



BLUE ISLAND BROWNFIELDS

A Technical Report and Recommendations

Prepared for the City of Blue Island
by The Delta Redevelopment Institute

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1.0 Introduction

This technical report was prepared for the City of Blue Island by the Delta Redevelopment Institute as part of the work plan for a federal EPA Brownfields Assessment grant that was awarded to the City in 2007. The purpose of this report is to educate City staff and other brownfield stakeholders to make for a more informed decision-making process as well as to lay the groundwork for creating new tools that contribute to a more permanent brownfields redevelopment program.

1.1 Unique contribution of municipalities. The term “brownfield” conjures images of rusty above-ground storage tanks and chemical spills. In reality, most brownfield sites are much more ordinary -- a former corner gas station or a former dry cleaner. Federal and state environmental protection agencies define a brownfield as a site that has either *actual or perceived* contamination.¹ It is also important to note that buildings may be considered brownfields. Most brownfield assessment programs will allow the use of assessment money to investigate hazardous building materials such as asbestos and lead paint.

Because the trend in commercial and industrial development is toward bigger buildings on bigger sites, it is easy for developers to pass over smaller, infill sites and avoid the time and cost of assembling land and assessing possible contamination from former land uses. Municipalities in older communities like Blue Island can play an important role in helping to level the playing field between brownfield and greenfield sites. They can take an active role in assessing redevelopment sites, assembling smaller sites into larger ones and putting together incentive programs and marketing strategies to make their sites more competitive in the marketplace.

1.2 Why is it important to learn about brownfields? One obvious reason is to reduce possible exposure of health risks to community residents. Residents who learn about the possible sources of environmental concerns can help identify historical uses of sites and help put in place the strategies and safeguards to prevent them. Residents will also be involved in setting priorities and select sites where the City will focus its resources in the near term. As the City is currently updating its zoning, City staff and residents should also understand how land use restrictions relate to cleanup requirements. Most importantly, education about brownfields will ensure that City staff and other brownfield stakeholders are trained to make informed decisions about brownfield sites in their communities.

1.3 Brownfield Basics. The process of assessing potential environmental concerns can be a daunting one for those who are new to it. This report is intended to

¹ US EPA defines a brownfield as: “Real property, the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant.” Illinois EPA’s definition is simply: “Real property, or a portion of the parcel, that has actual or perceived contamination and an active potential for redevelopment.”

explain the process and other factors that affect redevelopment of brownfields. Education is intended to help the City push its highest-priority brownfield sites through the process, making them more competitive candidates for redevelopment consistent with the City's economic goals. Additional information and education is also intended to assist the City in preventing future brownfields and creating a more effective, sustainable economic development program on an on-going basis.

Alphabet Soup. Environmental consultants tend to speak in acronyms. (“Well, first we’ve got to do a Phase 1 ESA to identify any RECs, and then if we find anything, we might have to do a Phase 2 ESA and enroll in the SRP, but if we’re lucky, we’ll be able to just use institutional controls to meet the TACO standards.”) This report includes both an explanation of these terms and the process to help both public and private stakeholders establish priorities and make decisions regarding the future development of brownfields.

Federal Grant Focus. In 2007, the City of Blue Island was awarded a brownfields assessment grant from the U.S. Environmental Protection Agency (EPA). The immediate focus of the City is to select roughly 20 brownfield sites for preliminary environmental assessment and then select a few with the most potential for immediate redevelopment for more in-depth assessment. Grant funds may not be used for sites that may already be under some form of federal control, such as Superfund sites. It is up to the City to select sites with the involvement of community stakeholders.

The City's economic development focus is on areas adjoining its rail assets, or Cargo-Oriented Development (COD) and Transit-Oriented Development (TOD) areas. Although the City's industrial COD areas would otherwise be considered obvious targets for environmental assessment work, the City is seeking to focus the current grant dollars on commercial and mixed-use TOD areas because it does not have other funding for assessment work in these areas. Other funding sources, primarily TIF funding, is available to fund more extensive environmental assessment work in industrial COD areas.

Three TOD areas have been identified in conjunction with the City's Economic Development Plan: South (Vermont Street) Station, Western Avenue/Main Street and James Street/Old Western Avenue. The boundaries of these TOD target areas, as well as concept plans for specific redevelopment sites is currently being reviewed as part of the update of the City's Economic Development Plan.

Sustainable Redevelopment. Beyond assessment of existing environmental concerns, this report discusses strategies for more sustainable redevelopment of brownfield sites as well as proactive strategies for preventing pollution and the creation of future brownfields.

1.4 Environmental Concerns in Target Areas. The following table summarizes the potential environmental and related concerns for each of the TOD target areas.

TOD Target Area	Economic Development Goal	Possible Environmental Concerns
South (Vermont Street) Station TOD	Promote construction of residential and mixed use near train stations	Existing and former industrial businesses may need investigation
Western Ave/Main Street	Add more retail, restaurants, service and mixed use development (new construction and adaptive reuse). Historic preservation of unique buildings or features.	Environmental condition of some former commercial uses (dry cleaners, auto-related uses) may require investigation. Adaptive reuse of former industrial buildings may require heightened “due diligence” and special consideration about the remediation of historic materials and building features.
James Street/Old Western Avenue	Allow for continued conversion of older industrial buildings for artist studios, offices or mixed use	Adaptive reuse of former industrial buildings may require heightened “due diligence”

In addition to considering assessment needs in the TOD areas, the City also has some isolated commercial and industrial sites outside of the TOD and COD areas that it would like to consider for immediate brownfield assessment depending on the importance to the community of encouraging redevelopment of these sites in order to reduce potential health risks or conflicts between residential and non-residential uses.

1.5 Factors Affecting Brownfield Redevelopment. Potential liability and cost for environmental contamination are obvious barriers to redevelopment of brownfields. However, they are not the only ones. It may be a mistake to focus brownfield grant dollars on sites that may not be redeveloped soon due to other factors. This section is intended to provide a better understanding of how environmental concerns and other factors impact redevelopment of brownfields.

- **Potential liability for environmental contamination.** A property that has potential environmental concerns can raise questions for a buyer relating to time, money, legal risk and ability to secure financing. Part 2 of this report provides information on timeframes and cost estimates for different stages of environmental assessment. A municipality can save developers time and money by doing this work in advance for sites that it would like to see redeveloped the fastest.

In cases where there is actual contamination, municipalities that acquire contaminated sites also have a unique exemption from liability under Illinois environmental law unless the municipality causes the contamination. Under the federal liability system,² a property owner can be held liable for all the costs of cleanup, even if they only contributed a

² Most of the federal liability laws are set out in The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) and the Resource Conservation and Recovery Act (RCRA).

small portion of the waste or only recently purchased a piece of property. This liability system is sometimes referred to as “joint and several liability.” The liability laws in Illinois were first drafted using the same structure as the federal liability system;³ however, beginning in 1993, a number of changes to the state statutes related to liability for contaminated sites were put into effect. Most notably, Title XVII of the Illinois Environmental Protection Act passed in 1995 included changes to the environmental cleanup liability scheme in Illinois aimed at encouraging parties to clean up and redevelop brownfields, including exemption of municipalities from remediation costs except in cases where the municipality is actively managing sites and caused contamination. (*See 415 ILCS 5/58.9(a)(2).*) Because liability laws are constantly changing, municipalities should know the latest laws and regulations before acquiring contaminated sites.

- **Ownership and Site Assembly.** In addition to contamination, redevelopment of a site may be complicated by ownership, site assembly, tax and title problems that take time and money to resolve, including:
 - **Difficult or multiple owners.** Environmental assessment may not help speed the redevelopment of a property has a difficult owner who is unwilling to sell or improve the property. Municipalities often focus first on sites that they own themselves or private sites where there is a willing seller. Assembly of property that is owned by multiple parties also requires more time.
 - **Payment of delinquent taxes.** Most government taxing bodies have a fixed process for forgiving delinquent taxes through transfer to a municipality. This process takes time and gives a property owner up to two years to redeem back taxes before the transfer process can begin. This process can take an additional 6-12 months depending on court dockets.
 - **Curing title defects and releasing liens or easements.** Abandoned sites in particular are often plagued by demolition, contractors or water liens. Title reports may also uncover recorded access easements that need to be addressed before a developer can be certain of the right to build in a specific location.

- **Interested Buyer or Tenant.** Sites that someone wants tend to get developed faster regardless of environmental condition. Municipalities often give priority to sites where they know there is an interested buyer or developer. Market analysis may be needed to help identify potential types of buyers or developers for other sites.

- **Market Factors.** The question for most developers is whether the market value of the property is high enough to justify the additional time and cost

³ The main Illinois law that applies to contaminated sites is the Environmental Protection Act.

to address problems. Developers are more willing to take risks on sites in strong markets or in exceptionally good locations within weaker markets. Sites that have manageable environmental concerns may nonetheless sit vacant for years after an owner has obtained an “NFR” letter because of a weak market, a weak location within a market, or a lack of effective marketing. This section of the report is intended to improve understanding of the factors that relate to the marketability of sites and to help target developers or buyers that best fit the Blue Island market.

- **Location, location, location.** The question is what type of location is a particular type of buyer seeking? A multi-national manufacturer is more likely to be looking at a location in China than the U.S. A high-tech firm is often looking for space in hip locations close to colleges or universities. National retailers are often looking for the best corners in any neighborhood or locations very close to other national retailers. Merchants of higher-priced goods seek locations that have relatively high population densities and income. A mixed-use developer is likely to be attracted to sites near transit stations. Blue Island has already identified its rail assets as a key competitive advantage of its location.
- **Demographic statistics.** Different buyers or developers look for different statistics. Statistics are much less important to a local buyer or developer who has already made a commitment to an area based on other factors. However, most national retailers will want to know the population, racial characteristics, income and education level within a 1-, 2- or 3-mile radius of a commercial site. Larger employers will be much more focused on labor statistics and quality of life issues such as schools, housing and recreation opportunities.
- Some free data sources exist; however, they may not be up to date or may not accurately reflect the real trade areas for a site. In weaker markets, it may be worthwhile to pay for more customized analysis of the strongest sites that place the community and location in the most positive light. A customized “competitive advantage analysis” might also address possible concerns about issues such as gains in education attainment and other statistics that are most favorable to a community. Some customized market analysis will be done by the consultants after the selection of priority sites for environmental assessment.
- **Community assets.** Just as different types of developers or buyers value different types of statistics, they will also value different types of community assets
 - transportation access – rail, highway, air
 - existing employers or proximity to employment centers
 - work force (education level, training resources)
 - quality of life – housing, schools, recreation, aesthetics & image

- **relationships** – people in your community who can effectively market your community to potential developers, retailers or employers
- **Community Readiness Factors.** In addition to liability, ownership and assembly and market factors, how quickly brownfields will be developed often depends on how prepared a community is to help, or community readiness factors. These factors include whether a community has done advance planning, whether a proposed use is consistent with community plans, whether economic incentives are already in place and whether the community has adequate staff capacity to move the necessary approvals and incentive applications through the approval process.
 - **Consistency with community plans.** A community that has done advance planning will be more attractive to good developers than one that has not. Planning helps insert some predictability into the development approval process. A multi-family housing developer who knows that higher density housing is encouraged in a particular area is more certain of community support and a faster approval process. Market analysis may be needed to determine whether the size or price of the proposed housing is realistic.
 - **Economic development incentives.** Sites that are eligible for some type of economic incentive may get developed faster than sites that are not. Knowledge of the potential incentives that may be available in a community or certain areas within a community can help in attracting buyers or developers. (Part 3 of this report includes information on financial incentives that are currently available in Blue Island.) In addition to tax incentives, municipalities can attract developers by acquiring land, resolving problems that might exist (such as back taxes) and offer properties for sale at discounted prices as an extra incentive.
 - **Staff capacity.** Communities with well-trained professional planning and economic development staff that can not only respond to requests for information, but be proactive in marketing their brownfield properties are more likely to be successful than communities that do not.

It is important for communities to learn about brownfields and consider all of the factors that affect the redevelopment of brownfield properties before setting priorities, determining where to focus their resources now and establishing action steps for the future.

2.0 The Environmental Site Assessment Process

Municipalities can play an important role in redeveloping brownfields by investing in upfront planning and environmental assessment work, which can often take time and money that developers are not willing to spend when faced with easier site options.

If a property has recognized environmental conditions (RECs) or there is known contamination at the site then an environmental assessment is needed. Conducting an environmental assessment according to the recognized standard of practices (ASTM E 1527-05 at the time of writing of this report) can provide the buyer “innocent purchaser” status against future liabilities associated with historic site uses and recognized environmental conditions as well as give comfort to lenders that may be financing the purchase.

This part of the report provides an overview of the environmental assessment process in Illinois. The City’s current brownfield assessment grant money will be used to push some of the City’s priority redevelopment sites through this process. Understanding the process may be important in making choices on which sites are ready for assessment now.

2.1 Illinois Site Remediation Program (SRP). The Illinois Environmental Protection Agency plays a key role in setting standards for assessment and cleanup of sites through administration of the Illinois Site Remediation Program (SRP). The SRP is a phased approach to investigating and remediating a brownfield site.⁴

Elements of the SRP investigation and remediation, described in detail below, include:

- Phase I Environmental Site Assessment
- Phase II Site Investigation
- Remedial objectives standards
- Site Remediation
- No further Remediation Letter

Remedial Applicants (RAs), which are property owners or interested parties that have the consent of the property owner, enroll in this program on a voluntary basis in order to obtain what is commonly known as a “comfort letter” or a “No Further Remediation Letter.” A description of the NRF letter starts the section as final receipt of the letter is considered “prima facie” evidence that the site has been remediated in accordance with the requirements of the Illinois SRP program and onsite contaminants do not present a threat to human health or the environment. Experienced developers of sites in older communities are likely to be familiar with the process.

While the Illinois SRP program is voluntary it is not free. A \$500 filing fee is required to enroll in the program. The Illinois EPA then collects fees for its

⁴ Information about the Illinois SRP can be found at <http://www.epa.state.il.us/land/site-remediation/>.

review of the required site reports and documentation. A typical rule of thumb is that Illinois EPA fees will be approximately 10% of the final remediation cost.

- 2.2 “Comfort Letter” or “No Further Remediation (NFR) Letter.”** This letter affirms that the site is safe for the intended use and does not constitute a significant risk or harm to human health and the environment if the site is used in accordance with the terms and conditions of the letter. In Illinois, a “**comprehensive**” NFR letter can only be achieved if:
- The site is enrolled in the SRP program
 - The future use of the site is known
 - The applicant has identified all potential recognized environmental conditions through Phase 1 and Phase 2 site assessment (*see more on this below*)
 - The applicant has identified and implemented all remedial actions to address any concerns

A “**focused**” NFR Letter is for those applications that want to limit their remedial actions on specific chemical or set of chemicals (e.g., BTEX) at a site. The focused NFR Letter would apply to those applicants that need to satisfy a contract requirement or specific release of hazardous substances.

- 2.3 Phase I Environmental Site Assessment.** The purpose of this assessment is to identify potential Recognized Environmental Concerns (or RECs). A recognized environmental condition means the presence or likely presence of a regulated substance or pesticide into site structures, surface water, sediments, groundwater, or soil. A REC typically does not include “de minimus” conditions that would not pose a threat to human health or the environment. Examples of RECs include underground storage tanks, fly dumping, and/or chemical releases to the soil or groundwater from onsite operations.

Phase I Environmental Site Investigations should be conducted in accordance with the most current version of ASTM standard E 1527. (For information on the most current version, see www.astm.org). The current standard of practices at the time of publication of this report was ASTM E 1527-05. The current ASTM standard meets the Phase I requirements of the Illinois SRP as well as the “All Appropriate Inquiry” rule required by the U.S. EPA since November 2006. The AAI requires additional due diligence during the Phase I process to assess the potential property buyers knowledge of the environmental conditions at the site. Typical costs for a Phase I site investigation range from \$3,000 to \$5,000; however, costs may be lower if multiple investigations are undertaken simultaneously.

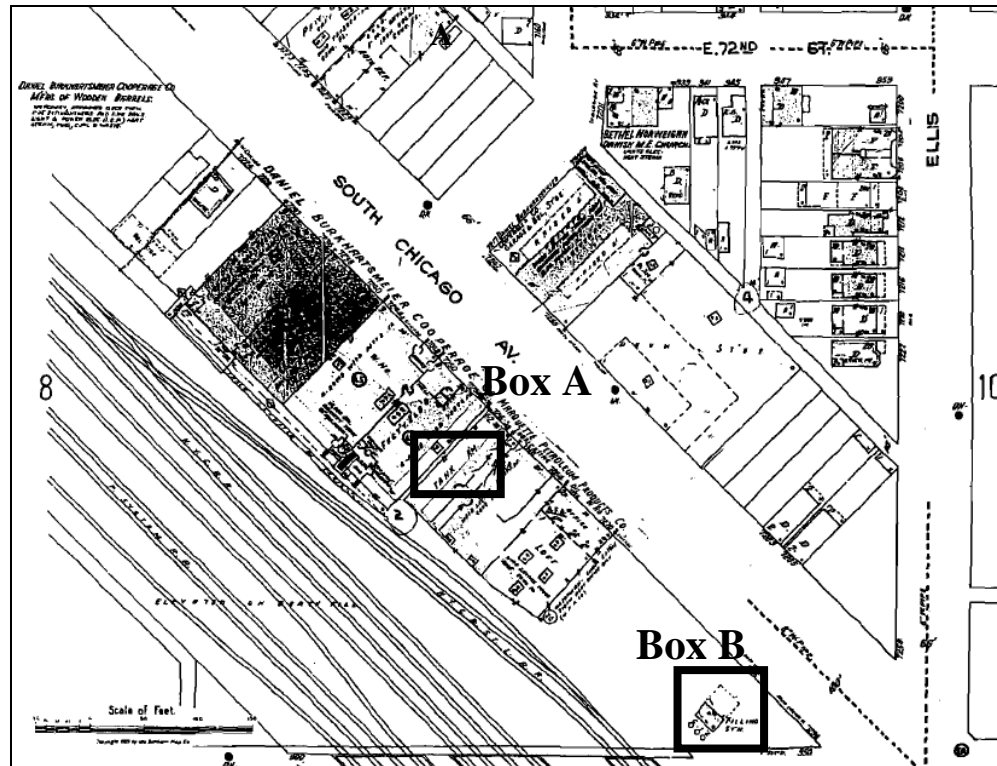
Aspects of a phase I include: site visit; interviews with knowledgeable personnel; a file review; and reporting. A site visit is typically conducted by an environmental consultant hired by the Remedial Applicant. The consultant will

visually inspect all accessible areas of the site and structures and note areas that were not accessible. Visual inspection may or may not uncover recognized environmental conditions depending on the use and condition of the site. Typically, historic uses that pose RECs are uncovered through the interview and records search processes.

The environmental consultant will interview persons knowledgeable of current and past site conditions. Interviewees may include past property owners; former facility managers; and/or former site workers.

Site records often provide the most clues to former site uses and possible RECS. Documents reviewed include:

- Historic Sanborn Fire Insurance Maps – Sanborns date back to the late 1800's and, because they were developed for fire insurance purposes, frequently provide information about former petroleum and chemical storage and use. An example of a Sanborn map is shown below.
- Freedom of Information Act requests – FOIA requests are made to city, state, and federal agencies with authority over chemical use and storage activities at the site. FOIA request frequently uncover information about underground storage tanks or onsite chemical storage (i.e. RCRA).
- Site radius search – ASTM requires searching certain federal and state chemicals storage and hazardous waste databases to obtain information about the current site regulatory status. ASTM also requires that certain databases be searched for surrounding sites in order to make an evaluation of the impact of nearby sites on the target site. Typically, database search companies are contracted to perform the search in accordance with the ASTM standards. An example of a radius search map results are shown below.



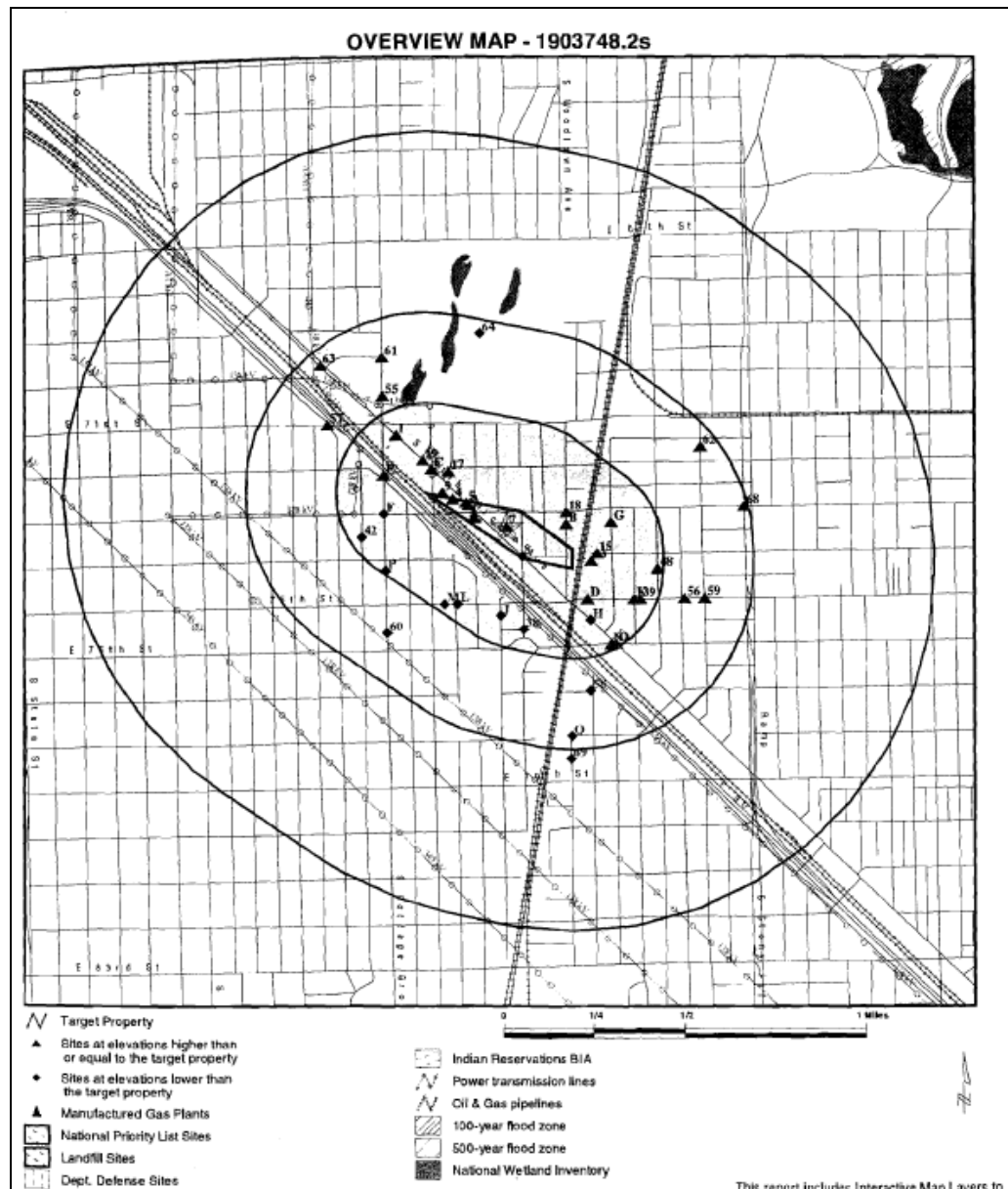
Sanborn map. Boxes A and B are enlarged below, showing locations of a former tank room and filling station, respectively.



Box A



Box B



EDR radius map.

- 2.4 Phase II Environmental Site Assessment.** The objective of the Phase II is to confirm the environmental site conditions identified in the Phase I and, if needed, define limits of contamination. The Illinois SRP includes specific requirements for Phase II subsurface sampling such as the frequency of soil samples and groundwater wells as well as the type of laboratory analysis.

Phase II activities are typically more invasive than Phase I activities and generally include magnetometer survey to identify underground structures (e.g. tanks or extensive piping); soil sampling; groundwater sampling; and/or other types of sampling (e.g. building materials). Phase II investigations typically cost more than

\$10,000 (and often much more) depending on the size of the site, numbers of RECs, and former site uses.

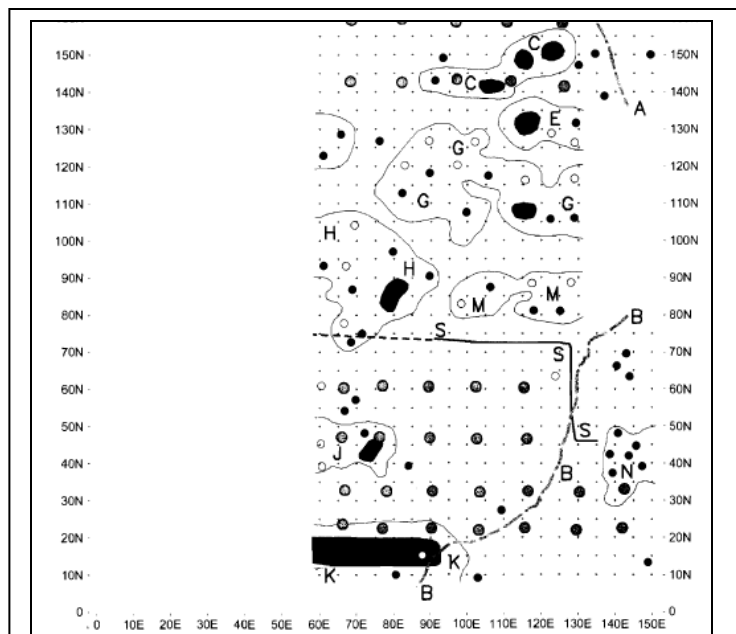
Phase II activities generally occur in several iterations based on the results of the on-site sampling activities. Initially, soil borings are advanced in areas of RECs to evaluate if subsurface contamination is present. Soil samples are usually laboratory analyzed by an Illinois certified laboratory for the SRP Target Compound List (TCL) which includes volatile organic compounds, semi-volatile organic compound, polynuclear aromatic compounds, metals, polychlorinated biphenyls, and pesticides. If contaminants are found in the soil samples then additional sampling is conducted to determine the extent of the contamination. Subsequent laboratory analysis is usually limited to the contaminants identified during the first round of sampling.



Soil sampling using a geoprobe. Source: <http://www.usgs.gov/>

Even though groundwater at a site is not used as drinking water, the Illinois SRP will typically require groundwater sampling in order to determine if contaminants are present in the groundwater and the potential for those contaminants to migrate offsite due to the natural flow of groundwater.

If the Phase I investigation identifies that an underground storage tank was or could be present at the site, a magnetometer survey is typically completed. Using a non-invasive electronic probe, a magnetometer survey will help to find underground storage tanks, or other metal structures, without a lot of digging. Once the magnetometer



Sample magnetometer results. Solid black areas indicate anomalous zones, such as underground storage tanks. Source: *Electromagnetic survey of confidential site for Delta Redevelopment Institute.*

survey is completed, test pits may be installed to confirm the presence of a tank or other underground structure.

The results of the Phase II investigation are compared to the standards published by the SRP. The SRP has residential, commercial/industrial, and groundwater standards known as the Tiered Approach to Cleanup Objectives (TACO) standards. The residential standards are the most stringent levels. Depending on the anticipated final use of the property, the soil and groundwater results will be compared to appropriate TACO standards.

The results of the Phase I and II investigations are documented in a report known as the Comprehensive Site Investigation Report (CSIR). The report is developed according to the SRP guidance and submitted to the Illinois EPA for review. Review times of around 60 days are typical. The Illinois EPA will make comments on the report and may require additional soil and/or groundwater sampling to be conducted if the reviewers do not feel the site has been adequately investigated to ensure that the final remediation activities, which are based on the soil and groundwater sampling, will eliminate exposure to onsite contamination.

2.5 Cleanup Standards: Which Standards Apply to My Site? The type and extent of subsurface remediation is based on the cleanup standards- residential versus industrial- established for the site. Residential standards are more stringent than the commercial/industrial standards and, therefore, generally require a higher degree of remediation depending on the environmental contaminant. For example, a site that will be developed into a park or playground will utilize a residential standard which may result in active cleanup activities such as soil removal and groundwater treatment. The same site developed under the commercial and industrial standards would require less intensive cleanup that could include soil removal but would more likely also include engineered barriers and institutional controls. Knowing the final site use at the start of the project is helpful to identify remediation options and/or limit the intensity of remedial activities at the site thereby reducing the overall cost of the final remedy.

A Remedial Objectives Report (ROR) is submitted to the Illinois EPA for review. The ROR identifies the standards that will be used to guide the remediation activities and provides a rationale for those standards. Remediation objectives for the projects are developed utilizing the TACO standards and procedures established in the SRP rules. The TACO procedure presents an approach for development of remediation objectives that includes use of the appropriate standard based on final site use; the exclusion of pathways from further consideration (i.e. if no contamination was identified in the groundwater); and the use of area background concentration as remediation objectives. An understanding of human exposure routes (i.e. will people be using the groundwater or not) needs to be included. At this time in the process it is important to have the site use defined.

2.6 Site Remediation. The purpose of the site remediation is to eliminate exposure of site contaminants. Therefore, site remediation alternatives are designed to be in perpetuity either through removal of the contaminants via excavation or maintenance of engineering barriers and institutional controls through site agreements and deeds. The cleanup remedy is highly site specific and, ideally, should be designed in conjunction with the final site use to take advantage of site development aspects such as building foundations or parking lots that could act as an **engineered barrier**.

An engineered barrier is an **impervious** structure such as a parking lot or building foundation that will eliminate exposure of subsurface contaminants. Consideration of worker health and safety issues must be addressed during the site planning and development process if an engineered barrier is to be included in the site design. An example of a redeveloped brownfield where the building is used as the engineered barrier is shown below.



*Engineered barrier at Chicago Center for Green Technology, a redeveloped brownfield site.
Source: City of Chicago Department of Environment.*

Institutional controls are a non-invasive site cleanup activity that involves placing a restriction on the final use of the site in perpetuity. Typically, institutional controls are deed restrictions that would place a control on the certain aspects of site development. For example, an ordinance that limits the use of groundwater for drinking water or a restriction of future land use would be considered institutional controls. The institutional control is described in detail in the NFR letter.

Excavation activities and groundwater remediation are the most invasive remediation techniques. Typically soil and/or groundwater removal is required when a contaminant source (e.g. drum of chemicals, undergrounds storage tanks) is found and needs to be removed. However, excavation is also common in when the site is being remediated to residential standards.

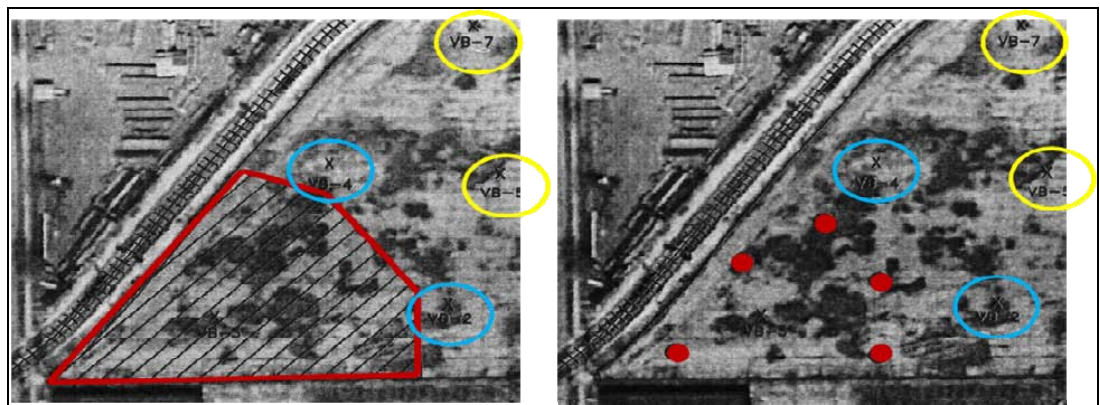


Excavation. Source:
<http://www.sxc.hu/photo/279748>



Groundwater treatment center. Source:
http://www.tucsonaz.gov/ets/Groundwater/Los_Reales/los_reales.html

As excavation is expensive and if the final site use is known it may be worthwhile to conduct additional soil sampling to attempt to reduce the limits of the excavated areas. For example, the following map shows a series of Phase II soil borings that were installed to define the limits of contamination. No contaminants were identified in the red samples at left. Therefore, the RA would have to implement a remediation plan that extended outward to the series of red samples. To reduce the limits of remediation, a second series of soil samples that were closer to the contaminated area were collected, indicated by the red dots at right. The second set of samples was also free of contamination; therefore, the limits of the area to be remediated were reduced resulting in both cost savings associated with remediation and development.



Phase II soil borings; explanation in text above.

The proposed site remediation strategy is documented in a report called the Remedial Action Plan (RAP). The RAP outlines the proposed remediation scenario that will meet the remediation objectives identified in the Remedial Objectives Report. Upon completion of the corrective actions, a Remedial Action Completion Report is submitted to the Illinois EPA. This report attests that all remediation objectives, site specific response action and data quality objectives

have been successfully obtained. If the remediation is acceptable to the Illinois EPA an NFR letter will be issued within 30 days of Illinois EPA approval of the remedial action completion report. The remedial applicant must submit the NFR letter to the Registrar of Titles of the county in which the remediation site is located within 45 days of receipt of the letter.

Building Redevelopment Issues: Asbestos and Lead Paint. Phase I

Assessments can typically address building concerns such as asbestos or lead paint issues if the consultant is requested to identify these issues before the start of the program. The ASTM standards for Phase I Environmental Site Assessments do not contain requirements for asbestos and lead. Additionally, the Illinois SRP program does not provide investigation and remediation guidelines for building contaminants. Those types of contaminants will need to be managed under the applicable state and federal guidelines.

The Department's Division of Environmental Health reviews asbestos management plans for elementary and secondary school facilities and inspects abatement projects to ensure compliance with state and federal laws. More recently enacted legislation regulates persons who perform asbestos-related activities in commercial and public buildings and requires that such activities be carried out safely. People who manage or abate asbestos in elementary and secondary schools must be trained and licensed. Asbestos sampling and removal should mirror the Illinois DOH requirements for public buildings.⁵

Lead based paint is a common contaminant in older building. Buildings should be tested for lead based paint and, if the building is to be demolished or significantly rehabbed, construction waste should be tested for lead paint and properly disposed. However, management standards for lead-based paint C&D debris may change in the near future with regard to requirements for lead-testing procedures and disposal methods. Call the Office of Small Business for additional information on lead-based paint waste disposal procedures.

⁵ <http://www.idph.state.il.us/envhealth/asbestos.htm>

3.0 Elements of a Successful Brownfield Redevelopment Program

A successful brownfields program is often part of a larger economic development plan and program, and it is important that these two are integrated and work together. In addition to investing in upfront environmental assessment of priority redevelopment sites (which was covered extensively in the preceding part of this report), municipalities can play a critical role in encouraging the redevelopment brownfields. Other elements of a successful brownfield program are covered in this part of the report.

Why Municipalities Are So Important. Municipalities play a unique and critical role in the redevelopment of brownfields in older communities such as Blue Island because older communities with smaller, infill sites and brownfield sites face a competitive disadvantage when compared to communities that have larger “greenfield” sites. Even though older communities have infrastructure in place, environmental assessment and demolition can add significant costs to a development that a developer would not face when looking at greenfields. In addition to “non-value-added cost,” brownfield sites present more risk. Money invested early on may be lost if conditions cannot be remedied quickly, government approvals are not forthcoming or property assembly is stalled. Or unexpected conditions may be discovered later that may put a project behind schedule and over budget. Developers are less willing to take risk in weaker markets with lower land values where lower profit margins make it more difficult to cover demolition and cleanup costs with anticipated revenues.

Municipalities can help eliminate risk by investing in upfront planning and environmental assessment work, having an ample inventory of available sites that are ready for development together with market analysis that places their community in the best possible light. And finally, municipalities are in a unique position to access grants, favorable loans and provide economic incentives to level the playing field and make Blue Island’s redevelopment sites competitive with pristine sites in edge cities.

3.1 Vision. Planning is one important way that municipalities can help reduce risk for developers. Planning introduces predictability into local decision-making. Developers who have learned how to deal with environmental risk often complain that “entitlement risk” is their biggest concern – or fear that the local community will not approve the proposed development. Developers take some comfort in knowing that a use they are proposing is already endorsed in a local plan.

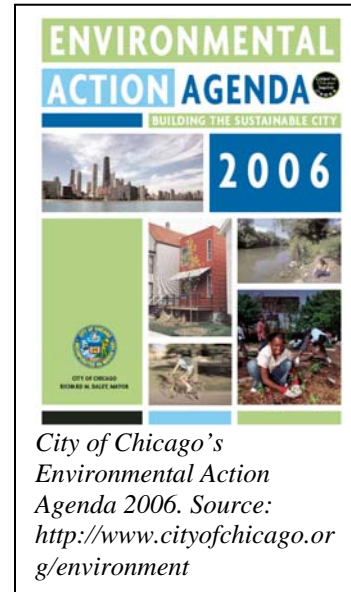
A municipality’s vision may be expressed in more general terms in a master plan or comprehensive plan. Economic development plans or neighborhood plans drill down deeper and create a plan of action for specific areas. Increasingly, progressive municipalities are also setting goals for sustainability. An environmental agenda or sustainability plan may include parameters for energy efficiency for new buildings or recommend policies for greening a city’s operations (through the use of renewable fuel for public fleets or through green purchasing). Some plans also include economic development goals to support and

increase “green business” as a strategy for creating jobs. Many of the policies in sustainability plans also relate to preventing future brownfields (see Part 4 below).

3.2 Available Properties. Most developers and tenants are looking for property that is ready to develop immediately or at most within a year. Especially in weaker market areas, municipalities can play a critical role in getting sites ready for development and having an up-to-date inventory of properties that are either ready to go or fully assessed.

Municipalities have a big advantage in assembling land and addressing environmental concerns on property they own because they have lower carrying costs (exemption from taxes and access to lower-interest bonds as a financing source). They also have an advantage in clearing away debts owed on a property by foreclosing on water, demolition or tax liens.

Municipalities that acquire property in order to enforce health & safety laws or eliminate blight, may also avoid legal responsibility for contamination when taking title to property. Although Illinois law governing eminent domain has changed somewhat recently, it may still be used to acquire blighted property, even for private redevelopment, provided a municipality has done its homework. Attorneys are usually important brownfield team members when considering the pros and cons of acquiring brownfield property.



City of Chicago’s Environmental Action Agenda 2006. Source: <http://www.cityofchicago.org/environment>

States	Counties	Localities	Buildings	Sites	Download															
Site Search Results 35 records were returned. Advanced Search My Property Cart 0 Properties Selected																				
QuickFilter: <table border="1"> <tr> <td>All</td> <td>0 - 1.0</td> <td>1.1 - 2.0</td> <td>2.1 - 3.0</td> <td>3.1 - 5.0</td> </tr> <tr> <td>5.1 - 10.0</td> <td>10.1 - 20.0</td> <td>20.1 - 50.0</td> <td>50.1 - 100.0</td> <td>100.1 - 500.0</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Over 500</td> </tr> </table>						All	0 - 1.0	1.1 - 2.0	2.1 - 3.0	3.1 - 5.0	5.1 - 10.0	10.1 - 20.0	20.1 - 50.0	50.1 - 100.0	100.1 - 500.0					Over 500
All	0 - 1.0	1.1 - 2.0	2.1 - 3.0	3.1 - 5.0																
5.1 - 10.0	10.1 - 20.0	20.1 - 50.0	50.1 - 100.0	100.1 - 500.0																
				Over 500																
Instructions: Select property records to be added to "My Property Cart". Records can be mapped, downloaded into Excel or published in PDF format.																				
<input type="checkbox"/>	Hotchkin Property - Class 8 Tax Savings	114.00	Tinley Park	Illinois																
<input type="checkbox"/>	Pavilion Property off Interstate 80	110.00	Tinley Park	Illinois																
<input type="checkbox"/>	Interstate 80 and Harlem - Class 8 Tax Savings	100.33	Tinley Park	Illinois																
<input type="checkbox"/>	Assembled LaGrange Properties	55.50	Tinley Park	Illinois																
<input type="checkbox"/>	I-80 & Ridgeland Avenue - Class 8 Tax Savings	40.00	Tinley Park	Illinois																
<input type="checkbox"/>	191st Street & 80th Avenue NEC - VIII County	37.00	Tinley Park	Illinois																
<input type="checkbox"/>	Brookside Glen Southwest - VIII County	32.50	Tinley Park	Illinois																
<input type="checkbox"/>	Brookside Glen Southeast - VIII County	28.40	Tinley Park	Illinois																
<input type="checkbox"/>	Loyola Property	25.00	Tinley Park	Illinois																
<input type="checkbox"/>	LaGrange Georgia	22.00	Tinley Park	Illinois																

Screen grab of Tinley Park’s online available properties listing. Source: <http://www.tinleypark.org/>

3.3 Funding and Financial Incentives. Another important way that municipalities can support the redevelopment of brownfields is by securing funding to assemble and assess property. Municipalities can also promote financial incentives available to developers or end users and help provide education on the importance of applying for incentives early on, before buying property or starting site work.

- **Planning or feasibility study grants.** Private foundations such as the Grand Victoria Foundation provide grants to focus on regional assets or river corridors. Blue Island has already benefited from these. The Illinois Department of Commerce and Economic Opportunity (DCEO) also provides small grants of up to \$50,000 for planning grants to local government. In addition smaller grants of \$5,000 - \$10,000 to municipalities are available through some corporations such as ComEd.
- **Brownfield assessment and cleanup grants.** Government grants for assessment of brownfields are available to municipalities through US EPA, and in years when funding is available, through the Illinois EPA. Municipalities or non-profit organizations are eligible for cleanup grants of up to \$200,000 for cleanup of a class of sites (e.g. petroleum sites) or up to \$350,000 for cleanup of both hazardous materials and petroleum for a specific site. The city or nonprofit organization must obtain sole ownership of the site to access cleanup money, however. Municipalities are also eligible for loans and grants for land acquisition and cleanup through the U.S. Housing & Urban Development (HUD). Some communities have pledged their CDBG grant funds against HUD 108 loans and related grant funds for specific redevelopment projects.

- **Tank Removal (LUST Fund) grants.** Owners of property with leaking underground storage tanks can seek reimbursement for most of the cost of removal.

- Reimburses eligible tank owners and operators for a portion of remediation costs from leaking underground petroleum storage tanks. Funds from an environmental impact fee and motor fuel tax pay for:
 - Eligible costs over \$10,000
 - Costs exceeding higher deductibles if tanks were registered before 1989 or were never registered
- Eligible owners must have:
 - registered the tank with the Office of the State Fire Marshall



A leaking UST excavation. Source: <http://www.epa.state.il.us/land/lust/ust-fund.html>

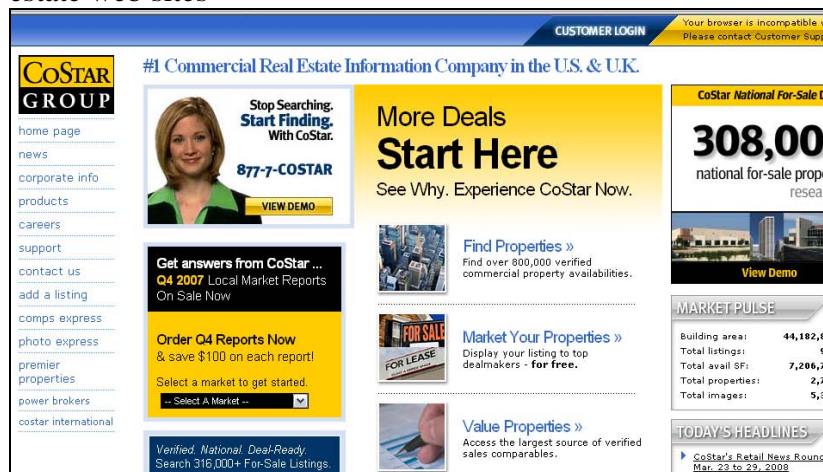
- a tank that was not taken out of service before 1974
[For more info see <http://www.epa.state.il.us/land/lust/ust-fund.html>.]
- **Tax Increment Financing (TIF).** This popular economic development tool creates a potential fund out of incremental taxes generated after a district is created. In some cases, a TIF district may have a balance that could be used to pay some predevelopment costs. If there is no balance, municipalities can agree to reimburse costs out of future increment from a specific redevelopment site on a “pay as you go” basis. In some cases, municipalities also pledge future increment to issue bonds. TIF:
 - Covers land acquisition, predevelopment, demo, site prep and rehab costs incurred after a TIF district is created.
 - Does not fund new construction.
 - “But for” test – seek assistance EARLY – before buying land
- **Tax Incentives – for projects in Cal Sag Enterprise Zone.** Blue Island is one of 5 communities that have jointly applied for the Cal Sag Enterprise Zone. Development within this zone can benefit from:
 - 50% abatement of city portion of real estate taxes on the added value the project creates for 5 years
 - 50% abatement of Cook County real estate taxes for industrial projects through 6B designation for 12 years
 - Sales tax abatement on building materials
- **Tax Incentives – for projects in Class 8 Townships.** Blue Island also has areas within specific townships (Bloom, Bremen, Calumet, Rich and Thornton) that are pre-approved for Cook County Class 8 tax abatement.
- **Favorable Loans.** Favorable loans are available to the City or developers for specific projects through a number of sources that could potentially be used to front-fund costs that might later be repaid through TIF reimbursement or serve as the local match for federal grants.
 - **South Suburban Mayors & Managers Association (SSMMA) Bond Fund:** provides loans of \$500,000 or more to municipalities for capital costs (land or building acquisition, remediation, demolition, site prep, road, water, sewer improvements, etc.). Loan funds can serve as the local match for federal grants.
 - **SSMMA Brownfield Cleanup loans.** Regional revolving loan fund with a forgivable “grant” component. Very-low interest loans to public or private borrowers of up to \$1 million (or the existing available funds in the pool). Forgivable component is limited to \$200,000 per site.
 - **Illinois EPA – Brownfields Redevelopment Loan Program.** Very low interest loans of up to \$500,000 to public or private borrowers for cleanup and demolition of sites for specific projects with favorable repayment terms.

- **Great Lakes Bank/ Blue Island Development Loan Program.** Developed to help small business owners with a low-cost alternative to conventional commercial loans. Below-market rate loans of up to \$1 million for new construction; up to \$500,000 for acquisition and rehab available on favorable terms. May be used for rehab of commercial buildings (including upper floor apartments), modernization or expansion of new construction. The CenterPoint Small Business Development Center can also help with business planning and explore eligibility for other special loan, loan guarantee or tax incentive programs.
- **New Markets Tax Credit loan programs.** Flexible loans for real estate development or business expansion projects in low-income census tracts. Potential for partial forgiveness. Offered through some banks and non-profit economic development organizations.
- **Financial Incentives for Green Building**
 - **Affordable Housing Grants**
 - Green Communities. Offers charrette/planning grants for green projects and additional project funding if projects meet Green Communities criteria.
 - IL DCEO energy efficiency affordable housing grants.
 - Energy Star tax incentives for home energy efficiency and appliance rebates.
 - **Commercial/Industrial Rehab**
 - **IL DCEO** provides LEED project funding and through their SEDAC program, energy efficiency design technical assistance.
 - **Federal tax incentives** for energy efficient buildings and appliances through 2008. Program continuation to be determined within the next 2 months by Congress.
 - **Public/Institutional green building projects Illinois Clean Energy Community Foundation.** Provide grants for renewable energy projects and lighting retrofits.

3.4 Marketing Strategies. Effective brownfield redevelopment programs are based on market analysis and usually include a variety of strategies for marketing available properties and incentives.

- **Market analysis.** This analysis can provide information on what types of developers or business a municipality should target and why.
 - **Retail “gap analysis.”** Real estate professionals often rely on commercial data services such as Claritas for basic census and retail expenditure data. This type of analysis can be helpful in identifying gaps in retail suppliers in a specific radius. For example, the Center for Neighborhood Technology has provided some updated analysis for Blue Island which identifies a potential

- need for more clothing, sporting good/hobby, office supply/gift, and casual dining retail stores within a 2-mile radius of the Vermont and Western Avenue.
- **Regional industry sector studies.** Regional economic development groups can also be helpful in identifying industry sectors where municipalities may have a competitive advantage. For example, the Will County Center for Economic Development issues an annual report. South Suburban Mayors & Managers Association has done some analysis of corridors which may be useful as background information in updating the Blue Island Economic Development Plan.
 - **Marketing available properties to a broad audience.**
 - Internet listings on sites such as **Location One Information System (LOIS)**, see www.locationone.com, an on-line economic development site selection engine; or **CoStar**, www.costar.com, a service used primarily by real estate agents to provide valuations or get market insight.
 - Post Requests for Proposals (RFPs) broadly on municipal or real estate web sites



Marketing to a broad audience. Source: <http://www.costar.com/>

- **Targeted marketing strategies.** Broad outreach may not be as effective for communities as more targeted outreach to businesses and developers that are already familiar with the area and may already be committed to it.
 - **Outreach to adjoining property owners** – this has by far been the most effective strategy for marketing sites in weaker communities within the City of Chicago. In the absence of formal industrial or business councils that provide regular outreach to local businesses, community volunteer committees may be crucial to assist with regular surveys of local needs.

- **Targeted RFPs, developer forums or tours** focusing on specific types of developers – for example, mixed-use transit-oriented developers in older, inner-ring suburbs.

**21 ACRES AVAILABLE
ON U.S. HIGHWAY 12 MICHIGAN CITY, IN**



PROPERTY FEATURES:

- Over 1/2 mile frontage on US 12
- Located in TIF District & Enterprise Zone
- Rail adjacent to property
- 6 acres immediately available for development
- Light industrial/commercial zoning
- 14,000 sq. ft. existing warehouse structure

*Marketing to a targeted audience.
Source: 12 East Business Center LLC*

3.5 Risk Management Strategies.

Municipalities have unique advantages in brownfields redevelopment and can lower risk for developers. However, municipalities still need to protect themselves from risk. To a large extent, the Illinois EPA's issuance of an NFR letter gives both public and private sector comfort that risk from known conditions can be managed. The conditions of the NFR letter spell out the ways in which known risk will be managed. But what about risk from undiscovered conditions that may be found later? Or from claims that may be filed by parties other than environmental agencies? Municipalities can share this risk through development agreements or insurance.

- **Development Agreements.** The environmental clause in development agreements can provide for risk sharing for undiscovered conditions. If the current template lacks this language, it may worth retaining an environmental attorney to provide several options for language that could be used for future agreements.
- **Enforcement of NFR Letter conditions.** Since the NFR letter is often the first line of defense in litigation, it is important for municipalities to understand the typical conditions of these letters and make sure they are being enforced.
 - Maintenance of engineered barriers – who is responsible for ongoing physical activities?
 - Maintaining institutional controls – usually enforced through ordinances, deed restrictions and covenants in homeowners association documents.
- **Environmental Insurance**
 - Cleanup Cost Cap (CCC) insurance – for cost over-runs in cleanup of known contamination
 - Pollution Legal Liability (PLL) policies – for unexpected conditions and possible third party “toxic tort” claims

4.0 Preventing Pollution and Future Brownfields

Getting through the site remediation process requires a significant amount of time and resources. For any site redevelopment process, municipalities should ensure that their plans or those of a partner development entity can be upheld over time and that future brownfields on that site are prevented. To accomplish this, consider employing pollution prevention and green development.

Green development strategies can pertain to both site design and building design. This section discusses example ordinances and green development best practices that prevent pollution, save on energy costs, improve environmental quality, promote open space, reduce waste and result in sustainable, green communities.

4.1 Ordinances

- **Control use of site resources in a manner that is protective of human health and the environment.** Certain ordinances that control site use—and eliminate human contact to contaminated media—can be used as an institutional control in lieu of active cleanup.

An Environmental Land Use Control (ELUC) is also an institutional control that may be used under 35 Illinois Administrative Code 742.1010. The purpose of an ELUC is to impose land use limitations related to environmental contamination thus eliminating a pathway to exposure from onsite contaminants. Examples of ELUCs include prohibition of groundwater use, as described herein, restriction to industrial/commercial uses, operation and maintenance of engineered barriers, and/or worker safety plans. ELUCs must be approved by the Illinois EPA and should be structured in accordance with the model in 35 Illinois Administrative Code 742 Appendix F. A draft of the ELUC must be submitted to the Illinois EPA with the corrective active plan.

An example of an ELUC is Blue Island's groundwater use ordinance (#2000-295), which does not allow groundwater in Blue Island to be used a drinking water. A copy of the ordinance is included in Appendix B.

- **Pollution Prevention Ordinances.** While generally not considered an environmental land use control, ordinances that create incentives for pollution prevention, thereby reducing the amount of hazardous chemicals used in a facility, and establish an assurance that larger companies have the capacity to address contamination problems should they occur. Such an ordinance would make pollution prevention a requirement for doing business in each community. An example of a pollution prevention ordinance developed by Delta Institute for SSMMA in 2003 is included in Appendix C.

4.2 Stormwater Management and Green Infrastructure. Stormwater management, more recently referred to as green infrastructure, is an important part of the green development process. Managing stormwater on-site, thereby reducing contaminated runoff, can prevent the proliferation of brownfield contamination as well as ground and surface water contamination. On-site stormwater management also protects the health of nearby rivers and streams, prevents flooding, protects habitat for local ecosystem flora and fauna and recharges the local aquifer.

Stormwater management design strategies include native landscaping, naturalized detention, retention, porous pavement, bioswales, vegetated swales, filter strips, rain cisterns, rain gardens, green roofs and increased open space. When redeveloping a site, consider the site's natural stormwater infiltration to maximize the efficiency of existing conditions, thereby reducing the costs of landscaping and reducing the potential of site flooding.

As a City, Blue Island can set more stringent stormwater regulations than the Metropolitan Water Reclamation District through a local stormwater management ordinance. The District is updating its stormwater guidance to develop a draft Watershed Management Ordinance (WMO) in late 2008 or early 2009. The City should educate relevant staff on the ordinance and, if necessary, produce guidance more stringent than the minimum requirements of the WMO. Information on the District's ordinance development is available at <http://www.mwrddc.dst.il.us/Engineering/Stormwater/WMO.htm>.

Native landscaping involves the use of plants that are indigenous to the local ecosystem. Native plants are typically more drought and pest tolerant based on their adaptability to the local climate, have deeper root systems, require less maintenance and provide habitat for wildlife.

Naturalized detention areas are a useful stormwater management strategy that can also be used as an aesthetic site design feature. They are designed to store stormwater and release it slowly into the surrounding landscaped areas, or eventually, a sewer system.

Porous or permeable pavement can be used throughout the site to allow stormwater to percolate into the soil naturally. To achieve this, pavers or a porous concrete may be applied for parking lots, throughout landscaped areas and as sidewalks.

A **bioswale** is an infiltration trench, similar to a naturalized detention area, in that it is designed to store and release stormwater slowly. Typically planted with water loving, or hydrophilic, plants, bioswales can often be found around the perimeter of parking areas absorbing run-off from the parking lot and filtering pollutants, before the water leaves the area.

Green roofs, rain cisterns and rain gardens are stormwater design strategies incorporated into the design of a building design. When rain falls on the roof of a typical building, the rain is diverted towards a downspout or gutter, and eventually to a storm sewer. Green roofs allow stormwater to be managed on the roof with the use of a vegetated cover of succulent, drought tolerant plants. This more typical style of green roof known as an ‘extensive’ system, uses a growing medium such as a lightweight shale or clay and a succulent groundcover like sedum. The extensive green roof system can often be applied to an existing roof, and doesn’t require a great deal of structural reinforcement. An intensive green roof system is a more traditional, garden style design with a deeper growing medium, more traditional trees and shrubs and requires more structural capacity. Rain cisterns collect any access stormwater from the roof and store it for future irrigation needs. Rain gardens are designed to be water features on the site and can collect run-off from the roof or a parking lot.

4.3 Pollution Prevention & Energy Efficiency Assessments: Technical Assistance for Blue Island Government and Businesses. Municipalities can prevent future brownfields by preventing pollution and improving energy efficiency in building operations. A variety of technical assistance services are available to local government and businesses through non-profit organizations such as the Delta Institute’s P2E2 Center⁶ and other consultants and engineering firms. These services include:

- Municipal pollution prevention program
- Waste reduction and handling technical assistance
- Energy efficiency and water conservation assistance
- Aggressive bans of specific toxics
- Local green purchasing program focused on specific toxics, wastes, etc.

4.4 Promoting Adaptive Reuse of Existing Buildings. The adaptive reuse of existing buildings has a wide range of economic, environmental and community benefits, including the reduction of resource consumption for new building materials, waste reduction, the reuse of existing infrastructure to reduce costs and the revitalization of existing communities to promote dense, and economically sustainable development. Adaptive reuse principles are discussed in related Blue Island Economic Development and former Main Street Plans.

Generally, adaptive reuse is the process of adapting old structures for new purposes. When the original use of a structure changes or is no longer required, as with older buildings, communities have the opportunity to change the primary function of the structure, while often retaining some of the existing architectural and design features that make the building unique. Adaptive reuse and infill development are both important strategies in promoting land conservation and reducing development sprawl. Adaptive reuse and infill development make the

⁶ <http://www.p2e2center.org/>

cost of urban infrastructure more economical and ensure that greenfield sites are maintained to provide important environmental benefits.

An example of an adaptive reuse project in the region is the recent conversion of a historic bank building in Berwyn, IL into an 8,000 square foot retail center. The Berwyn National Bank Building at Cermak Road and Oak Park Avenue is undergoing a renovation that will maintain the architectural integrity of the building and preserve the local design heritage of the community. Often adaptive reuse and historic preservation practices, such as in the case of the Berwyn bank renovation, work hand-in-hand to allow the developer to update the function of the building, while preserving original architectural features and design integrity.

Though historic preservations failed to get the building officially added to the historic landmark register, the decision was made to preserve it and adapt it for reuse.



The City of Los Angeles has developed an *Adaptive Reuse Program Guide*⁷ which presents best practices in identifying opportunities for adaptive reuse for redevelopment.

- 4.5 Green Building Codes and Building Guidelines.** The purpose of developing green building codes and guidelines is to provide environmental benefit and mitigate pollution, protect natural resources, reduce greenhouse gas emissions, create healthy communities, save money on long-term operating costs and brand development such that market recognition will lead to new economic development opportunities.

Some codes and guidelines are developed and applied locally, such as the *Chicago Energy Conservation Code*. This code provides multiple paths for demonstrating code compliance including prescriptive, performance, and acceptable practice approaches. It requires improvements in energy efficiency including the insulation of floors, roofs and walls as well as the installation of energy efficient windows and mechanical systems. It also establishes standards to limit the amount of solar energy absorbed by building roofs and transmitted to the atmosphere, a condition known as the urban heat island effect.

⁷ <http://www.scag.ca.gov/Housing/pdfs/summit/housing/Adaptive-Reuse-Book-LA.pdf>

Other municipalities require or promote third-party standards such as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system and the US EPA's ENERGY STAR standard. LEED offers a set of increasingly popular rating systems that approach new construction, renovation, and ongoing operations with emphases on high performance building systems yielding energy and water conservation, environmentally friendly materials acquisition and waste management, sustainable site selection, occupant health and comfort, and overall building sustainability. A common starting point for these requirements is to impose them on public buildings. Cook County, Illinois has an ordinance requiring LEED certification on all new county-owned buildings. Grand Rapids, Michigan also requires all municipal construction and renovation projects involving buildings over 10,000 square feet and costs of \$1 million to achieve LEED certification. Some municipalities have taken the requirements a step further by imposing them on private developments. For example, the town of Normal, Illinois has an ordinance requiring LEED certification on any new private construction in the Central Business District over 7,500 square feet at ground level.

- 4.6 Promoting Renewable Energy Production and Green Fleets.** Renewable energy generation provides economic development opportunities, saves energy costs, and reduces environmental impacts associated with the production and consumption of traditional fuels. These impacts include natural resource destruction, air and water pollution, acid rain, smog, global climate change, and human health problems resulting from air contaminants. Municipalities can maximize the use of local renewable energy sources either on-site or off-site, and promote the use of alternative transportation fuels through a "Green Fleets" program.

On-site renewable energy technologies to consider include solar (both photovoltaics and solar thermal), geothermal, wind, biomass (using only sustainably harvested fuel), and bio-gas. Each of these technologies is site-specific in its cost-benefit equations and practicality of installation. The State of Illinois offers incentives for many of these technologies in the form of tax expenditures, grants, and loan and guarantee programs.

Off-site renewable energy can be purchased through a local utility provider or through renewable energy credits or certificates, all of which provide the environmental benefits of renewable energy generated elsewhere. Off-site renewable energy should abide by the Center for Resource Solutions (CRS) Green-e products certification requirements or the equivalent. The Green-e website⁸ provides comprehensive listings of certified providers, searchable by location of generation. By using locally-sourced renewable energy, municipalities can contribute to the local or regional environmental and economic health.

⁸ <http://www.green-e.org/>

Another option for promoting renewable fuels and saving on fuel costs is through the **Illinois Green Fleets Program**,⁹ a voluntary program where businesses, government units, and other organizations in Illinois gain recognition and additional marketing opportunities for having clean, domestic, renewable fuel vehicles in their fleet. It is a program to recognize a fleet manager's progressive efforts in using environmentally friendly vehicles and fuels to improve air quality while promoting our domestic fuels for greater national energy security. To qualify as an Illinois Green Fleet, a fleet must have a portion of its vehicles use natural gas, propane, 85% ethanol (E-85), electricity, biodiesel, or other clean, American fuels.

- 4.7 Promoting Reuse of Construction & Demolition Waste.** The solid waste stream in the Chicago region is made up of 40% of construction and demolition waste material. Many opportunities exist to divert these materials from the landfill for recycling and reuse, while not incurring additional project costs. In many cases, recycling or sending these materials to a reuse center can actually reduce project costs in the way of reduced disposal costs, actual resale or tax donation benefits.

Recycling construction and demolition material requires an organized plan on the construction site to sort materials and identify eventual destination points. A construction waste management plan can help a contractor evaluate the costs and benefits of this process, with a line by line assessment of the market for these raw materials. Metal, concrete, asphalt, brick, and wood are some of the more obvious recyclable construction and demolition materials. Markets are currently developing for drywall and interior fixtures, the latter in the way of building material reuse centers that specialize in the used building material resale. Some wood, if deconstructed properly, can also be reused, as opposed to recycled through a building material reuse center but requires proper handling and disassembling, including board denailing.

Deconstruction, versus standard building demolition, ensures that a building's materials can be reused again in another building. This process can require more time than standard demolition, but a tax donation benefit of these materials can offset the cost premium. Reusing these materials diverts waste from the landfill, reduces pollution including greenhouse gas emissions that contribute to climate change and creates new job opportunities in the construction industry.

- 4.8 Green Space Enhancement and Increased Recreation Opportunities.** In order to retain residents and businesses so as to avoid brownfields, municipalities can improve quality of life by providing open space for the community for recreational and cultural activities that result in vibrant social spaces, healthy residents and higher property values.

⁹ <http://www.illinoisgreenfleets.org/>

5.0 Next Steps

The City is currently lacking some resources and a process to address brownfield sites. This final chapter includes recommendations on action steps for completing work under the current EPA Brownfield Assessment grant and establishing resources and processes for redevelopment and prevention of brownfields in the future.

5.1 Site Information Database. Mapping and land information was an important part of the City's economic development planning process. Support in terms of mapping and data has been provided by the Center for Neighborhood Technology through outside grant funding. The City has recently acquired staff and equipment for a Geographic Information System (GIS) and is currently working to develop its own database and mapping capacity. The following types of data are helpful in tracking and prioritizing brownfield redevelopment sites:

- Target area (name of target area the site is located in, e.g., South Station TOD)
- Current land use (residential, commercial, industrial, mixed, vacant)
- Current zoning
- Address
- Land Area (s.f.)
- Building Area (s.f.)
- Owner / Taxpayer
- Possible Brownfield? (yes, no or unknown – based on current or former land use)
- Phase 1? (yes, no or unknown)
- Phase 2? (yes, no or unknown)
- NFR Letter? (yes, no or unknown)
- Incentives? (yes, no or unknown)
- In TIF district? (yes, no or unknown)
- TIF district expiration date (year)
- In Enterprise Zone (yes, no or unknown)
- In Class 8 Township (yes, no or unknown)

There may be sensitivity to classifying sites as Possible Brownfields. However, the idea is to be able to generate a list of possible brownfields for purposes of setting priorities and assessing needs for future brownfields assessment or cleanup grant money. It is important to keep the data updated as new information is gathered.

REDEVELOPMENT SITES					
Site Number	Proposed Land Use	Existing Zoning	Number of Parcels	Total Acreage	Priority
1	Institutional	Industrial	1	8.32	A
2	Industrial	Single Family Residential	1	0.27	C
3	Industrial	Single Family Residential	3	0.31	C
4	Low Density Residential	Multiple Family Dwellings	1	0.33	B
5	Low Density Residential	Multiple Family Dwellings	1	0.21	B
6	Commercial	Industrial	1	0.31	B
7	Commercial	Industrial	1	0.11	A
8	Commercial	Industrial	1	3.66	B
9	Commercial	Industrial	2	2.62	B
10	Commercial	Multiple Family Dwellings	5	0.38	C
11	Low Density Residential	Commercial	2	2.45	A

Broadview Comprehensive Plan Page 24

Database of redevelopment sites from Village of Broadview's Comprehensive Plan

- 5.2 Site Inventory.** The City has identified a number of redevelopment opportunity sites through its economic development plan. The plan is currently in the process of being updated. In addition, the City will need to identify which of the redevelopment opportunity sites are potential brownfields based on what is currently known about their existing and historical use.
- 5.3 Identify Stakeholders.** Once some information on the inventory of Blue Island brownfields is collected, stakeholders who should be invited to help set goals and selection criteria for brownfields assessment grant money (as well as future brownfield decisions) might include:
- Members of the City's "Brownfields Team" (city planning, marketing and legal staff and consultants)
 - Property owners – Metra, MWRD, residents and business owners within the target TOD areas
 - Community members – including aldermen, members of the City's Development Commission and Chamber of Commerce
 - Government agency representatives - Cook County Dept of Public Health, US EPA
- 5.4 Goals and Selection Criteria.** The City will host workshop this spring to discuss possible goals and selection criteria for the City's brownfields program. Goals might include:
- Reinforce the community vision in the Economic Development Plan
 - Encourage redevelopment of vacant or underutilized properties
 - Reduce health risks to residents
 - Create economic benefits (jobs and tax base)
 - Focus on sites with the greatest market potential for redevelopment in the near term (the next 1-2 years).

Possible selection criteria for assigning priorities based on these goals might include:

- Consistency of current use with economic development plans & zoning (focus first on sites that are not currently consistent)
- Location in a target area (i.e., a TOD area)
- Location near residential property
- Ability to obtain access and site information (cooperative owner)
- Marketability for new use that would generate jobs or tax base
- Readiness for development (or redevelopment) in the near term – based on a variety of factors such as ownership, environmental conditions, tax status and market factors.

The current federal brownfields grant is unlikely to be adequate to fund environmental assessment of all of the City's brownfield redevelopment sites. It will be necessary for stakeholders to agree on goals and criteria for selecting sites that should receive assessment dollars first. One of the outcomes of the workshop may be to determine if there is community consensus on which sites should be redeveloped in the near term (in the next 1-3 years).

5.5 Preliminary Environmental Assessments for Priority Sites. Once goals have been set and priority sites have been selected, the City anticipates selecting roughly 20 sites for preliminary (Phase 1) environmental site assessment. The City would retain the services of an environmental consultant to perform this work. The results of this preliminary assessment work as well as market analysis would be used to further narrow the list of priorities for further investigation.

5.6 More In-depth Environmental Analysis of Highest Priority Sites. The City has earmarked a portion of its current brownfield assessment grant for Phase 2 assessment of 2-3 priority sites. Funds would be spent on sites with the highest redevelopment potential, based in part on market analysis. Work plans for soil, groundwater and possibly building materials sampling at the priority sites would take place in the fall of 2008 and all investigation work would be completed by the spring of 2009. The site investigation work would be used to develop remediation options and cost estimates for remediation.

5.7 Ongoing Brownfield Program Implementation. Once the current brownfields assessment work program has been completed, the City should be well on its way to having resources in place for a more permanent brownfields redevelopment program that is an integral part of its economic development program. Action steps that should be assigned during the current update of the City's economic development plan should include:

- **Available Properties Inventory.** Once the City's GIS database is in place, staff resources will be needed to update data on a regular basis and generate reports that include information most relevant to potential buyers and developers. The frequency of updates depends in part on the

frequency of economic development meetings, but updates at least once every quarter are advisable.

- **Land or Property Acquisition.** In many communities that are already built-out, suitable properties may not be available on the private market to meet the demand for needed stores or businesses. If the City discovers there is demand for sites that are currently not available, the City should consider playing an active role in acquiring tax delinquent or other properties land acquisition and assembly to expand its inventory of marketable sites.
- **Economic Incentives.** The city already has a number of incentives in place such as TIF districts and enterprise zones. Periodic updates of the economic development plan should include an evaluation of how effective these incentives have been or whether there is a need for additional or more aggressive marketing of incentives.
- **Marketing Strategies.** The City has already put in place some marketing strategies such as subscription to web-based site location services. However, it is not clear what processes are in place for more targeted marketing, especially regular outreach to existing businesses and institutional employers that may have expansion needs.
- **Model Development Agreements, Ordinances and Guidelines to Manage Risk and Promote Sustainable Redevelopment of Brownfields.** The preceding chapters of this report have discussed a number of strategies that the City should consider as possible action steps during the update of its economic development plan. These include development agreements, enforcement of NFR Letter conditions, and environmental insurance, all of which are described in more detail in Section 3.5.
- **Regular Updates.** Revisit priorities every two to three years.
- **Funding for Future Assessments & Cleanups.** Consider establishing a fund out of a portion of the sales proceeds from the sale of city property, TIF or other sources. If at least one end user has already been identified, low-interest loans from IEPA or South Suburban Mayors & Managers Association might also provide a pool for land acquisition, environmental assessments, cleanups or demolition.

5.8 City Redevelopment Team. Redevelopment of brownfields is not easy and requires a team of professionals and committed community volunteers who have regular on-going responsibilities for typical tasks that are likely to arise on a fairly regular basis. This same team roster is essential for an effective economic development program, not just redevelopment of brownfields.

- **Staff (Planning & community development, law).** As discussed in part 3 of this report, professional planning, community development and legal staff play key roles in providing information, securing funding for predevelopment work, marketing and community outreach. Regular updates of the City's economic development plan should include an evaluation of the capacity of existing staff to carry out all of the desired action steps.
- **Technical experts (environmental, economic incentives, legal, etc.).** Outside experts can supplement professional staff and are often retained to provide advice and opinions on issues relating to specific brownfield issues such as environmental liability relating to the exercise of eminent domain or provide sample language for environmental risk clauses in development agreements. Outside experts can also provide extra capacity for more time-consuming activities, such as preparation or updates of a comprehensive plan or zoning ordinance.
- **Outreach coordinators.** Although many chambers of commerce provide networking and joint marketing opportunities for local businesses, it is important to assign time and responsibility for individual check-ins with existing businesses to assess their needs and get an early jump on expansion needs in particular. In the City of Chicago, non-profit industrial councils play a key role in this area.
- **Community volunteers.** In addition to providing essential input into the community's vision plans, community volunteers often are key players in making connections and tapping relationships to attract end users for redevelopment sites.

5.9 Partnerships with Other Agencies, Organizations or Consultants.

- **Other Government Agencies (US EPA, IEPA, IL DCEO).** Federal and state environmental and economic development agencies are key sources of grant funding. In some cases, they can be a source of free technical assistance. For example, US EPA provides funding to teams of technical assistance providers, often based at universities, who can provide free environmental assessment work or market analysis. In the Midwest region, the University of Kansas is a major brownfields technical assistance provider. For more information, see: <http://www.engg.ksu.edu/CHSR/outreach/resources/docs/TABBrochureLR0107.pdf>
- **Non-Profit Organizations.** Nonprofit organizations can provide valuable support in planning, program development, marketing and market analysis. Work by these organizations is often funded by foundation grants. For examples, the Center for Neighborhood Technology (CNT) is

providing free economic development planning assistance to the City through foundation grant sources. The South Suburban Mayors & Managers Association also has foundation grant funding that is potentially available to Blue Island as one of the Calumet River Development Corridor communities. The Metropolitan Planning Council also has grant funding to build capacity for these same communities, and has recently hosted a technical assistance workshop to assess a specific development site. The Urban Land Institute also hosts technical assistance panels for specific redevelopment opportunities. The Delta Institute and Delta Redevelopment Institute can also provide free assistance with a number of sustainability programs including green purchasing.

- **Development Consultants.** A few for-profit development consultants, such as Business Districts, Inc., are active in providing market analysis and support for redevelopment sites and districts in south suburban communities. Some developers and brokers that are active in south suburban communities can also provide development consulting services on a fee for service basis. These developers may have firsthand experience with issues such as development agreement terms, and may have experience and relationships with specific types of retailers or end users.

6.0 Conclusion

This report has provided information to educate City staff and other brownfield stakeholders on factors that should be considered in selecting sites for brownfield assessment grant money as well as the development of an ongoing brownfields development program. The report emphasizes the unique and important role that municipalities can play in the brownfield process and how to manage the associated risks.

In many cases, local government brownfield programs die after the brownfield grant ends. For historical communities like Blue Island with an industrial past, that would be a shame. This report is intended to be useful in putting into place the mechanisms and funding ideas to keep the program going after the current grant work is completed.

7.0 Appendices

APPENDIX A: Glossary of Environmental Terms

RECs: A recognized environmental condition means the presence or likely presence of a regulated substance or pesticide into site structures, surface water, sediments, groundwater, or soil. A REC typically does not include “de minimus” conditions that would not pose a threat to human health or the environment.

SRP: Illinois Site Remediation Program. The Illinois SRP is a voluntary program that site owners can enter to help guide the environmental investigation and remediation of their sites. The benefit of enrolling in the SRP is the receipt of a No Further Remediation letter that provides assurances to future owners and/or developers that the environmental and human health hazards have been mitigated according to the final site use.

Phase I Environmental Site Assessment: A Phase I Environmental Site Assessment is used to identify possible Recognized Environmental Concerns at a site that could pose a liability to a future owner and/or limit site development options. Aspects of a phase I include: site visit, interviews with knowledgeable personnel, records search and reporting. A Phase I assessment should be conducted in accordance with the most current version of ASTM standard E 1527. (For information on the most current version, see www.astm.org). The current standard of practices at the time of publication of this report was ASTM E 1527-05.

Phase II Site Investigation: A Phase II site investigation includes invasive environmental sampling such as soil and ground water sampling and magnetometer survey. The objective of the Phase II is to confirm the environmental site conditions identified in the Phase I and, if needed, define limits of contamination. Within the SRP program, the Phase II activities are documented in a Site Investigation Report

Remediation objectives: Remediation objectives are the final cleanup standards for the site established based on final site use. The Illinois SRP program utilizes the Tiered Approach to Corrective Action (TACO) procedures for establishing remediation objectives. Under the SRP program Tier 1 standards are based on residential use as the final site use and Tier 2 standards are based on a commercial/industrial final use scenario. Tier 3 provides SRP applicants the option to apply risk assessment models to establish site specific standards.

Remedial Action Plan: The remedial action plan describes the proposed remediation/corrective action at the site consistent with the SRP guidelines and standards.

Remediation Action Completion Report: A report submitted under the SRP attesting to the cleanup activities at the site.

No Further Remediation Letter: A NFR letter documents that the site cleanup activities have been completed. The purposes of the NFR letter is to notify future purchasers of the site of participation in the SRP as well as document engineered barriers or institutional controls that

have been installed at the site and need to be maintained to protect human health and the environment.

Engineered controls: Physical barriers (e.g. paving or foundations) that have been installed at the site to mitigate exposure to onsite contaminants.

Institutional controls: Non-physical controls (e.g. ordinances, zoning) that apply to the site to mitigate exposure to onsite contaminants.

APPENDIX B: Blue Island Groundwater Ordinance

ORDINANCE NO. 2000-295

AN ORDINANCE PROHIBITING THE INSTALLATION OR DRILLING OF WELLS WITHIN THE CITY OF BLUE ISLAND, COOK COUNTY, ILLINOIS

WHEREAS, the City of Blue Island adopted Ordinance 1783 on May 13, 1957; and

WHEREAS, this Ordinance 1783 prohibits the use of ground water or well supply ground water for use as potable water; and

WHEREAS, well water in the City of Blue Island has also been used over a period of time for commercial and industrial purposes; and

WHEREAS, the City of Blue Island now desires to further limit the threat to human health from ground water contamination to the city waterworks system because of the installation of wells to supply ground water for commercial, industrial, agricultural, residential and other purposes; and

WHEREAS, the attempt to install or drill wells to supply ground water for commercial, industrial, agricultural, residential and other purposes within the corporate limits of the City of Blue Island may have a deleterious effect on the city water supply due to the potential for back siphonage into the city waterworks system and contamination of the city water supply; and

WHEREAS, the potential risk of back siphonage and contamination of the city waterworks system and the ramifications of this to the public health, safety and welfare far outweighs the benefit of allowing the use of wells to supply ground water for commercial, industrial, agricultural, residential and other purposes.

NOW THEREFORE BE IT ORDAINED by the Mayor and City Council of the City of Blue Island, County of Cook and State of Illinois as follows:

SECTION ONE

The recitals set forth above are incorporated herein by reference the same as if they were set forth herein verbatim and are made a part of this ordinance as the findings and determination of the City Council upon which the prohibition set forth in this ordinance are based.

SECTION TWO

It shall be unlawful for any person, firm, partnership, limited liability company, corporation or other entity of any kind to use, continue to use, install, drill or attempt to install or drill a well to supply ground water for commercial, industrial, agricultural, residential or any other purpose or use within the corporate limits of the City of Blue Island. All persons, firms, partnerships, limited liability companies, corporations or any other entities presently using a well to supply ground water for commercial, industrial, agricultural, residential or any other purpose shall immediately cease and desist from continuing to do so and shall also immediately cap the well to prevent further use.

SECTION THREE

Any person, firm, partnership, limited liability company, corporation or other entity, who shall violate any provision of this ordinance shall, upon conviction by a court, be subject to a fine of Seven Hundred Fifty Dollars (\$750.00) for each violation. Each day that a violation continues after due notice has been served in writing by the City of Blue Island Water Department to cease and desist drilling, installation or use of a well to supply ground water shall be deemed a separate offense.

SECTION FOUR

In case any violation of this ordinance is not corrected within three (3) days after notice has been served to cease and desist drilling, installation or use of the well, the jurisdiction's legal representative may institute an appropriate action or proceeding at law to exact the penalty provided in Section Three, and in addition thereto, may proceed at law or in equity against the party responsible for the violation for the purpose of ordering the person or entity:

- 1) to restrain, correct or remove the violation or refrain from any further use of the well;
- 2) to restrain or correct the installation, drilling or use of the well;
- 3) to require the removal of the well, or;
- 4) to prevent the occupation or use of the premises where the well has been installed or drilled.

SECTION FIVE

All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION SIX

This ordinance shall be in full force and effect from and after its passage, approval and publication as provided by law. A full, true and complete copy of this ordinance shall be published in pamphlet form, by authority of the City Council as corporate authorities.

PASSED this 8th day of February, 2000.



**CITY CLERK OF THE CITY OF BLUE ISLAND
COUNTY OF COOK AND STATE OF ILLINOIS**

VOTING AYE: Ald. Ostling, Jackson, Vasquez, Vargas, Mindeman, Koehler
Pegorin, Seibert, Rita, Stone, Poulsen.

VOTING NAY: None

ABSENT: Ald. Elton, Disabato, Glasgow.

ABSTAIN: None

APPROVED: this 8th day of February, 2000.



**MAYOR OF THE CITY OF BLUE ISLAND,
COUNTY OF COOK AND STATE OF ILLINOIS**

ATTESTED and Filed in my office this

8th day of February, 2000.


CITY CLERK

PUBLISHED in pamphlet form this

8th day of February, 2000.


CITY CLERK

APPENDIX C: Model Brownfield Prevention Ordinance

Overview

The following model brownfield prevention ordinance was developed by the Delta Institute for the South Suburban Mayors and Managers Brownfields Coalition. The objective of the draft ordinance was to create an incentive for pollution prevention planning, and to establish an assurance that larger companies have the capacity to address contamination problems should they occur. Such an ordinance would make pollution prevention a requirement for doing business in the community. An overview of the ordinance is provided below followed by example text.

Applicability. The ordinance applies to both large and small owners and operators of facilities that handle hazardous substances, materials, and wastes as defined by the U.S. Superfund Amendments and Reauthorization Act of 1986, the Resource Conservation and Recovery Act (RCRA), and the Illinois Environmental Protection Act, as well as facilities that reprocess construction and demolition materials.

Purpose. The purpose of the ordinance is to require any relevant owner or operator to prepare and submit an annual pollution prevention plan as a condition of receiving a new or renewed business license.

Fees. For larger companies that are required to report their handling of toxic substances to the federal government, a \$1,000 fee is required in addition to submitting a pollution prevention plan. If large reporting companies do not submit a pollution prevention plan, they must pay larger fees: \$5,000 for companies that use, handle, store, or release less than 50,000 pounds per year, plus \$.01 per additional pound used, handled, stored, or released above 50,000 pounds per year. The idea behind the fees is to create an incentive for companies to submit pollution prevention plans. Companies that handle small quantities of hazardous substances are not required to pay any fees, but they must submit a pollution prevention plan. Lastly, companies that manage and recycle construction and demolition debris are required to pay a flat fee and submit a pollution prevention plan.

Pollution Prevention Requirements. The model ordinance requires that pollution prevention plans include a written policy demonstrating management commitment for the plan and its implementation; information on the substances uses; objectives and pollution prevention targets; updates on prior pollution prevention activities; upcoming activities; and an implementation schedule.

Proof of Insurance. The model ordinance calls for owners and operators that report releases to the Toxic Release Inventory or are RCRA large quantity generators to provide the municipality with a proof of adequate pollution insurance as a condition of obtaining a new or renewed business license. The ordinance requires that the insurance policy have the equivalent effect of a general liability policy that “buys back” the standard pollution insurance coverage as outlined in the 1992 Insurance

Service Office commercial general liability insurance form that would normally be excluded.

The ordinance would begin to instill a culture of pollution prevention within the community. Larger companies will typically already have pollution prevention plans in place and would likely have no difficulty complying with the ordinance. The ordinance would have an impact on smaller companies that that may not have ever considered pollution prevention. Technical assistance, guidance, and training from the municipalities and/or the South Suburban Mayors and Managers Association would have to be provided. Costs for this technical assistance would partially be defrayed through the fees collected as outlined in the ordinance.

Model Brownfield Prevention Ordinance

Section I. Applicability and Purpose

The ordinance shall apply to owners and operators of facilities that use, handle, store or release hazardous materials, substances, or wastes; or reprocess construction/demolition material. The purpose of this ordinance shall be to prevent new brownfield sites through the adoption of pollution prevention measures, and the proof of pollution insurance to address any environmental damage that does occur through the use, handling, storage, or release of hazardous materials, substances, and/or wastes; or reprocessible construction/demolition material.

Section II. Definitions

1. Facility. "Facility" means all buildings, equipment, structures, and other stationary items that are located on a single site or on contiguous or adjacent sites and that are owned or operated by the same person.
2. Hazardous Material. A "hazardous material" as defined by the United States Department of Transportation at 49 CFR 171.8.
3. Hazardous Substance. A "hazardous substance" as defined in section 3.215 of the Illinois Environmental Protection Act (the Act), 415 Illinois Compiled Statutes 5/3.215; "used oil" as defined in section 3.520 of the Act, 415 Illinois Compiled Statutes 5/3.520; a "pesticide" as defined in section 3.320 of the Act, 415 Illinois Compiled Statutes 5/3.320; "petroleum" as defined in the Federal Resource Conservation and Recovery Act, 42 USC 6991(8); "toxic and hazardous substances: as defined by the Occupational Safety and Health Administration at 29 CFR, part 1910, subpart Z (sections 1910.1000 through 1910.1500); and a "toxic substance" as defined in section 3(m) of the Illinois Toxic Substances Disclosure to Employees Act, 820 Illinois Compiled Statutes 255/3(m). A mixture containing, by weight or volume, five percent (5%) or more of hazardous substances combined shall itself be considered a "hazardous substance."
4. Hazardous Waste. A "hazardous waste" as defined in section 3.220 of the Illinois Environmental Protection Act, 415 Illinois Compiled Statutes 5/3.220.

5. **Persons.** Any natural person or individual, firm, association, partnership, copartnership, joint venture, company, corporation (including a government corporation), joint stock company, trust, estate, state, local government, county, commission, political subdivision, any interstate body, or any other legal entity, or their legal representatives, agents, or assigns and includes public or private utilities, governmental bodies or agencies, and common carriers.
6. **Pollution Prevention.** “Pollution prevention” means eliminating or reducing at the source the use, generation, or release of toxic pollutants, hazardous substances, hazardous materials, and hazardous wastes.
7. **Release.** Release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any hazardous material, substance, and/or waste.
8. **Reprocessible Construction/Demolition Material.** “Reprocessible construction/demolition material” shall mean broken concrete, bricks, rock, stone or paving asphalt generated from construction or demolition activities.

Section III. Brownfield Prevention Fees

A. Any owner or operator who applies for a new or renewed business license in [municipality] and *is* subject to the reporting requirements of the Toxic Chemical Release Reporting: Community Right to Know program (also known as Title III of the Superfund Amendments and Reauthorization Act of 1986 and the Emergency Planning and Community Right to Know Act of 1986) or *is* considered to be a large quantity generator under the Resource Conservation and Recovery Act shall submit a pollution prevention plan as set forth in Section IV plus an annual \$1,000 brownfield prevention fee. In lieu of submitting a pollution prevention plan, the owner operator may choose to pay fees as set forth below.

1. \$5,000 if less than 50,000 pounds of hazardous material(s), substance(s), and/or waste(s) are used, handled, stored, or released at a facility on a yearly basis.
2. \$5,000 plus \$.01 per each additional pound of hazardous material, substance, and/or waste above 50,000 pounds that is used, handled, stored, or released at a facility on a yearly basis.

B. Any owner or operator who applies for a new or renewed business license in [municipality] and uses, handles, stores, or releases hazardous materials, substances and/or wastes and is *not* subject to reporting requirements of the Toxic Chemical Release Reporting: Community Right to Know program and is *not* a large quantity generator under the Resource Conservation and Recovery Act shall submit a pollution prevention plan as set forth in Section IV, but is not required to pay a fee.

C. Any owner or operator who applies for a new or renewed business license and handles reprocessible construction/demolition material shall submit a pollution prevention plan as set forth in Section IV plus an annual \$1,000 brownfield prevention fee.

D. Fees required under this section must be paid to the [municipality] by [date]. The fees shall be credited to the [municipal] brownfield prevention fund.

Section IV. Pollution Prevention Requirements

Owners or operators submitting pollution plans must include the following specific elements.

1. Written policy demonstrating management and corporate support for the pollution prevention plan and a commitment to implement the planned activities and achieve the established goals.
2. A list of hazardous materials, substances, and/or wastes used, handled, stored, or released at each facility, and/or reprocessible construction/demolition material handled at each facility; and a map, floor plan, or site plan identifying where such materials are handled at each facility
3. A description of the objectives and pollution prevention targets.
4. An update of pollution prevention activities implemented and progress made toward the prior year's targets.
5. A description of activities planned for the current year.
6. An implementation schedule.
7. The plan must be submitted by [date] each year to [municipality] where it will be made available for public review.

Section V. Proof of Pollution Insurance

An owner or operator who *is* subject to reporting requirements of the Toxic Chemical Release Reporting: Community Right to Know program or *is* a large quantity generator under the Resource Conservation and Recovery Act must provide proof of adequate pollution insurance when applying for a new or renewed business license. A copy of the active policy covering the owner or operator must be provided to [municipality]. The policy must provide:

1. The policy must have the equivalent effect of a general liability policy that "buys back" pollution insurance coverage that would be excluded under the 1992 Insurance Services Office commercial general liability insurance form.
2. The policy must be effective prior to the application of a new or renewed business license.

3. The policy must provide that the insurer may not cancel, terminate or fail to renew the policy except for failure to pay the premium.
4. In lieu of an insurance policy, the owner and operator may submit evidence of self-insurance.

Section VI. Effective Date

This ordinance being deemed of immediate importance shall become effective upon passage and publication.

Section VII. Inspection

Municipality shall have the right to inspect the site to insure compliance with the provisions of this ordinance.