation of shovel-ready sites to promote development;
- As a tool for making decisions about placement of infrastructure, roads, sewers, schools, etc.;
- As a resource in preparation of a brownfields element for the municipal master plan;
- As an educational tool for residents to learn more about their community and potential threats to their health and the health of their environment;
- For compliance with requirements of potential funding sources (grants) for assessment and cleanup;
- In order to earn Sustainable Jersey points for Brownfields Inventory and Prioritization.

A Brownfield Inventory includes the names, number, and characteristics of potential brownfield sites. It is an important tool used by Environmental
Commissions, Planning and Zoning Boards, green teams, and municipal staff to track the status of sites, their location, potential contamination, ownership, and redevelopment potential. The Brownfield Inventory should be a dynamic document, updated as additional data becomes available, e.g. when properties are cleaned, redeveloped, sold, or when new properties are identified. Developing a policy to update the list and assigning a responsible person is an integral part of land reuse planning.

To develop an inventory, a green team or municipality can collect information from online lists such as:
- NJDEP’s DataMiner
- NJ-GeoWeb
- SiteMart Database for Brownfield Properties

Then, they can conduct a ‘windshield survey’ - driving by the properties - and solicit input from local officials, tax collector, property owners and realtors.

Mapping the brownfields inventory is a good starting point for identifying a town’s stagnant and potentially contaminated properties. This view allows the town to see the scope of its brownfields problem and, perhaps, to begin to identify opportunities. Prioritization of sites follows the Inventory, and offers additional benefits for communities with multiple brownfield sites. This step will help focus municipal attention on problem sites that pose a significant hazard, are blocking needed redevelopment, or hinder achievement of other community goals. For more information on conducting a brownfield inventory, including data sources and verification, see Sustainable Jersey’s Brownfield Inventory and Prioritization Action.

Site Assessment and Investigation

Community members are usually well aware of a vacant lot or decaying industrial building located in their neighborhood. What additional information do you need to understand the site better?

For starters, past ownership and a description of previous commercial activity may provide clues as to the types of chemicals handled at the site. Many brownfield sites have had multiple owners and users. Talking to neighbors or former employees who still live in the area might help discover past uses. The box on page 9 shows some more common contaminants associated with a particular industry, but the list is not exhaustive, as each site is unique. It is also important to understand that some sites may not be identified as polluted, but that the state has tagged them as brownfields because of their potential to be contaminated based on past use.

For brownfield sites that pose an immediate threat to public health or the environment, contact the NJDEP Environmental Action Line at 1-877-927-6337.

How Clean Is Clean?

If the Site Investigation of the brownfield indicates contamination exceeding state standards, a Remedial Investigation must be conducted to delineate the extent of the contamination. The source of contamination must then either be removed from the site or be controlled by other mechanisms prior to any redevelopment on a site. As mentioned above, the site remediation process is controlled by NJDEP’s Rule, titled Technical Requirements for Site Remediation. The requirements take into account the following four factors:
- type and toxicity of contamination (standards for 163 chemicals);
- potential exposure pathways (ingestion, dermal, inhalation, vapor intrusion, groundwater);
- current and future use (residential and/or non-residential);
- impact on the environment.

In addition, if the Remedial Action leaves contamination in place, state law requires parties involved in the cleanup to place institutional controls (such as deed notices or ground water use restrictions) or engineering controls (such as caps or fencing) via permits established under SRRA on the property to ensure that restricted use of the land is maintained by future generations.
### Typical Industry

- Automotive garages/body shops
- Dry cleaners
- Dye works
- Electrical substations
- Electroplating operations
- Farmlands
- Gasoline stations
- Glass factories
- Hospitals
- Laboratories
- Landfills
- Leather factories
- Manufacturing plants
- Petroleum refining sites
- Pharmaceutical factories
- Plastics factories
- Print shops
- Railroads/rail yards
- Smelter operations

### Potential Contaminants

- Waste oils, paints, cleaners, solvents, scrap metal
- Petroleum products, chlorinated solvents
- Acids, metals
- Polychlorinated biphenyls (PCBs)
- Metals
- Pesticides and heavy metals
- Petroleum products, lead, chlorinated solvents
- Metals
- Formaldehyde, solvents, infectious materials
- Explosive, corrosive, flammable materials
- Metals, organics, PCBs, various wastes
- Volatile organics such as benzene and toluene
- Petroleum products, solvents, metals, PCBs
- Petroleum hydrocarbons
- Lead, solvents, organics
- Polymers, solvents, phthalates, cadmium
- Solvents, inks, cleaners
- PCBs, petroleum products, lead
- Metals such as lead, copper and arsenic

### Case Study: Newark, NJ

#### Collaborative Assistance for Undiscovered Contamination

The owner purchased the Malvern Street site in Newark’s Ironbound district with the hope of converting an empty warehouse into a storefront business. Unfortunately, the owner discovered a 2000-gallon fuel tank lying beneath the property while doing a repair on a sidewalk. The owner’s contacts with the NJ Commerce, Economic Growth and Tourism Commission, NJDEP, and other government agencies helped her navigate the regulatory process and obtain financial assistance through the Petroleum Underground Storage Tank Remediation Upgrade and Closure Fund. With financial assistance and regulatory guidance, the owner was able to convert an empty warehouse into a successful restaurant – Socafé – serving over 400 regular customers.
The Importance of Due Diligence

An important lesson learned from past efforts is that additional contamination might be found at any stage, even when the parties involved believe all the contamination has been identified. Additional areas of environmental concern will add to the final cleanup costs. Undertaking a comprehensive environmental investigation at the start of the project can minimize, if not completely avoid, unexpected costs and delays.

Even at a site that has already received regulatory closure, a thorough investigation can result in the identification of contamination issues that were not previously identified or not addressed in a manner consistent with current standards. For example, only within the past decade have concerns about vapor intrusion (migration of chemicals from soil or groundwater into indoor air) been routinely incorporated into site assessment and remediation protocols. Other examples include 1,4-dioxane and Per- and polyfluoroalkyl substances (PFAS).

Conducting a robust site assessment prior to purchasing a contaminated property is also a necessary step to avoid becoming a liable party under federal or state law.

Two evaluation protocols can be applied when conducting a due diligence assessment to accrue liability protections: the federal protocol and the New Jersey protocol. Any qualified environmental professional can conduct the federal due diligence assessment, called All Appropriate Inquiry. The state due diligence assessment, called a Diligent Inquiry via conducting a Preliminary Assessment/Site Investigation, will have to be conducted by an LSRP (depending on whether or not you are the party responsible for the discharge). Involvement of an LSRP can make the Diligent Inquiry assessment more expensive, so it might be more cost effective to start with the federal All Appropriate Inquiry, which can be augmented by an LSRP to meet state requirements upon a business decision to proceed with site acquisition.

Case Study: Woodbridge, NJ

Brownfields Development Area (BDA) Designation Expedites Remediation of Abandoned Waterfront

A 185-acre parcel on the Raritan River in Woodbridge, New Jersey, approximately 50 acres of the site was used for clay mining from the 1800s through early 1900s supporting the region’s brickmaking industry. Several chemical manufacturers used the site until the mid-1980s. The other portion (approximately 135 acres) was historically undeveloped (including three ponds and 81 acres of jurisdictional wetlands) although highly impacted by historic releases, infill, and disposal of contaminated dredge spoils. After the last chemical manufacturing plant closed in 1986, the heavily contaminated property remained vacant. The property was not desirable to developers due to the cost of remediation and sat vacant for years.

Twenty-six years later, in 2008, the responsible party assumed leadership in the development of a comprehensive remedial approach that has led to the successful remediation and redevelopment of the site.

In 2009, NJDEP, in cooperation with the Town of Woodbridge, established the Keasbey Brownfields Development Area (BDA). Working with the Woodbridge Redevelopment Agency and the Brownfields Development Area Steering Committee as well as partnering with members of the public and private development, plans were drawn up to create some areas of redevelopment and a large area of natural preserved open space allowing for direct public access to the Raritan River. The BDA designation allowed the township to work on coordinated remediation and redevelopment, while being eligible for grants of up to $5 million each year from the DEP’s Hazardous Discharge Site Remediation Fund for investigation and remediation.
When completed, the park will include about 30 acres of nature area with restored wetlands/uplands, more than 7,000 feet of walking trails circling the restored wetlands, 800 feet of boardwalk overlooking natural wetland areas, a viewing platform/overlook at the Raritan River, bird blinds for observing wildlife, interpretive/educational signs, gathering spaces with seating, and bus parking for school outings/trips. This ecological restoration work is ongoing.

Participation in the BDA program facilitated the remedial action. It created an expedited clean-up and redevelopment of this large and complex brownfield site, after decades of lying dormant. The redevelopment is now creating jobs, tax revenue, and space for public recreation while enhancing and preserving ecological resources.

Within a year, the Remedial Action Work Plan (RAWP) was submitted to NJDEP and included on-site containment of approximately 70 acres using a subsurface hydraulic barrier wall, groundwater extraction and treatment and soil cap, with limited excavation and off-site disposal of “hot spots,” requiring the filling and capping of ponds and wetlands. The remedial action also included ecological enhancement, restoration, and preservation of approximately 100 acres of an open water pond feature, wetlands, and enhanced uplands including an “eco park” for public access. The inclusion of the eco-park within the BDA facilitated input from the NJDEP, the U.S. Army Corp of Engineers (U.S. ACE), the Town of Woodbridge and other stakeholders, and expedited the design, permitting and approval of the remedial action.

The RAWP was approved by the NJDEP in March of 2011; the primary NJDEP and U.S. ACE permits were received and remedial activities initiated in June and September of 2011. The soil remedial activities were completed by 2013 and the LSRP issued a Response Action Outcome (RAO) for soil. By 2015, the ecological mitigation and restoration project had completed some significant milestones, including creation of about 10 acres of freshwater wetlands, enhancement of more than 30 acres of freshwater wetlands, enhancement of about 12 acres of tidal wetlands, and planting of over 500,000 herbaceous plants and 12,000 trees and shrubs.
The Process of Remediation

Brownfields cleanup in New Jersey has a language all its own, one that is not always easy to follow. To be an active participant in a brownfield project, a community organization must understand the process in order to review or oversee the work of LSRPs and other consultants or the NJDEP.

The primary document used by LSRPs and other environmental professionals is NJDEP’s Technical Requirements for Site Remediation (N J.A.C. 7:26E or the “Tech Rules”), which describes the minimum requirements needed to investigate and remediate contamination at any site, and the associated Administrative Requirements for the Remediation of Contaminated Sites (N J.A.C. 7:26C or “ARRCS”).

Nine Steps to Brownfield Redevelopment

Determining the State of the Site:

- Step 1: Hire an LSRP unless you are only performing transactional due diligence;
- Step 2: Conduct a Preliminary Assessment (PA) and/or Site Investigation (SI) if necessary;
- Step 3: Determine if the site can realistically meet the needs of all stakeholders involved, including the surrounding community;
- Step 4: With the LSRP, conduct a Remedial Investigation (RI) to determine the extent of the contamination and cleanup costs;

Finding a Viable Path Forward:

- Step 5: Contact NJDEP Office of Brownfield & Community Revitalization, Brownfields Redevelopment Interagency Team (BRIT), EPA Brownfields Program, New Jersey Environmental Infrastructure Trust (NJEIT) and New Jersey Economic Development Authority (NJEDA) to determine available grants and loans available for the project;
- Step 6: Review the information contained in this guide to determine total costs, including liability issues, oversight costs, and potential unforeseen costs;
- Step 7: LSRP prepares a Remedial Action Work Plan (RAWP) if required, consistent with the project design for residential, commercial and/or industrial reuses;

Implementing the Plan:

- Step 8: Prepare the required Deed Notice (DN) (formerly called Declaration of Environmental Restriction). If the RAWP proposes to leave some contamination on the site, obtain applicable remedial action permits (RAPs). If groundwater contamination exceeds NJDEP standards, and obtain the required Classification Exception Area/Well Restriction Area (CEA/WRA). Obtain any other permits necessary;
- Step 9: Complete all remedial activities and obtain a Response Action Outcome (RAO) from the LSRP (site-wide or area of concern specific, as may be applicable).

Note: Whatever remedial action is put into place, three groups of people may have the responsibility of inspecting and maintaining the engineering controls: person responsible for the remedial action, party responsible in any way for the hazardous substances causing the contamination, and subsequent owners/operators of the site. When dealing with institutional controls like caps or deed restrictions, the responsible parties should be fully informed and equipped to handle their responsibilities.
Case Study: Jersey City, NJ

Utilizing Public Funding for Community Green Space

In 1997, Jersey City applied to the U.S. EPA’s Brownfields Area-Wide Planning Program for a grant to do visioning and planning for a degraded area around the former Morris Canal, dominated by rail yards, junk yards, chop shops, and other derelict industrial facilities. All were contaminated to some degree with metals (including hexavalent chromium and PCBs) and petroleum. The community, which had no parkland or athletic fields at the time, wanted to see these sites cleaned up and converted to recreational facilities and open space. It seemed like a pipe dream.

However, over the next several years, the city made a commitment to the project, giving its Redevelopment Agency (JCRA) the go-ahead to investigate 12 sites comprising 13 acres and 47 tax lots. The Agency began to negotiate with owners in 2006, acquiring properties through a combination of tax liens, foreclosure, and outright purchase, using developer contributions, NJ Green Acres money, Hudson County Open Space grants, and Jersey City capital funds. As the project gathered steam, JCRA hosted three community design charrettes in 2008, creating a plan for a park that, when finished, would be the city’s largest.

After acquisition, the serious work of remediation and cleanup began. JCRA applied for multiple U.S. EPA grants to carry out assessments of contamination, then pursued U.S. EPA and NJDEP cleanup funds and ‘responsible party’ cleanup claims to help cover the costs of removing underground storage tanks, metal drums, buildings, and tons of contaminated soils, and capping of the entire site. The cleanup costs exceeded $10M.

The fun part – creation of athletic fields and open space amenities utilized public and private funding. Berry Lane Park features two basketball courts, two tennis courts, a baseball field, a soccer field, a spray park, and a playground, in addition to passive recreation areas featuring 600 trees and a rain garden. The city’s efforts in this neighborhood are greatly improving the quality of life of its residents, and will undoubtedly attract private investments that far exceed the city’s expenditures.

A time-lapse video of the work can be seen [here](#).
Managing Your Liability

In the recent past, liability concerns often presented the greatest barrier to reuse since banks were reluctant to invest in brownfields for fear of finding unknown contamination. The New Jersey Brownfield and Contaminated Site Remediation Act contains language to protect both innocent parties who purchase a brownfield site and clean it up, and financial institutions that provide financial support to redevelopment projects.

Under the SRRA, every responsible party has an affirmative obligation to remediate contaminated sites in a timely manner, including operational sites owned by municipalities. However, municipalities and public entities who are working on private redevelopment sites and have innocent party status – i.e., the government entity owns contaminated property for which it is not a responsible party – may be eligible for exemptions and minimized administrative requirements.

The New Jersey Spill Compensation and Control Act exempts municipalities from liability in the event that they acquired title to a site either involuntarily, as a result of its sovereignty functions (e.g. tax delinquency, abandonment, etc.); to promote the redevelopment of that property. It is important to note that these protections do not apply if the site was being cleaned up at the time of acquisition or if the municipality caused or contributed to the contamination.

Understanding Legal Obligations

Every party with any responsibility for remediating a contaminated site must follow the 2009 Site Remediation Reform Act (SRRA) requirements and corresponding Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C). Most remediation activities occurring within New Jersey require supervision by an LSRP.

Voluntary cleanup programs pursuant to a Memorandum of Agreement (MOA) no longer exist. However, parties such as local governments and non-profits can conduct remediation on properties that they own or control on a voluntary basis. Voluntary parties that do not have strict liability for the contamination are not required to complete remediation in accordance with state laws or time frames if they choose to stop work for any reason (such as lack of funding, increase in costs, or change in redevelopment priorities).

Controlling Laws

Various laws at the federal, state and local level apply specifically to brownfields redevelopment. Technical and legislative requirements must be considered as well as state and local development plans. See Appendix A for a list of federal and state laws.

Could You Be Liable?

Private developers are offered protection from state actions and third party damage claims if they did not cause or contribute to the past contamination, conducted Diligent Inquiry prior to site acquisition, and, if necessary, cleaned up the site in accordance with NJDEP rules and regulations. These protections are triggered once the LSRP issues their final Response Action Outcome to the PRCR. As a brownfield developer, the best way to limit liabilities is to engage an environmental attorney as early in the process as possible. In order for your attorney to craft an effective liability management strategy, you will need to be ready to answer these top four questions:

- Who are you in relation to the property?
- What do you know about the history of the property?
- What do you know about the environmental conditions of the property?
- What do you plan to do with the property?
Case Study: Voorhees, NJ

Nonprofit and Community Partnership to Preserve Open Space, Including a Brownfield

In Voorhees Township (Camden County, NJ), four adjacent parcels of land along the South Branch of the Cooper River included an abandoned municipal wastewater treatment plant, two swampy and forested sites (the Coliseum property - 60% undeveloped - and the Grasso property) and the Abbotts Dairy distribution plant property. In 1984 the dairy was purchased by a heavy equipment refurbisher, who lost it to the municipality in 1989 due to delinquent taxes. The property was contaminated with asbestos, benzene, and xylene and classified as a brownfields site.

A developer (Develcom) purchased the Coliseum and the Grasso properties in 2006, and approached Voorhees about purchasing the Abbotts tract, which the Township was in the process of cleaning up. Asbestos was removed from the site, and a plan for remediation of the benzene and xylene through natural attenuation was put in place. Develcom wanted the Township to designate the tracts as a redevelopment area, due to their deterioration and contamination, and proposed 370 condominium units.

Residents from the surrounding neighborhood banded together as the Ashland Residential Coalition (ARC) to fight the proposal. Although the Planning Board favored designation as a redevelopment area, the Township Committee did not act on the recommendation. ARC recommended that Voorhees Township should preserve the area as green space and establish a municipal park on the wastewater treatment site.

Members helped clear the entrance to the proposed park, and Voorhees secured a $25k grant from Camden Co. to create the John T. Hale, Sr. Memorial Park, dedicated in 2009.

ARC’s research found that the areas they were seeking to protect were included in the County’s Open Space Plan as well as a River to Bay Greenway Plan developed by the Trust for Public Land, and they enlisted the nonprofit’s involvement in their campaign. The Trust for Public Land approached Develcom about a conservation land purchase, and secured an option on 19.4 acres. The land was later purchased using NJ Green Acres, municipal and county open space trust funds, and deeded to the Township.

“I am extremely pleased with this purchase. Local residents have known for years that the Ashland Woods property represents a unique ecological oasis in an otherwise overdeveloped area,” said Ed Hale, Chair of Voorhees Environmental Commission. In 2012, the Environmental Commission conducted a feasibility study on adaptive reuse of the Abbotts Dairy property as an Environmental Education Center. The report concluded that it is feasible, and VTEC continues to lobby for this project.
Sources of Technical and Financial Assistance

Federal Government Resources

Technical Assistance to Brownfields Communities Program (TAB), an initiative of the U.S. Environmental Protection Agency (U.S. EPA), provides technical assistance to under-resourced communities, helping them tackle the challenge of assessing, cleaning up and preparing brownfield sites for redevelopment. The main candidates for TAB assistance are community groups, municipal officials and developers. The TAB Program serves as an independent resource providing communities with technical assistance in a variety of forms, such as identifying project funding sources, reviewing grant applications and technical documents, and organizing workshops and webinars. The Center for Creative Land Recycling (CCLR) is the TAB provider for U.S. EPA Region 2, which includes New Jersey and New York. U.S. EPA’s Brownfields Program provides direct grant funding to local governments for brownfields assessment, cleanup, revolving loans, and environmental job training.

Some of these grants are also available to nonprofits. EPA’s Brownfields Program also collaborates with other EPA programs, other federal partners, and state agencies to identify and make available resources that can be used for brownfields activities. U.S. EPA’s Region 2 Brownfields Program has partnered with the New Jersey Business Action Center’s Office for Planning Advocacy, NJDEP, and the Center for Creative Land Recycling to form the New Jersey Brownfields InterAgency Work Group (IAWG).

The IAWG is a diverse group of experienced state and federal agencies whose mission is to support New Jersey’s brownfields redevelopment policies and the U.S. EPA’s Brownfields Economic Development Initiative, which is designed to empower states, communities and economic development stakeholders to work together in a timely manner to assess, safely clean up and reuse brownfields. Using a proactive and problem solving team approach, the IAWG offers assistance, guidance and resources to municipalities and any of their redevelopment partners as the municipality navigates the complex road to brownfield redevelopment.

Case Study: Orange and West Orange, NJ

Comprehensive Planning for a Brownfields Neighborhood Involving Everyone

The Central Valley was once a busy manufacturing hub, well-known for its hat industry, print shops, shoe factories, breweries and other industries. By the 1970s, most of the manufacturing had ceased, and the area had degraded into a ghost town of brownfields.

The City of Orange and the Town of West Orange entered into NJDEP’s Brownfields Development Area (BDA) program in 2005 to jointly address the Central Valley/Valley Neighborhood, which spans both towns. The program allows towns with multiple brownfields sites to plan comprehensively, rather than piecemeal, for cleanup and reuse of those properties. Properties within a state-designated BDA are fast-tracked for approvals and receive financial assistance for remedial investigation costs and portions of the cleanup in some cases.
Working collaboratively, stakeholders developed a long-term vision for the Central Valley that includes development of an Arts District, adaptive reuse of some buildings such as the Berg Hat Factory (loft condominiums, art studios, and commercial and community arts space), Harvard Press (200 apartments and a river park), and the former Monroe Calculating Company; demolition of many buildings; new construction of commercial, retail, and residential projects; and public facilities such as a police station.

All sites have had environmental investigations; most sites were found to have some level of contamination. Cleanups are in process, with ten complete, and many recycled and new buildings are in active use. The Valley Arts District is vibrant and growing.

Not all communities qualify for participation in the BDA program, but they can learn from the experiences of towns like Keyport, Long Branch, Orange, and West Orange: collaborative, proactive, comprehensive visioning, planning, and implementation under the guidance of a qualified organization such as HANDS is a winning recipe for brownfields redevelopment.

Participation in the BDA program required that a steering committee of municipal officials, community residents, developers, and property owners be established. The Committee identified approximately 19 commercial, industrial, and vacant lots for investigation. NJDEP provided guidance that helped the towns to access investigation and cleanup funds. Just as significant, the program engaged the community and a wide range of stakeholders in a discussion of appropriate redevelopment options for this large area. A nonprofit community development organization called Housing and Neighborhood Development Services, Inc. (HANDS) was instrumental in helping coordinate and mobilize the communities, locate resources, and provide continuity of vision from a regional, experienced perspective. HANDS is a developer of nine of the impacted properties.

New Jersey Government Resources

State officials have recognized that communities affected by brownfields need to be involved in the redevelopment process and have a role in making the projects a success. Improving public access and involvement in remediation is a goal of the NJDEP’s Site Remediation Program.

To assist communities with brownfield redevelopment, the New Jersey Business Action Center’s Office for Planning Advocacy manages the Brownfields Redevelopment Interagency Team (BRIT) to provide the tools for interested parties to develop brownfields in an efficient and timely manner. The BRIT is made up of representatives of numerous state agencies and introduces projects to all affected state agencies and departments.

The BRIT enables and facilitates dialogue between the state, the municipality and the developer to identify opportunities and obstacles, as well as applicable financial and technical assistance, early on in the planning process of a project. BRIT can offer information on the resources available from its other agencies, help clarify the necessary steps and enlist the help of relevant state agencies.

In addition, the NJDEP created the Office of Brownfield and Community Revitalization (OBCR) to serve as the focal point for the Department’s brownfield program. OBCR coordinates remediation and reuse efforts at specific brownfield sites and pilots innovative approaches to expedite the revitalization process. The first major OBCR effort was the Brownfields Development Area Program. This program works in partnership with selected
municipalities and neighborhoods impacted by multiple brownfield sites. The BDA Program coordinates planning, resource acquisition and remediation with a focus on reuse. Individual BDAs are designated through a highly selective application process.

Getting Started

- To learn about resources available from state agencies and required steps to take, contact the New Jersey Department of State, Office for Planning Advocacy’s Brownfields Redevelopment Interagency Team (BRIT).
- For information on financing, contact New Jersey Economic Development Authority (NJEDA), Housing and Mortgage Finance Agency (HMFA), or New Jersey Redevelopment Authority (NJRA).
- For information on environmental regulations, contact the LSRPA, your LSRP, and NJDEP’s Site Remediation Program.
- For help with reaching out and communicating with federal, state and local officials, concerned citizens and media, contact NJDEP’s Office of Community Relations, Site Remediation Program.
- Twelve municipalities in New Jersey are involved in the Community Collaborative Initiative (CCI) at NJDEP. CCI aligns interests that support environmental and community revitalization, equitable economic development, and enhanced public health outcomes. The twelve municipalities are Bayonne, Bridgeton, Camden, Jersey City, Millville, Newark, Paterson, Paulsboro, Perth Amboy, Salem, Trenton, and Vineland. For more information, see www.nj.gov/dep/cci/.

OBCR administers several additional programs that support brownfield redevelopment. It has a loan and grant program to investigate and remediate contaminated sites, the Hazardous Discharge Site Remediation Fund Program. OBCR also oversees landfill remediation/closure for redevelopment projects and is the liaison to the NJ Economic Development Authority for state financial incentives related to contaminated sites. OBCR provides federal tax incentive certifications that are required for expensing brownfield remediation costs. OBCR provides support to all NJ communities that have received EPA Brownfield grants.
Appendix A
Guidance, Regulations, and Laws

Federal

- **Small Business Liability Relief and Brownfields Revitalization Act ("The Brownfields Law"):** This 2002 law authorizes up to $250 million in funds and additional resources for the public and private sectors to promote brownfields assessment and cleanup for reuse. In addition, it expands the definition of what is considered a brownfield, so communities may now focus on mine-scarred lands or sites contaminated by petroleum or the manufacture and distribution of illegal drugs.

- **Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"):** 42 U.S.C. §§ 9601 et seq. Congress enacted CERCLA in 1980, “which authorizes the federal government to assess and/or clean up contaminated sites and provides authority for emergency response involving hazardous materials.”

- **Resource Conservation and Recovery Act ("RCRA"):** 42 U.S.C. §§ 6901 et seq. Congress enacted RCRA in 1976, which authorizes EPA to establish programs to regulate hazardous waste (Subtitle C), solid waste (Subtitle D), and underground storage tanks (Subtitle I).

New Jersey Brownfields and Contamination Cleanup

- **Site Remediation Reform Act ("SRRA"):** N.J.S.A. 58:10C-1 et seq. May 7, 2012 marked the phase-in period for implementing the SRRA, which serves to increase the pace of remediation, thus helping to decrease the threat of contamination to public health and safety and of the environment, and to quickly return underutilized properties to productive use. Key provisions of the SRRA “are to (1) establish the LSRP program and the Site Remediation Professional Licensing Board, which issues licenses to qualified individuals (LSRPs) to conduct the remediation of sites in New Jersey; (2) set forth the affirmative obligation of every person responsible for conducting remediation to remediate any discharge for which they would be liable pursuant to the Spill Act; and (3) set forth the circumstances under which the NJDEP shall undertake direct oversight, and may undertake direct oversight, of a remediation.”

- **Administrative Requirements for the Remediation of Contaminated Sites ("ARRCS"):** N.J.A.C. 7:26C ARRCS (adopted in 2012) is the third phase of NJDEP’s initiative to implement the requirements of SRRA. It lays out the mandatory remediation timeframes for the completion of key phases of site remediation and also provides the requirements regarding direct DEP oversight of a remediation.

- **Brownfield and Contaminated Site Remediation Act (the “Brownfield Act"):** N.J.S.A. 58:10B-1 et seq. Aiming to encourage the cleanup and redevelopment of abandoned or under-used contaminated sites, the 1998 Brownfield Act and its amendments contain many incentives for the buyers and sellers of brownfield properties, including monetary incentives through tax abatements, innocent purchaser protection, grants to encourage developers and businesses to reclaim contaminated land, matching grants for conservation, recreation and affordable housing. Additionally, the act created a state Brownfields Redevelopment Task Force made up of public and private members who are charged with preparing an inventory of brownfield sites around the state and prioritizing the redevelopment of the sites based on a number of factors, including economic potential. Legislative amendments signed in 2005 dedicate remediation funds for open space acquisition and development in brownfields. In particular, the amendments establish matching grants up to 75 percent for municipalities, counties and redevelopment entities for the remedial costs for open space and conservation projects and up to 50 percent for the remedial costs for affordable housing projects.
Brownfields Redevelopment and Natural Resource Damages: P.L. 2005, c.004 (A2444 2R). This 2005 law provides qualified developers with liability protection against Natural Resource Damages (NRD) claims at brownfields sites. Liability protections apply to properties acquired after January 6, 1998 (effective date of Brownfield and Contaminated Site Remediation Act), and after any hazardous substance discharge. The legislation also provides brownfield developers liability protection for off-site contamination and makes changes to the statute of limitations under which NJDEP can assess NRD claims.

Industrial Site Recovery Act (ISRA) Rules: N.J.A.C. 7:26B ISRA is triggered when a property owner attempts to sell property where materials regulated under RCRA (i.e. hazardous substances) were handled. The seller of the property must perform an investigation to determine if there are any areas of environmental concern that may require cleanup. The NJDEP will grant a “no further action” letter once the property owner has demonstrated that no hazardous materials were ever spilled at the site or that cleanup of the hazardous materials has been performed. ISRA is the amended version of the Environmental Cleanup Responsibility Act (ECRA).

NJDEP Technical Requirements for Site Remediation (Tech Rules): N.J.A.C. 7:26E The Tech Rules spell out the minimum criteria required by the NJDEP to investigate and remediate contaminated sites, including brownfields. Environmental professionals use the Tech Rules on a regular basis because they provide guidance on subjects such as site cleanup criteria, sampling requirements, and post-remediation requirements. NJDEP must “establish presumptive remedies for residential development, schools and childcare facilities to ensure that the remedy implemented at the site is protective of human health and safety and of the environment.”

Processing of Damage Claims Pursuant to the Spill Compensation and Control Act (“Spill Fund Rules”): The Spill Fund Rules establish the NJDEP’s rules for processing Spill Act claims based on the discharge, or threat of a discharge, of a hazardous substance. (1) Remediation Standards, N.J.A.C. 7:26D The soil remediation standards contained in the Remediation Standard Rules became effective on the date of adoption June 2, 2008. The groundwater and surface water remediation standards were previously effective at N.J.A.C. 7:26E-1.13. (2) Spill Compensation and Control Act (“Spill Act”), N.J.S.A. 58:10-23.11 et seq. The state levy tax on the transfer of petroleum products and other hazardous substances funds the New Jersey Spill Compensation Fund, which the Legislature established to ensure compensation for cleanup costs and damages from spills. The New Jersey Division of Taxation administers this tax.

Underground Storage of Hazardous Substances Act (“USTs”): N.J.S.A. 58:10A-21 Under this law, NJDEP regulates underground storage tanks (USTs), and includes a tank registration program and a corrective action program to remediate discharges from USTs, which are found on brownfield sites.

New Jersey New Residential Construction Off-Site Conditions Disclosure Act: N.J.S.A. 46:3C1 et seq This Act requires a list of “off-site conditions in the municipality, which may affect the value of newly constructed residential real estate,” be made available at each municipal clerk’s office. This list must include Superfund sites and other known contaminated sites.

New Jersey Vacant and Abandoned Properties Act: N.J.S.A. 2A:50-73 In addition to expediting the foreclosure procedure for vacant and abandoned homes, this 2013 Act also allows municipalities, or entities they may designate as their agents, to obtain an order of possession in court, giving them control of abandoned buildings for the purpose of rehabilitation and putting them back into productive use. Once the court issues an order of possession the entity has full control over the property, including the ability to borrow funds for rehabilitation, obtain construction permits, and the like. Once the entity has rehabilitated the
the building, if the owner fails to take steps to regain rights to the property, the court can order the property sold and the proceeds distributed.

Guiding Documents

- **NJDEP, Compliance Advisory for Government Officials**: DEP Advises Government Entities of Mandatory Remediation Time Frames (March 2012). NJDEP guidance to government entities on compliance with the SRRA's deadlines for submittal of milestone remedial reports.
- **NJDEP, Quick Reference Guides**: NJDEP quick reference guides for its Site Remediation Program.
- **NJDEP, Site Remediation Reform Act Guidance**: This Guidance Library is provided to comply with the ARRCS rule.
- **New Jersey Department of State, Business Action Center, Office for Planning Advocacy, New Jersey Brownfields Redevelopment Resource Kit**: The New Jersey Brownfields Redevelopment Resource Kit helps anyone interested in redeveloping brownfields learn about the financial incentives and other resources available to them, as well as navigate the associated regulatory processes and legal requirements. It provides technical and financial resources, prerequisites to qualifying for assistance, and contacts within each New Jersey state agency or department that can assist in the redevelopment process. Resources are organized into the following categories: planning; environmental; financing; infrastructure; housing; retail/industrial/commercial projects; and art & cultural centers, open space & recreation.
- **U.S. Environmental Protection Agency Office of Site Remediation Enforcement, The Revitalization Handbook (2020 Edition)**: This handbook summarizes the statutory and regulatory provisions of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601 et seq. (CERCLA, commonly known as Superfund) and the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq. (RCRA), as well as the policy and guidance documents most useful in managing environmental cleanup liability risks associated with the revitalization of contaminated sites. It is designed for use by parties involved in the assessment, cleanup, and revitalization of sites, and provides a basic description of the tools parties can use to address liability concerns.
Appendix B
Acronyms and Remediation Process Definitions

CEA or Classification Exception Area: NJDEP issues a CEA to designate a site where pollutants in the ground water exceed standards. The CEA restricts the use of an impacted aquifer as a public drinking water source until standards are achieved, at which time the CEA may be rescinded.

DN or Deed Notice: (formerly Declaration of Environmental Restriction) Properties must be deed restricted when soil contamination will remain above the NJDEP Restricted Soil Cleanup Criteria even after cleanup activities take place. A DN provides notice to future owners and tenants of the property that contamination above the cleanup criteria will remain on site. The existing property deed is modified to include the location and concentration of all contaminants remaining on site, description of controls to be maintained in order to control off-site spread of the contamination, and the type of future monitoring to keep track of the contamination.

IEC or Immediate Environmental Concern: An IEC is a condition at a contaminated site where there is: (1) confirmed contamination in a well used well for potable purposes at concentrations at or above the ground water remediation standards; (2) confirmed contamination that has migrated into an occupied or confined space producing a toxic or harmful atmosphere resulting in an unacceptable human health exposure, or producing an oxygen-deficient atmosphere, or resulting in demonstrated physical damage to essential underground services; (3) confirmed contamination at the site of a nature that either dermal contact, ingestion, or inhalation of the contamination could result in an acute human health exposure; or (4) any other condition that poses an immediate threat to the environment or to the public health and safety.

LSRP or Licensed Site Remediation Professional: LSRP means an individual who is licensed by the Site Remediation Professional Licensing Board or the New Jersey Department of Environmental Protection, in accordance with the Site Remediation Reform Act of 2009.

Oversight Costs: NJDEP’s past charges for guidance and appraisal of privately conducted and funded remedial activities that are currently unpaid need to be resolved. NJDEP will charge for their limited involvement in cases overseen by an LSRP.

PA or Preliminary Assessment: The PA is an initial step performed to identify potentially contaminated areas of concern (such as an underground storage tank, surface lagoon, or floor drain) at the site that will require more comprehensive site investigation work. A site inspection for visual contamination and a review of historical records are part of a PA. No environmental samples (such as soil or water samples) are collected during this step. An LSRP typically performs a PA.

Person Responsible for Conducting the Remediation: “Person responsible for conducting the remediation” means (1) any person who executes or is otherwise subject to an oversight document to remediate a contaminated site, (2) the owner or operator of an industrial establishment with an identified discharge, (3) the owner or operator of a leaking underground storage tank, (4) any other person who discharges a hazardous substance or is in any way legally responsible for a hazardous substance that was discharged at a contaminated site, or (5) any other person who is remediating a site.

RA or Remedial Action: The RA follows RI in cleaning up the site. It is the physical remedy to correct a release or
threat of a release of a hazardous substance into the environment. The cleanup action can include, but is not limited to confinement, dredging, neutralization, recycling, removal, reuse and storage or treatment of the hazardous waste.

**RAO or Response Action Outcome**: An RAO is a written determination by an LSRP that the contaminated site was remediated in accordance with all applicable statutes and regulations, and based upon an evaluation of the historical use of the site, or of any area of concern at that site, as applicable, and any other investigation or action the NJDEP deems necessary, there are no contaminants present at the site, or at any area of concern, at any other site to which a discharge originating at the site has migrated, or that any contaminants present at the site or that have migrated from the site have been remediated in accordance with applicable remediation regulations, and all applicable permits and authorizations have been obtained.

**RAWP or Remedial Action Work Plan**: A remedial action work plan (RAWP) is developed to implement the selected RA, and may include a detailed description of the RA, cleanup objective, proposed monitoring program, cost estimate, and project schedule. If a cleanup objective is proposed in the RAWP that differs from the NJDEP soil cleanup criteria, a risk assessment of the proposed remedial option will be required to evaluate any potential hazards to the community.

**RI or Remedial Investigation**: The RI takes the SI a step further by collecting additional data on the site to determine the appropriate RA (see above). The RI further defines the source of contamination and size of the impacted area, and identifies alternatives for cleaning up the contamination.

**SI or Site Investigation**: An SI takes the PA a step further by collecting environmental samples (such as soil and groundwater) to determine whether contamination is present in the “areas of environmental concern” (AEC) identified during the PA. The SI will also determine whether any contaminants are present that exceed NJDEP cleanup criteria. An LSRP should perform an SI since it requires special monitoring equipment to properly collect the samples in accordance with NJDEP guidelines. In all likelihood, a chemical laboratory specializing in environmental analyses will analyze the samples.
Appendix C
Organization Contact Information and Brownfield References

Federal

- Environmental Protection Agency Region 2 | USEPA | www.epa.gov/brownfields | 212-637-3283: The mission of EPA is to protect human health and the environment.

State

- Department of Community Affairs | NJDCA | www.state.nj.us/dca | 609-292-6420: DCA offers programs and services that respond to issues of public concern including fire and building safety, housing production, community planning and development, and local government management and finance.
  - Urban Enterprise Zone Program | UEZ | www.state.nj.us/dca/affiliates/uez/: UEZ Program fosters an economic climate that revitalizes designated urban communities and stimulates their growth by encouraging businesses to develop and create private sector jobs through investment.
- Department of Environmental Protection | NJDEP | www.state.nj.us/dep: DEP works to protect environmental quality and public health, and create vibrant, sustainable communities.
  - Hazardous Discharge Site Remediation Loan and Grant Program | HDSRF | www.state.nj.us/dep/srp/finance/hdsrf | 609-984-1790: HDSRF grants and loans are available to public entities, private entities, and non-profit organizations that perform a remediation pursuant to DEP’s Site Remediation Program requirements.
  - NJ GeoWeb Online Map Resources | www.nj.gov/dep/gis/geowebsplash.htm: This application provides users access to NJDEP GIS data on the internet. Users can view, query and analyze the Department's GIS data with related environmental information.
  - NJ Green Acres Program | www.state.nj.us/dep/greenacres | 609-984-0500: Green Acres is committed to preserving New Jersey's rich natural, historic, and cultural heritage. Hundreds of thousands of acres of conservation and recreation lands have been preserved, and hundreds of public parks have been developed with Green Acres funds.
  - Office of Brownfields Reuse | OBR | www.nj.gov/dep/srp/brownfield/contacts.htm | 609-984-1790: OBR is charged with coordinating remediation and reuse efforts at specific brownfield sites and piloting innovative approaches to expedite the revitalization process.
  - Office of Community Relations | OCR | www.state.nj.us/dep/srp/community | 609-984-3081: OCR maintains summaries related to many, but not all, contaminated sites, and these summaries are updated periodically as new information becomes available.
  - Public Records Access Program | OPRA | www.nj.gov/dep/opra/: NJDEP will make every reasonable effort to provide complete responses to record requests within the timeframes required under OPRA.
  - Site Remediation Program | SRP | www.state.nj.us/dep/srp/brownfields | 609-984-1790: Goal of reducing the threat of contamination to public health and the environment.
- Housing and Finance Mortgage Agency | HFMA | www.njhousing.gov | 609-278-7400: NJHMFA is dedicated to increasing the availability and accessibility to safe, decent and affordable housing to families in New Jersey. In some cases this may mean working with traditional affordable housing developments, serving New Jersey's most needy families.
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- **Department of State - Office for Planning Advocacy** | nj.gov/state/planning/: The Business Action Center coordinates statewide planning to protect the environment and guide future growth into compact, mixed-use development and redevelopment.
  - **Business Action Center** | BAC | www.state.nj.us/state/bac | 866-534-7789: NUBAC is a business-first resource that can help you get answers from government agencies, direct you to appropriate officials or contacts, facilitate meetings and follow-ups with regulatory agencies and so much more, all at no cost and strictly confidential.
  - **Brownfields Redevelopment Inter Agency Team** | BRIT | nj.gov/state/planning/redevelopment.shtml: BRIT is a resource group comprised of representatives from various State agencies and programs.
  - **Brownfields Task Force** | BFTF | nj.gov/state/planning/redevelopment.shtml: Assists municipalities and counties in using brownfield redevelopment to help implement Smart Growth strategies in their plans and initiating an inventory of marketable brownfield sites for prospective developers with the support of the Brownfields Redevelopment Inter Agency Team.
  - **Inter Agency Working Group** | IAWG | nj.gov/state/planning/assets/docs/redevelopment/2014-IAWG-1-page.pdf: IAWG on Brownfields was established in July of 1996 as a forum for Federal agencies to exchange information on brownfields-related activities and to develop a coordinated national agenda for addressing brownfields.

- **Economic Development Authority** | NJEDA | www.njeda.com: NJEDA is an independent government entity in the U.S. state of New Jersey dedicated to broadening and expanding the state’s economic base.
- **Environmental Infrastructure Trust** | NJEIT | www.njib.gov/njeit | 609-219-8600: Provides and administers low interest rate loans to qualified municipalities, counties, regional authorities, and water purveyors in New Jersey for the purpose of financing water quality infrastructure projects.

Non-profit Organizations

- **Association of New Jersey Environmental Commissions** | ANJEC | www.anjec.org | 973-539-7547: ANJEC’s programs support strong local action for the environment aimed to help citizens protect the environment.
- **Center for Creative Land Recycling** | CCLR | www.cclr.org | 415-398-1080: CCLR is the leading national nonprofit dedicated to transforming communities through land recycling. This means converting abandoned or vacant commercial and industrial properties to assets that benefit the community.
- **Brownfield Coalition of the Northeast** | BCONE | www.brownfieldcoalitionne.org/New Jersey: BCONE’s mission is to provide a platform for exchange of ideas/best practices on the benefits of brownfield remediation, resilience and sustainable redevelopment and to work with public, private and regulatory stakeholders in our region to facilitate economic activity and growth.
- **Housing and Community Development Network of New Jersey** | HCDNNJ | www.hcdnnj.org | 609-393-3752: Worked to improve the environment for the work of community development corporations and to strengthen their capacity to create housing and revitalize distressed neighborhoods throughout New Jersey.
- **Ironbound Community Corporation** | ICC | www.ironboundcc.org | 973-589-3353: To engage and empower individuals, families, and groups to create a more just, vibrant and sustainable community.
Appendix C
Organization Contact Information and Brownfield References

- Isles, Inc. | www.isles.org | 609-341-4700: Prepares youth and adults for work and life through an alternative school, green job training center, and garden-based STEAM education in schools and summer projects.

- La Casa de Don Pedro | www.lacasanwk.org | 973-482-8312: La Casa was born out of collaborative and unifying efforts to reverse the trajectory of social, cultural, political, and economic dislocations and marginalization of children and families.

- Licensed Site Remediation Professionals Association | LSRPA | www.lsrpa.org/: The LSRPA is a non-profit professional membership organization established to provide information, education and technical resources to LSRPs, other professionals involved in environmental remediation in the State of New Jersey.

- New Community Corporation - Newark | NCC | www.newcommunity.org | 973-623-2800: Offer affordable housing, early childhood learning centers, youth services, adult education, family transitional housing, mental health services, a long-term care facility, a food pantry, and more.

- New Jersey Brownfields Assistance Center at NJIT | www.njit.edu/njbrownfields | (973) 596–3000: Providing the public and private sectors with the tools and resources necessary to reclaim and redevelop brownfield sites.

- New Jersey Conservation Foundation | NJCF | www.njconservation.org | 908-234-1225: To preserve land and natural resources throughout New Jersey for the benefit of all.

- New Jersey Environmental Federation | NJEF | www.cleanwater.org | 732-963-9714: Promotes policies to keep toxics out of our waterways and drinking water.

- New Jersey Future | NJF | www.njfuturer.org | 609-393-0008: New Jersey Future is a nonprofit, nonpartisan organization that promotes sensible growth, redevelopment, and infrastructure investments to foster vibrant cities and towns, protect natural lands and waterways, enhance transportation choices, and more.

- New Jersey Highlands Coalition | www.njhighlandscoalition.org | 973-588-7190: To protect, enhance and promote the natural and cultural resources of the New Jersey Highlands to sustain current and future generations.

- New Jersey Sierra Club | www.sierraclub.org/new-jersey | 609-656-7612: The Sierra Club is a national, member-supported environmental organization, which seeks to influence public policy in both Washington and the state capitals through public education and grass-roots political action.

- NJIT Brownfields Assistance Center at NJIT | www.njit.edu/njbrownfields/ | (973) 596-3000: Provides the public and private sectors with the tools and resources necessary to reclaim and redevelop brownfield sites.

- New York - New Jersey Baykeeper | www.nynjbaykeeper.org | 732-888-9870: To protect, preserve and restore the ecological integrity and productivity of the waterways in the most urban estuary on Earth.

- Project Freedom | www.projectfreedom.org | 609-448-2998: Develops and operates barrier-free housing to enable individuals with disabilities to live independently.

- Regional Plan Association NJ Committee | RPA | www.rpa.org | 609-228-7080: Seeks to improve the prosperity, sustainability and quality of life in the tri-state area.


Research Institutes

- National Center for Neighborhood and Brownfields Redevelopment | 848-932-2937 | www.eac.rutgers.edu/brownfields/: Committed to transferring its knowledge and expertise to others to promote urban revitalization and sustainable reuses for brownfields sites.
Appendix D
Financial Programs and Agencies

Brownfields Redevelopment Interagency Team (BRIT): Can provide interested parties with guidance as to available loans, grants, or property tax credits as well as a copy of the NJ Brownfields Redevelopment Resource Kit. For more information contact 609-633-8301.

NJ Economic Development Authority (NJEDA): NJEDA is an independent government entity in the U.S. state of New Jersey dedicated to broadening and expanding the state’s economic base. NJEDA administers additional financing and incentive programs that may be applicable for redevelopment projects.

New Jersey Hazardous Discharge Site Remediation Fund (HDSRF): The HDSRF finances the investigation and cleanup of contaminated sites through grants (for investigation) and low interest loans (for cleanup) to municipalities, businesses and responsible parties who discharge hazardous substances. The NJ Department of Environmental Protection (NJDEP) administers this program. For more information contact 609-292-1251.

Petroleum Underground Storage Tank Remediation Upgrade and Closure Program: A hardship fund specifically created to provide loans and grants to business owners, homeowners and municipalities for upgrades, closures and remediation of underground storage tanks. The NJ Department of Environmental Protection (NJDEP) administers this program. For more information contact 609-984-2076.

Redevelopment Funding Revenue Allocation District (RAD): Funding is available to municipalities to encourage revenue-generating development projects in RADs as part of a locally approved redevelopment plans. Bond Financing is available to municipalities in formally designated redevelopment areas and other areas. This financing offers long-term, low-interest bonds for infrastructure improvements and other costs including demolition and remediation. Brownfields Redevelopment Loans and guarantees are provided for brownfields remediation costs. These low-cost loans are available to all types of communities. Redevelopment funding is also available for site preparation costs (e.g. demolition, removal of materials and debris, and engineering). The NJ Economic Development Authority (NJEDA) administers the Revenue Allocation District funding. For more information contact 609-341-2723.

Small Business Liability Relief and Brownfields Revitalization: The federal 2002 Small Business Liability Relief and Brownfields Revitalization Act provides additional funds for brownfields redevelopment, and also expands the definition of what is considered a brownfield, so communities may now also focus on sites contaminated with petroleum. USEPA administers this program. For more information contact 202-566-2777.

Urban Enterprise Zone (UEZ) Program: The UEZ program provides funds for infrastructure improvements, brownfields planning and remediation, and other projects that support economic growth. This program’s goal is to revitalize local, regional and state economies. The NJ Department of Community Affairs administers this program. For more information contact 609-292-1912.