

**BROWNFIELD DEVELOPMENT OPPORTUNITIES
IN LONG ISLAND CITY, NEW YORK**

**AN ANALYSIS OF
FEDERAL, STATE, AND LOCAL
BROWNFIELD INCENTIVE PROGRAMS**

Chapters 1 - 5

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1.0 INTRODUCTION

The United States Environmental Protection Agency has recently estimated that there are between 500,000 and one million brownfield sites in America today. Most of these sites are abandoned or underutilized industrial or commercial properties which are prevented from being redeveloped by possible environmental contamination and the liability under Superfund law for parties that purchase or operate them.

The vast majority of these contaminated properties lie within America's urban landscape and due their underutilization have served to blight our cities and to hinder development in many areas that are in desperate need of urban renewal. These properties, which once provided jobs and tax revenue for our cities now sit empty, adding no value to the communities surrounding them and more often than not creating the problems of neighborhood segregation, environmental hazard, property devaluation, and urban blight.

A distressing symptom of the problems created by these underutilized sites is the continuation of concentric suburban expansion away from our city centers into our nation's quickly disappearing greenfields. Small businesses have shied away from utilizing these available but contaminated urban properties out of fear over the excessive regulation that has historically controlled them or because of the fear of getting involved in a property ownership and cleanup situation that could lead to perpetual litigation and liability issues. Urban sprawl is one of the greatest planning concerns facing our nation today, the inefficiency of suburban expansions strains our infrastructure, decentralizes our tax base, disrupts our environment, and increases our reliance on fossil fuels. The president of the United States said while signing The Small Business Liability Relief and

Brownfields Revitalization act in 2002, that for every acre of redeveloped urban brownfield land, we save four and a half acres of open space.¹

Between 1982 and 1997 economic, cultural, demographic and political forces, spurred the conversion of approximately 39,000 square miles (or 25 million acres) of rural land into subdivisions, malls, workplaces, roads, parking lots, resorts, and the like.² The rural land lost to development between 1982 and 1997 is equal to the entire land mass of Maine and New Hampshire combined, this equaled a land loss rate of 2.2 million acres per year. At this rate the United States will have lost an additional 110 million acres of rural countryside by 2050. Amazingly, this is an area comparable in size to the combined areas of Connecticut, Massachusetts, Rhode Island, Vermont, Delaware, Pennsylvania, New York, New jersey, and Virginia.³

Considering the many millions of acres of underutilized urban brownfield sites across the nation it is easy to understand the impact that redevelopment of these sites could have on the unfortunate trend of urban sprawl. If the presidents estimation of 4.5 acres of greenfield land saved for every 1 acre of brownfield redeveloped is correct, America has the potential to prevent the destruction of millions of acres of undeveloped rural land by making use of it's abundance of urban brownfields.

Urban areas that are blighted by vacant and unused contaminated property are not attractive to private developers and often devalue and disenfranchise entire communities, which all to often leads to suburban migration. Redevelopment of these sites will serve

¹ U.S. White House. "Brownfield Bill Signing, White House Press Release", January 11, 2002

² USDA Conservation Survey Data, U.S. Bureau of Census data on Urbanized Areas, www.sparwlcity.com

³ USDA Conservation Survey Data U.S. Bureau of Census data on Urbanized Areas, www.sparwlcity.com

to catalyze the rehabilitation of urban communities and will provide much needed incentive for re-urbanization.

In addition to planning and environmental benefits, the revitalization of urban brownfield sites will serve the much needed function of bolstering local economies that are in need of stimulation. This cleanup and redevelopment will provide new jobs, generate direct investment in communities through cleanup and construction expenditures, and provide an expansion of local tax base creating increased tax revenue. According to the 2003 “Recycling America’s Land Report,” issued by the U.S. Conference of Mayors, Cleanup and redevelopment of brownfields could produce as much as \$1.9 billion in new tax revenue each year.⁴

1.1 The definition of a Brownfield

“With certain legal exclusions and additions, the term ‘brownfield site’ means 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.”⁵

1.2 The History of Contamination

An important question to ask when developing a process for the clean up of America’s vast array of contaminated property is; “how did we get here?” In many ways it is a obvious course of rapid industrialization across America since the turn of the century but more significant was the issue of under regulation by or government of American companies who were polluting with little or no regard for the future consequences to the environment.

⁴ US EPA Brownfield Program, Reusing Land and Restoring Hope: A Report to Stakeholders www.epa.gov 2002

⁵ The Small Business Liability Relief and Brownfields Revitalization Act (H.R. 2869), EPA Brownfields web site, www.epa.gov

Since the signing of the Constitution in 1787 America's prime motivations have been advancement, growth, and progress. The government did very little to stand in the way of this progress and when it did it was usually in the form of the common law traditions that it had inherited from Great Britain. This common law gave citizens the right to take legal action to protect themselves against harm or nuisance cause by others. Depending on the ruling of the courts they could obtain compensation for injuries sustained. The earliest forms of governmental regulation for the benefit of public health were spawned from these first judicial rulings.

After the American Civil War an era of dramatic industrial expansion coined "the gilded age" swept across the nation. During this era "industry and city" gained dominance over "agriculture and slavery" as the result of an all out competition between ever growing utilities, railroads and emerging industries. Through the use of permissive grants Washington saw to it that nothing would stand in the way of these industries, including concerns over pollution.

It wasn't until the emergence of American leaders such as President Theodore Roosevelt that the United States government started utilizing federal statutes to protect citizens and the environment from the negative attributes of unbridled progress. Monopolies had begun to control most of American industry and land so the government set up administrative commissions to control the worst of their abuses. These early government commissions created America's first public health agencies such as the U.S. Public Health Service which worked to prevent the spread of water borne diseases and later set standards for Air quality.

In the 1930's the policies of President Franklin Roosevelt's New Deal created a dramatic increase in the size and the power of the federal bureaucracy. As a result of the increase in public works projects which were helping to redevelop the nations infrastructure America saw a dramatic improvement in the quality of its drinking water, sewage treatment, and other services vital to public health.

By the 1950's the rapid development of the nations chemical, plastics, petroleum, and munitions works was creating highly visible forms of pollution. The old common law system used to insure liability and compensation for personal harm was no longer effective against such giant industries. As a result several federal programs were set up to establish national pollution standards such as The Federal Water Quality Administration and The National Air Pollution Control Administration. These agencies and new legislative acts that served to regulate and control pollution between the 50's and the late 60's were Americas first concerted efforts to protect the environment and hold parties accountable for the damage they had done.

The United States Environmental Protection Agency was formed in 1970 as a hybrid of all of the previously formed environmental regulatory bodies. "The fledgling Agency was saddled with a tremendously difficult regulatory mission: How should ecological goals be balanced with those related to public health and the common law rights of the individual? How should the atmosphere of public and media hysteria be dispelled? How should scientific findings be interpreted and correlated – and their gradations of uncertainty be communicated to lawmakers, reporters, and citizens?"⁶ This agency stands today as the foundation and guiding force behind all U.S. environmental regulation and cleanup policy.

⁶ U.S. EPA, "Brownfields Cleanup and Redevelopment" www.epa.gov

2.0 THE FEDERAL GOVERNMENT AND ENVIRONMENTAL REGULATION

2.1 The Beginnings of Brownfield Cleanup

The U.S. Government's first efforts promote the clean up of brownfield sites began in 1955 with the initiation of a program which invested in locally based brownfield Pilot Programs. These Pilots gave communities the use of federal funds to assess and clean up properties that had been sitting idle and blighting surrounding areas. The historic barrier to cleanup of these sites had been limited access to funding, the Brownfield Cleanup Revolving Loan Fund (BCRLF) enabled Pilot programs to get under way by providing funding to local governments and by removing the uncertainty about contamination that had prevented many urban properties from being developed.

2.2 RCRA

In 1965 the Solid Waste Disposal Act was developed to create a system for properly disposing of solid wastes. It was amended in 1970 by the Resource Recovery Act which gave the EPA funding for resource recovery. The act didn't account for the management and ultimate disposal of hazardous waste so the Resource Conservation and Recovery Act (RCRA) was passed in 1976 which established a system for managing non-hazardous and hazardous solid wastes in an environmentally sound manner. The RCRA also promotes resource recovery and waste minimization and therefore became the basis for most of the EPA's brownfield clean up efforts. In 1998 the EPA created the RCRA Brownfield Prevention Initiative which encouraged the reuse of potential RCRA Brownfields. These "potential" sites are considered to be portions of RCRA sites that are not in use. They have redevelopment potential that is being hindered or limited by

concern over contamination, liability, and RCRA requirements. The motivation behind this initiative is to encourage development on sites that have already been developed rather than continuing the trend of Greenfield development. The EPA created special RCRA Brownfield Pilots, and RCRA Targeted Effort Projects to focus on these sites.

2.3 NEPA

In 1969 The National Environmental Policy Act (NEPA) was created to establish a nation policy with a goal to protect, maintain, and enhance the environment. The key to this law was the inclusion of a defined process for the implementation of these goals. The act created the Council on Environmental Quality (CEQ) which maintains oversight of the policies created by the law.

NEPA ensures that the environmental effects of any federal undertaking are evaluated through creation of a system of assessment processes. The first level relieves an undertaking from environmental analysis due to a categorical exclusion. The second level requires federal agencies to prepare an environmental assessment (EA) to determine whether or not the action would significantly affect the environment. If the EA determines that there is no significant impact from the action a “Finding of no Significant Impact” (FONSI) is issued. In the event that significant impact from the action is determined a more detailed evaluation of the proposed action and alternatives to the action called an Environmental Impact Statement (EIS) is required.

2.4 CERCLA

The Environmental Protection Agency is the root of all brownfield regulation and clean up effort in America Today. The basis of all of its influence and control over brownfields was the creation in 1980 of The Comprehensive Environmental Response,

Compensation, and Liability Act (CERCLA), which is commonly known as the Superfund Cleanup Program. The law funds cleanup efforts with a tax on the petroleum and chemical industries which over the first 5 years of its creation collected \$1.6 billion. This tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. The act also provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. The groundbreaking act:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites
- Provided for liability of persons responsible for releases of hazardous waste at these sites
- Established a trust fund to provide for cleanup when no responsible party could be identified
- Established two kinds of response actions
 1. Short term removals , where actions may be taken to address releases or threatened releases requiring prompt response
 2. Long term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on the EPA's Nation Priorities List (NPL)⁷

CERCLA was amended in 1986 by the Superfund Amendments and Reauthorization Act (SARA) as a result of the lessons learned from the previous 6 years of administering the program. SARA provided for greater enforcement authorities and settlement tools, stressed the importance of permanent remedies and innovative treatment technologies, required Superfund actions to consider the standards and requirements found in other

⁷ U.S EPA, "Brownfield Topics" CERCLA www.epa.gov

State and Federal environmental laws, encouraged greater citizen participation in making decisions on how sites should be cleaned up, increased the size of the trust fund to \$8.5 billion, and most importantly increased State involvement in every phase of the Superfund program.

2.5 Federal Brownfields Tax Incentive

In 1997 the Taxpayer Relief Act was signed into law, this act included a tax incentive for private developers who would take on the burden of cleanup and redevelopment of urban and rural brownfields. The Law allows private parties who remediate contaminated land to deduct all environmental cleanup costs in the year that they are incurred rather than having to capitalize the costs over a number of subsequent years. “The governments estimated that while the tax incentive costs approximately \$300 million in annual tax revenue, the tax incentive was expected to leverage \$3.4 billion in private investment and return 8,000 brownfields to productive use.”⁸ The law originally had strict guidelines for qualifying based on specific land use, contamination categorization, and geography. The geographic qualification requirements were removed in 2000 in an effort to broaden the reach of the incentive. Unfortunately the incentive expired on December 31, 2003.

2.6 Federal Brownfields Revitalization Act

The EPA’s promotion of Brownfield clean up through the issuance of small “seed money” grants to local governments created hundreds of two-year Brownfield pilot projects and was relatively successful, but it wasn’t until 1995 that the EPA’s Brownfield Program was fully set in motion. The Brownfields Revitalization Act placed in to affect the tools which are the backbone of the EPA’s influence on Brownfield redevelopment today. With this new law the EPA began to stimulate development through the use of:

⁸ U.S. EPA, “Brownfields Tax Incentive Fact Sheet” www.epa.gov

Assessment Grants – provide funding to government, communities, or non profits for the inventory, characterization, remediation planning and assessment of brownfield sites. The limit for these grants is \$200,000 per site but applicants may apply for a waiver and receive up to \$350,000.

Targeted Brownfield Assessments – designed to assist government entities to minimize the uncertainties of contamination by providing funding and technical assistance for assessment of brownfield sites.

Brownfields Cleanup Revolving Loan Fund Pilot Program – gives States, political subdivisions, and Indian tribes the ability to make low interest loans for the remediation of Brownfield properties.

Cleanup Grants – provide funding of up to \$200,000 for actual remediation process at brownfield sites. These grants require a 20 percent cost share that can come in the form of money, labor, material or services.

Job Training Grants – intended to provide environmental training to individuals, community groups, developers, etc. in areas impacted by brownfields.

2.7 The Small Business Liability Relief and Brownfield Revitalization Act

The Brownfield Revitalization Act was amended by the Small Business Liability Relief and Brownfield Revitalization Act in 2002 enabling the EPA's most effective Brownfield policies to be passed in to law.

The law's primary benefits are to limit liability for purchasers of contaminated land and to add expanded funding and incentive for cleanup to communities and municipalities.

The following is a summary of Bill Benefits taken from the EPA's Brownfields Cleanup and Redevelopment Web Site.

Small Business Liability Relief (Title 1)

- Exempts certain small volume contributors from Superfund liability
- Exempts certain contributors of municipal solid waste from Superfund liability
- Shifts court cost and attorneys fees to a private party if a private party loses a Superfund contribution action against de micromis or municipal solid waste exempt party

Brownfields Program (Title II – Subtitle A)

- Provides legislative authority for brownfields programs including grants for assessment and cleanup
- Expands current brownfields programs by increasing funding authority up to \$200 million per year including up to \$50 million per year to assess and cleanup brownfields with petroleum contamination
- Expands eligibility for assessment and cleanup grants
- New provision for direct cleanup grants of up to \$200,000 per site
- Streamlines current requirements for the brownfields cleanup revolving loan fund and makes funding available to nonprofits
- Applies Davis Bacon Act on same terms as authority for current program
- Makes funds available for technical assistance, training and research

Brownfields Liability Clarifications (Title II - Subtitle B)

- Exempts certain contiguous property owners from Superfund liability
- Exempts certain prospective purchasers from Superfund liability
- Clarifies the innocent landholders defense to Superfund liability

State Response Programs (Title II - Subtitle C)

- Supports State and Tribal response programs and preserves Federal safety net
- Provides \$50 million per year for State and Tribal response programs
- Expands activities available for funding of State programs
- Provides Superfund liability relief for certain properties cleaned up under State response programs

3.0 New York State and Brownfield Regulation

3.1 The Department of Environmental Conservation

In 1970 New York's Governor Rockefeller enacted legislation which created the New York State Department of Environmental Conservation with the intention of creating a unified leadership for the states efforts to protect its environment and natural resources. The mission of the new department was to detect and control sources of pollution, to protect and manage New York's natural resources, and to inform and educate the public about the government's efforts to protect the environment.

Today the NYSDEC has 3,200 employees and utilizes its network of regional offices to create and manage New York's efforts to protect its natural resources and to remediate and redevelop brownfield sites. The goal of the DEC is to utilize their experience and legal power to streamline the cleanup process, to stimulate community involvement and planning, to increase financial assistance, and to create relief from the common issue of liability.

3.2 SEQRA

The bulk of New York State's environmental law is governed under the State Environmental Quality Review Act (SEQRA) which was signed in to law in 1978 and then revised in 1987. The Act requires that state and local government agencies consider the environmental impact of all development actions in an equal capacity with social and economic factors. Essentially this forces agencies within New York State and Local government to assess the environmental impact of any and all development that they propose or fund and balance that impact with the social and economic impacts of the development when they are deciding weather or not to approve.

If an action or development is determined to have a negative affect on the environment an agency or private party will be responsible for preparing an

Environmental Impact Statement (EIS) which will be used to determine ways of avoiding or reducing the projects negative impacts. The DEC presides over adherence and review of SEQRA requirements and benefits from the law by its system of establish a clear and supportable record of the agencies decision making process.

3.3 Voluntary Cleanup Program

The DEC's original system for Brownfield Redevelopment was the Voluntary Cleanup Program (VCP) which was created to stimulate private sector clean up and development of Brownfield sites by allowing the remediation of sites using private funds as opposed to public funds.

The Program was a system in which "Volunteers" could work with the DEC to develop a remedial work plan and upon approval perform the cleanup requirement themselves. The volunteer agreed to remediate the site to an agreed upon level which was safe for the environment and for public health based on the intended use of the property. The DEC and the New York State Department of Health were charged with oversight of the remediation process. Once the work was completed the volunteer was given a release from liability through the issuance of a letter from the DEC declaring that the volunteer had met their obligation and barring a reopener, the DEC would take no further action against the site.

3.4 Brownfield Cleanup Program

In October of 2003 Governor Pataki signed in to law Brownfield Cleanup Program. The new legislation is meant to refine, enhance, and clarify the original New York Voluntary Cleanup Program. This very comprehensive program has been the object of much scrutiny and question from the public and private sector in New York due to what

many consider to be its unrealistic financial incentive plans and its inability to differentiate between small and large projects. However, this sweeping piece of legislation has the potential to be the catalyst for the cleanup of thousands of contaminated properties by encouraging the redevelopment of brownfields across New York State by private developers. The program will restore the State Ailing Superfund Project which will allow municipalities to take advantage of opportunities for redevelopment, job creation, and economic revitalization and will spur private sector involvement in the process. In addition to its funding and assistance for public entities the new program dramatically enhances financial tax incentives for private developers.

The following is a summary outline of the benefits of New York's New Brownfield Cleanup Program.

- Funding of the New York Superfund Program – Authorizes up to \$135 million worth of funding, \$120 million of which will be authorized on an annual basis and \$15 million for the New Brownfield Opportunities Area Grant program which offers grants to community based organizations to participate in Superfund and Brownfield Cleanup.
- Acceleration of Brownfield Cleanup and Redevelopment – Through the establishment of a tax credit program the BCP will help developers to offset the costs of real property taxes, site preparation, water treatment expenses, and property improvements for remediated brownfield sites. The value of these credits is estimated at \$135 million annually.
- Expansion of Site Eligibility for Cleanup – The definition of Hazardous Wastes that qualify for State Superfund Cleanup has been expanded to include Hazardous Substance sites in addition to Hazardous Waste Sites.
- Improves the Municipal Environmental Restoration Program – Increases the State grant to municipalities from 75 percent to 90 percent of eligible costs and 100

percent of eligible off-site costs for cleanup. It also allows municipalities to leverage other funds to pay for their share of cleanup costs.

- Creates Brownfield Area Planning Opportunities – Provides Brownfield Opportunity Grants to municipalities and community-based organizations to strategically plan for the redevelopment of brownfields within targeted urban areas.
- Expands Public Participation Opportunities – Creates Technical Assistance Grants for community-based organizations to help in the assessment and evaluation process.
- Provides a new system for ensuring protective and predictable cleanups – The legislation creates a new system for categorizing anticipated land use and a subsequent remedy (track) that is commensurate with that use. The remedy is intended to be fully protective of public health and the environment.

Track 1 – Unrestricted use;

Track 2 – commercial and industrial use with groundwater engineering and institutional controls;

Track 3 – unrestricted, commercial and industrial use applying the formula used to develop tracks but applying site specific data; and

Track 4 – site- specific soil cleanup objectives using site-specific information.

Soil Cleanup Objectives:

In conjunction with the Department of Health the DEC will create and oversee soil cleanup objectives called “look up tables” that are based on the above land uses.

- Reforming of the liability system – The legislation provides protection against liability to municipalities, lenders, and innocent third parties while continuing to hold polluters responsible for cleanup. (All data compiled from NYSBA)⁹

⁹ New York State Bar Association, Real Estate and the Environment: New York's New Brownfield Law, 2003

There are many key components to this legislation, far too many to outline in detail in this paper. However, in conjunction with the incentives and procedural changes listed above the following two points have the greatest impact on private developers.

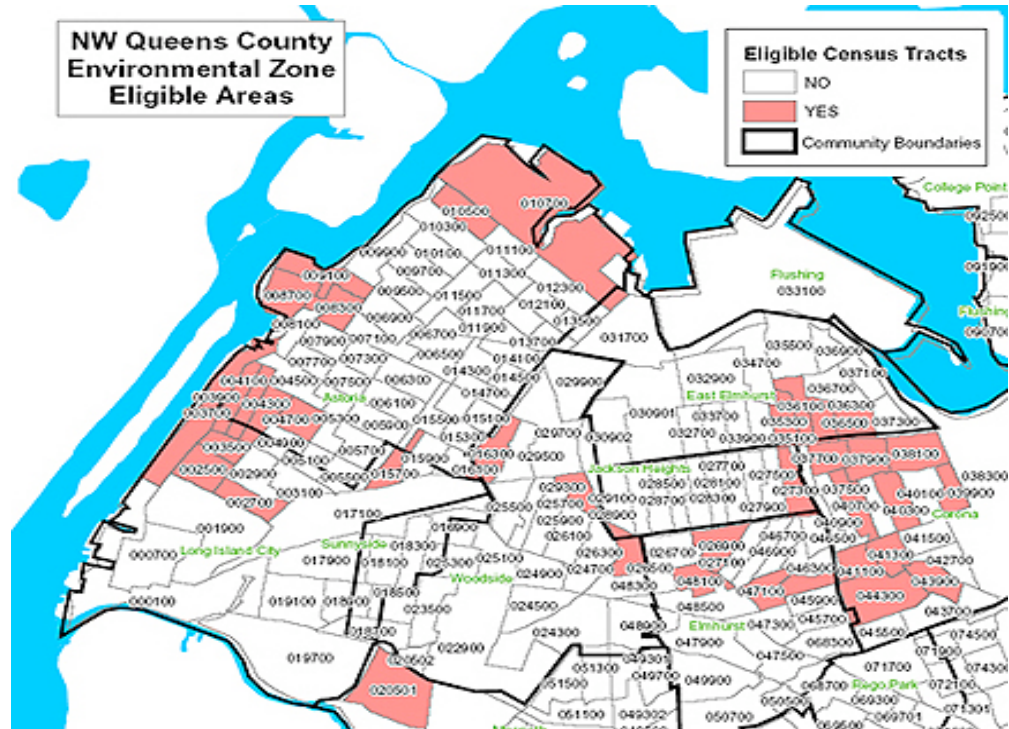
The legislation for the first time offers a differentiation between parties responsible for pollution and those who are involved only for the purpose of remediation. A “Participant” is defined as an applicant who owned or operated a brownfield during the release of contamination at the site. A “Volunteer is an applicant is someone other than the “Participant” who would be liable for cleanup because of ownership or operation after site cleanup. The BCP will be more lenient to Volunteers in requirements for remedial investigation and in requests for alternative remedial plans.

The law also, for the first time, creates different requirements based on the qualification of a site as a “significant threat site” or a “non-significant threat site”. The qualification of these sites will be based on the consideration of the potential exposure of humans to site contaminants. In the event that a site is considered to be a Significant Threat the DEC will select a remedy for the cleanup rather than the applicant.

3.5 Brownfield Cleanup Program Tax Credit

By far, the most significant and most talked about component of the BCP legislation is the proposed issuance of \$135 million in annual tax credits to provide financial incentive to private parties who take part in the cleanup of brownfields. The act offers a variety of tax credit opportunities for developers including bonuses for developments that take place in areas designated as Environmental Zones or En-Zones where were chosen by the DEC as areas with the greatest opportunity to benefit from brownfield redevelopment.

Figure 1:



An applicant to the BCP program who completes required site remediation outlined in a written agreement with the DEC (Brownfield Cleanup Agreement) will be granted a Certificate of Completion which entitles the applicant to the tax credits created by the program. These credits are available to Volunteers and Participants as long as they adhere to the provisions of the Brownfield Cleanup Agreement. A developer has the ability to significantly increase the returns of a project through the use of these credits and is likely to have a much easier time gaining financing from outside sources with their guarantee.

The new legislation creates three new State income tax credits which will allow a developer to reduce the amount of income tax from a projects earnings on a dollar for dollar basis. The law allows for these credits to reduce taxes to the minimum which is zero in New York. An interesting and compelling component of the BCP tax credits is that they are “refundable” which means that any unused credit will be treated as an

overpayment of taxes. This overpayment is repaid to the taxpayer after the taxpayers return is filed which has the potential to provide a very lucrative incentive. Following is a description of the three available tax credits:

The Brownfield Redevelopment Tax Credit – This credit is based on an “applicable percentage” of cleanup and development costs which is based on the location of the property and the extent of the cleanup. The base percentage is 10% for individual and 12% for transmitting utilities, business corporations, and banking corporations, but can range to 22% with enhancements given to sites that are in “En-Zones” and for sites cleaned up to “Track 1” standards. The derived applicable tax credit percentage is multiplied by the total of three allowable development cost components; Site Preparation, which includes all cost incurred in qualifying the site for the Certificate of Completion under the Brownfield Cleanup Agreement; Tangible Property, which includes all property placed or constructed on the site within three years of the Certificate of Completion; and On-site Groundwater Remediation which includes all costs to remediate groundwater on the premises.

The Tax Credit for Remediated Brownfields (Credit Based on Property Taxes) – This credit is also a refundable income tax credit and is determined based on the property taxes that due for a remediated brownfield site. This credit is offered to a developer who has received a Certificate of Completion from the DEC or who has purchased a qualified site within seven years of receipt of a Certificate of Completion. The credit is calculated by multiplying Eligible real property taxes by an “employment number factor” which is based on the number of full time employees working on the site for the developer or tenants. This factor ranges from 0% for 0 to 24 employees to 100% for 100 or more

employees. The derived number is then multiplied by 25% for a typical site or by 100% for a site located in an En-Zone. For example, a site with 100 employees that is located in an En-Zone would qualify for an income tax credit of 100% of the property tax owed for seven years. It is important to note that this credit is limited to \$10,000 per employee. For example: \$10,000 x 100 employees = \$1,000,000 maximum credit.

Tax Credit for Environmental Remediation Insurance – This credit is based on premiums that are paid for environmental insurance policies that are utilized by developers to protect themselves during remediation activities and must be claimed in the year of the Certificate of Completion. The amount of the credit available is equal to the lesser of \$30,000 or 50% of the premium paid for qualifying policies. Qualifying policies are those that cover:

- Cost of clean up for cleanup of existing conditions that are not outlined in the original Brownfield Cleanup Agreement
- All third party claims for injury or property damage that result from the cleanup of existing pollution outside the Scope of the BCA
- Capping of cleanup costs that relate to the BCA
- Cost of the state reopening the site or changing the BCA work plan to account for changes in the law.

(All data above compiled from the NYSBA)¹⁰

It is very important to note that one of the provisions of the tax credit incentive is the potential for recapture. This recapture can be triggered by a revocation by the DEC of the Certification of Completion due to findings of noncompliance. There is also a trigger for disposal of the property. The developer is expected to hold the remediated property for at least 12 years in order to avoid a recapture of a portion of his tax credits. When

¹⁰ NYSBACLE, Real Estate and the Environment: New York's New Brownfield Law c 2003

considering tax credit application it is also important to consider the form of ownership in which a property is held. Most development projects are owned as Limited Liability Corporations and therefore are structured as Pass Through Entities. In this form of ownership the Corporation itself is not taxed, the members of the corporation are considered individually responsible for tax liability, gain, loss and deduction pass through. Refunds from the balance of unused tax credits will be passed through to LLC members rather than returned to the development itself. For this reason it is important to recognize that the brownfield tax credit program does not necessarily contribute to the cash flow of a project itself but in actually it benefits the projects investors.

A final and very relevant point to consider is that the availability of these tax credits is delayed. They will become available for use beginning on or after April 1, 2005 which will translate to calendar year 2006 for taxpayers. (See Appendix A for detail project flow of NY Brownfield Cleanup Program)

4.0 The City of New York and Brownfield Regulation

In New York City the parties involved in the decision making process that effects the development of real property are the Department of City Planning (DCP) and the City Planning Commission (CPC), Community Boards, the Borough Presidents, the Borough Boards, the City Council and the Mayor. In an effort to unify all of the interests of these parties, to increase the involvement of the city's Community Boards in the development of the city and to increase community participation in the governmental process New York created a universal system for land use approval called the Uniform Land Use Review Procedure or ULURP. This procedural city charter states that applications by any person or agency regarding the use, development, or improvement of real property subject to city regulation shall be reviewed pursuant to a uniform review procedure. (City Charter, Section 197-c, November 4, 1975) ULURP standardizes the procedures under which city land use changes are reviewed and sets mandated time frames within which application review must take place.¹¹

Today New York city is divided into 59 separate community districts. These districts have a Community Board of up to 50 members who live or work in the district and represent the district in its duties to advise the City Planning Commission on matters relating to the development or welfare of its district. Obviously matters of public health which come about due to the presence of contaminates at brownfield sites and the desire to revitalize underutilized sites are of great concern to community members and for that reason Community Boards have historically played a large roll in the approval or refusal by the CPC and the DCP of redevelopment actions at Brownfield sites.

¹¹ New York Department of City Planning, "ULURP" www.dec.state.gov.ny

In areas with the greatest need for redevelopment the city government will often make efforts to change zoning or designate special permits which will create greater incentive for the redevelopment of Brownfields and underutilized properties. The actions which trigger ULURP that have the greatest effect on the remediation and development of contaminated property are; Changes to the City Map, Mapping of subdivisions or platting of land into streets, avenues or Public Places, Designation or change of zoning districts, The issuance of Special Permits within the Zoning Resolution requiring CPC approval, Site selection of public capital projects, Urban Renewal plans, the disposition of city owned property and acquisition of property by the city.

In 1973, even before the State of New York had enacted SEQRA, the city of New York under an executive order from the Mayor adapted the Federal NEPA legislation to meet the needs of the city. The next year, after SEQRA was enacted at the state level the Mayor ordered the establishment of City Environmental Quality Review (CEQR) which placed responsibility for environmental review for development projects in the hands of the Department of City Planning and the Department of Environmental Protection. Much like NEPA and SEQRA, the act established a set of procedures for the conduct of environmental review by city agencies including; (1) the selection of the city agency that is to be responsible for determining whether an EIS is required (ie. The “lead” agency), (2) the participation by the city in reviews involving agencies other than city agencies and, (3) coordination of environmental review procedures with the Uniform Land Use Review Procedure. Actions that are subject to CEQR include proposed actions that are

(1) directly undertaken by a City agency, (2) for which the agency provides financial assistance, or (3) for which the agency issues permits or approvals at its discretion.¹²

4.1 Private Sector

The private sector is becoming increasingly involved development of brownfield revitalization projects by providing services such as financing and planning assistance. Non-Profit entities are leading the charge and playing an increasingly important role in getting brownfield projects off the ground by leveraging public funding with private capital. This helps to position brownfield sites as attractive redevelopment opportunities to private developers. These groups are able to bridge the gap that occurs when lenders or private developers fear involvement with projects that have environmental uncertainty by gaining approval from regulatory agencies and by utilizing revolving loan funds to finance the cleanup. By completing this process they are able to cleanup and ultimately stimulate a properties reuse and revitalization.

Non profits groups also can provide grants for brownfield revitalization which can stimulate economic and environmental redevelopment. These groups most often promote the development of accessible, well-planned open space in existing communities and favor sustainable urban design while reducing incentives for urban sprawl.¹³

¹² New York DEC, Brownfields, Transforming the Past, Build for the Future, Financial Resources Manual, November 2003

¹³ New York DEC, Brownfields, Transforming the Past, Build for the Future, Financial Resources Manual, November 2003

5.0 The Remediation Process

5.1 Site Evaluation

The most essential element in any development project that has the potential for existing contamination is the identification of contaminants. As mentioned above in this paper, the type and extent of contamination will directly affect the liability, development time, and cost of a project. The key to an accurate determination of a sites contamination is to perform a thorough site assessment and due diligence. These processes will provide a developer with preliminary information on the feasibility of a redevelopment project. A site assessment will evaluate the environmental and public health risks that are present and due diligence will help to determine any financial and legal risks that are associated with any contaminants that are found to be present.

Phase 1 Site Analysis

A typical site assessment begins with a “Phase 1” analysis of the property. This analysis is most often performed by an environmental professional whose fee’s depending on size of the site and scope are typically around \$2500.¹⁴ This assessment is utilized to identify the type, quantity, and extent of contamination by characterizing any potential contaminants that remain at or around the site, any systems which the contaminants may travel through, and the potential risks to the environment and the surrounding human population from the travel of the contaminants.

Site evaluation is most often requested by parties involved in the transfer, foreclosure, leasing, or marketing of properties. Financial institutions also most often require site

¹⁴ U.S. EPA, “Brochure: Technical Approaches to Characterizing and Cleaning up Brownfield Sites”, July 15, 2002

evaluation prior to committing to lend money to purchasers in order to minimize their lending risk.

A Phase 1 site assessment utilizes a number of basic tertiary investigative and research techniques to determine whether or not a site has the potential for contamination. The first step in the process is a thorough review of available records such as building plans, site use, and records of any prior cases of contamination. Secondly, a site visit will be performed to visually inspect for evidence of any industrial processes. Interviews with prior site owners, occupants, neighbors, and local government agencies are then utilized to further investigate any potential history of contamination. Finally, a report will be compiled by the environmental professional that will explain in detail any likelihood that contaminants are present at the site. The Phase 1 site analysis usually takes 3 to 4 weeks to complete.

If the Phase 1 analysis sufficiently proves to the stakeholders in the development, the community representatives, and to state and local officials that no contamination is present at the site and that no risk is posed to public health or the environment by redeveloping the site then the process of redevelopment may proceed. In some cases where evidence of contamination exists it may be determined that the Phase 1 analysis has provided sufficient data to characterize the site and to develop a remediation plan. However in most cases where contaminants are found to be present a Phase II site investigation will need to be conducted.

Phase II Site Analysis

In the event that a Phase 1 analysis determines that contaminants most likely exist at a site, a Phase II analysis will be conducted to give objective and credible data about the

contaminants at the site which can be used to develop an appropriate remediation or management strategy. The Phase II analysis will determine the types of contamination that are present, the goals of cleanup and reuse, the time that will be required to reach those goals, any care that will be required post cleanup, and the predicted cost of the entire process.

The essence of this phase of analysis is the gathering of data. Data quality goals will be set based upon the redevelopment goals and reuse plans of the site so that the appropriate environmental sampling and analysis techniques can be performed. Data gathering will most often include sampling of the soil, water and air to determine the types and extent of contamination. The investigation most often will begin with a limited sampling of these media and will potentially proceed to a more comprehensive sampling if needed.¹⁵

5.2 Remediation Plan

Once an accurate assessment of the type, quality, and extent of contamination at a site has been completed it is essential to create a site remedy plan that will quickly and efficiently cleanup the site to the level and extent required for the developers intended use. In many cases an intensive remediation plan will be chosen so that the contamination can be mitigated as quickly as possible. Although time is usually of great importance for developers who wish to return sites to operational states quickly cost is also a very important concern in remediation and is greatly increased when intensive plans are utilized. Due to these factors a remediation planner will often weigh a number of options for cleanup and assess the costs and benefits of each.

¹⁵ U.S. EPA, "Brochure: Technical Approaches to Characterizing and Cleaning up Brownfield Sites," July 15, 2002

The level of cleanup required at a site is a derivative of the intended use of the redeveloped property. In many states the EPA and local governments have imposed corrective action levels (CALs) for certain chemicals that have legal requirements for cleanup levels. These CAL's will determine how extensive a cleanup action must be.

The first step in creating a remedial plan is to determine the remedial alternatives available for a site. This begins with the establishment of remedial goals in which an appropriate and feasible remedy level and contamination strategies are developed based on federal, state, and local requirements, community surroundings, available funding, and timeframe. Once these goals are in place a list of remedy options is created by analyzing technical information on the applicability of different technologies. From this point the list of options must be screened by the stakeholders and the regulatory agencies involved. A final plan for remediation is based on a balancing of risk minimization with redevelopment goals, future uses, and community needs and by integrating alternative options with reuse alternatives to identify potential constraints on reuse, considering time schedules, cost, and risk factors.¹⁶ (See Appendix B for detail of Remediation Project Flow)

5.3 Remediation Techniques

There are two forms or classes of remediation used to clean up soil; ex situ is the process of removed soil from the site for treatment, and in situ is when the soil is treated on the site. There are a multitude of systems for cleaning soil, the following are the most commonly used in the state of New York. Bioremediation is a system which used microorganisms like bacteria and yeast to break down hazardous substances. Thermal

¹⁶ U.S. EPA, "Brochure: Technical Approaches to Characterizing and Cleaning up Brownfield Sites", July 15, 2002

Desorption is a process where soils are heated to 1000 degrees Fahrenheit to break down and destroy contaminants. Once broken down the “volatilized” contaminants are collected and treated. Soil Vapor Extraction (SVE) utilizes the exertion of a vacuum through the soil to extract vapors. It is most often used ex situ.

Groundwater Remediation is also often a component of the remediation plan, especially in coastal or waterfront areas. Treatment walls are the most common form of passive remediation at sites where the hazard is not threatening but where groundwater must be contained. In this process a trench is excavated perpendicular to the direction of groundwater flow and an absorbent wall is erected that will screen contaminants while letting water flow through. Groundwater Extraction/Injection is a much more invasive method of treating contaminated groundwater. In this process wells are drilled into and around contaminated groundwater and water is extracted for treatment. The treated water is then re-injected into the groundwater supply so that the level of overall contamination is gradually reduced. This system can take many years to reduce contamination to acceptable levels and is often continued after redevelopment of the property.

5.4 Liability Insurance

Liability is a major concern for any municipality, government, or private developer when considering the purchase, clean up, or development of a Brownfield site. In New York the New York State Brownfield Cleanup Program, the New York State Environmental Restoration Program, and the Federal Small Business Relief and Brownfields Revitalization Act all contain important provisions to limit the liability of those who purchase or cleanup land which they did not personally contaminate.

Although these regulatory actions remove much of the uncertainty associated with developing a brownfield property it is often essential to purchase Liability Insurance to obtain the required financing from major lending institutions for these projects. The construction and environmental insurance industries have matured rapidly to accommodate issues related to initial and long-term remediation. The industry has created insurance products for municipalities as well as private developers that have coverage for varying levels of responsibility and liability for remediation of brownfield sites.

These insurance products consider the difficulties and health hazards of remediation and aid to eliminate the risks and fears associated with them. They are designed to eliminate risks such as; cost over runs, the discovery of contaminants not identified in site assessments, changes in governments requirements and laws, third party claims for bodily injury and property damage, business interruption, the reduction of adjacent property values due to remediation process, claims from potentially responsible parties, liability for employees, officials, officers and directors against personal liability, and the acceleration of tax deductibility for remediation and other expenses.¹⁷

During property purchases environmental insurance can be used to eliminate risk to purchasers associated with taking title to a contaminated property. The insurance product will stand in place of a sellers contractual indemnity. According to the New York DEP, this contractual indemnity is the single largest difficulty in any brownfield transaction negotiation. Insurance will assist in reducing credit risk, preserving purchase price, and removing environmental uncertainties.

¹⁷ New York DEC, Brownfields, Transform the Past Build for the future, Financial Resources Manual, November 2003

5.4a Environmental Insurance Products

Cost Overrun Insurance for Cleanup of Known Environmental Contamination

Commonly known as Cost Cap insurance this product insures a developer against the occurrence of remediation costs exceeding the expected costs determined by a remedial action plan. Overruns are common in remediation projects and can occur when contaminated “hot spot” areas are missed during site analysis, off-site clean-up costs are discovered, disposal costs increase, or clean up requirements are changed through regulatory action.

Environmental Impairment Liability and Remediation Warranty Coverage

EIL policies as they are commonly called cover the discovery of new contaminations, bodily injury and property damage, business interruption and natural resource damage.¹⁸ The policies cover these costs whether they are on site or off site and even if they are associated with unknown pre existing conditions and ongoing polluting situations.

These policies can be written for a period of 10 years and are very effective in cases where a prior owner has been indemnified. The policy can essentially protect a property against future potential environmental conditions after the site has been remediated. This protection will most likely increase the sale price of the property. The policy can also cover reopening of the Certification of Completion in the event that the regulatory agency decides to reverse their position on their acceptance of cleanup.

Errors and Omission Insurance for Environmental Consultants

These policies will cover against errors made in the services provided by environmental consultants and engineers. Errors made when identifying contaminants,

¹⁸ NYDEC, Complete Brownfields Manual, Financial Resources Handbook, 2003

characterizing a site, and creating remedial action plans can have great impact on the cost and time that it takes to clean up a site.

Contractors Pollution Liability Coverage

These policies cover the release of contaminants caused by the work of contractors. When remediating contaminated sites, harmful material can be released into the surrounding environment. This release can result in bodily injury, property damage or additional cleanup costs. These claims can be made by non associated third parties or by workers on site. This type of policy is intended to be purchased in addition the Commercial General Liability policy which will insure contractors against non-environmental risks.

Contractors Operations and Professional Services Coverage

This is a policy which combines Errors and Omissions coverage with Contractors Pollution Liability Coverage and provides protection when a single contractor is involved in the engineering as well as the contracting work.

Pollution Legal Liability Coverage

PLL is a site-specific plan which covers against third party claims that result from the release of contaminants and hazardous substances from the insured site. These policies are usually only necessary when the owner of the site is not listed as an additionally insured person on the contractors' policy.

The essence of environmental liability insurance is to shift any risk associated with remediation from any involved party including private parties and federal, state, and local governments to the insurance product. The costs of these products have been dramatically

reduced over the past few years due to increased acceptance of brownfield development projects and increases in competition within the industry.

In an interview with Terry Wolfram of Cherokee Investment Partners the cost of such products was explained in relation to their 750,000 acre Brownfield Development at the New Jersey Meadowlands. Mr. Wolfram expressed that a typical rule of thumb for remediation is the assumption that the cost of insurance is roughly 10% of the entire remediation cost for the project.

It is important to note that federal and state laws hold original polluters and owners responsible for cleanup regardless of insurance. Sellers cannot transfer the risks and responsibilities of pollution claims to the purchasers of their property. This potential liability to former owners is unlimited in terms of time and dollar amount. Insurance policies can only provide protection to parties that are identified at the time the policies are written, subsequent purchasers of remediated properties cannot be included as additional insured parties on the policies that are written at the time of the initial sales.¹⁹

¹⁹ New York DEC, Brownfields, Transform the Past Build for the future, Financial Resources Manual, November 2003