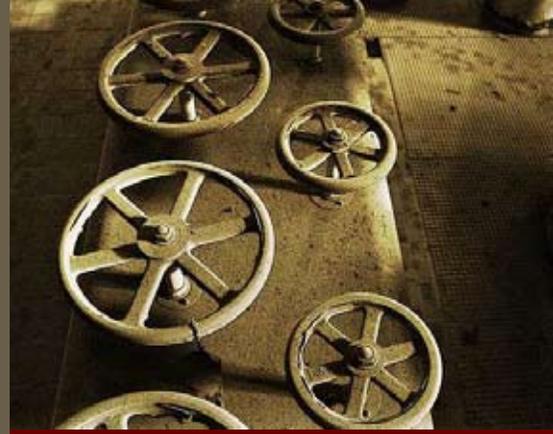


Iowa Brownfield Reuse Guide



IOWA DEPARTMENT
OF ECONOMIC
DEVELOPMENT



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Please note: This guide is not intended to be a complete discussion of the law or available information. Additional research or consultation with an attorney or other professional experienced in brownfield redevelopment is advised.

Introduction

Brownfield sites come in all shapes and sizes, from vacated industrial sites to a single building plagued with asbestos materials. Brownfield sites are found in both urban and rural settings and present challenges that make the cleanup and redevelopment of these sites unique as compared with other real estate projects.

Brownfield sites deal with four key issues, including:

- **Environmental Liability** – Developers, land owners, and prospective purchasers want to ensure that both past and potential liabilities associated with the property’s history can be successfully addressed.
- **Financial Barriers** - Private financial institutions or investors may be reluctant to provide loans for sites impacted by real or perceived environmental contamination.
- **Cleanup Activities** - Redeveloping a brownfield site may take longer than that of a typical real estate development if remediation is warranted.
- **Feasible Reuse** - A viable plan for putting the site back into productive use based upon the locality’s goals and well researched information are critical to successful redevelopment.

Despite these challenges significant opportunities exist for brownfield redevelopment which can economically revitalize an area and improve the quality of life for communities. Brownfield redevelopment is also an ideal time to integrate a number of sustainability features that can result in improved stormwater management, reduced air emissions and energy consumption, and preserve the history and culture of our communities.

The purpose of this guide is to provide a starting point for information about brownfield redevelopment planning, regulatory considerations and resources available from the federal Environmental Protection Agency (EPA) and the Iowa Departments of Economic Development and Natural Resources. For additional assistance please contact Iowa Department of Economic Development toll free at 1-800-351-4668 or visit: http://www.iowalifechanging.com/business/environmental_issues.html.



The federal definition of a “brownfield” is found in Public Law 107-118 (H.R. 2869) - *“Small Business Liability Relief and Brownfields Revitalization Act”* 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.”*

Iowa Code, Chapter 15 section 291: *“Brownfield site” means an abandoned, idled, or underutilized industrial or commercial facility where expansion or redevelopment is complicated by real or perceived environmental contamination. A brownfield site includes property contiguous with the property on which the individual or commercial facility is located. A brownfield site does not include property which has been placed, or is proposed for placement, on the national priorities list established pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act.*



Redevelopment Action Plan

A well thought out Redevelopment Action Plan is critical to successfully redeveloping a brownfield site. Establish the plan before initiating the project to ensure that important information about the site and options for managing the redevelopment process are identified and in place. This includes:

- Determining the planned end use for the site,
- Incorporating sustainable resource features,
- Soliciting key stakeholders,
- Identifying financial resources,
- Understanding potential liability issues or protections,
- Anticipating environmental or technical assessments,
- Evaluating possible clean up options, and
- Considering other compliance requirements.

A brief outline of these considerations is provided below.

Step 1

Identify Desired End-Use for the Brownfield Site

Identify the desired end use for the site to guide the subsequent redevelopment action steps and to anticipate if potential cleanup is likely and to what extent. Different end uses, such as residential, commercial, industrial or recreational will result in different exposure risk levels (assuming contaminants are present) and consequently mean different cleanup approaches and requirements.

For example, if contamination of metals (such as lead) is present at a site in the top six inches of soil, and the end use goal is developing a large retail store with a parking lot, contamination risk is low. Required cleanup could be as straightforward as covering the soil contamination with a ‘cap’ (the parking lot). On the other hand, if the goal is to establish a playground or public park where individuals may come into direct contact with the contaminated soil (face an exposure risk) removing the contaminated soil could be warranted.

Approaching a project with a clearly defined end use will save time and money by ensuring that the cleanup approach is necessary, cost effective, and sufficiently protective.

Step 2

Incorporate Sustainable Resource Features

Laying out the redevelopment action plan is an ideal opportunity to incorporate sustainable resource features as the site is evaluated and prepared for revitalized end use. This can improve the long-term economics of the project and help protect the environment. This type of planning can include:

- Native plants and natural landscaping which need less water and treatment with fertilizers and pesticides
- Green roofs (vegetated roofs) that improve storm water management, absorb UV rays and moderate temperatures
- Energy efficient building features (“green building” and LEED certification), such as improved insulation, energy-efficient lighting, and solar panels
- Water-efficient plumbing features to prevent waste or overuse of water
- Low impact development options such as permeable pavements which enable storm water to permeate back into the ground
- Rain gardens which use constructed vegetated areas to collect and absorb rain water and enhance aesthetic value
- Reusing existing buildings, deconstruction, and recycling of on-site materials, and
- Creating open space, restoring habitats and providing for recreational uses

(Please see the Resource and Contacts section of this guide for more information.)

Step 3

Engage Key Stakeholders

A brownfield redevelopment project can be an economic catalyst and help secure and beautify an area. In firming up the planned end use for the site, understand how it may complement and support the community or neighborhood’s vision for the area. Evaluating the strengths and needs of the locality, including economic and land use



trends can help determine the best end use for the site. An end use that leverages the community's vision is more likely to attract the support of investors, businesses, and citizens.

Key stakeholders to consider include: adjacent residents and businesses, local or regional planning commissions, public and government officials, area financial institutions and community groups. Engage stakeholders early in the planning cycle to solidify support, answer potential questions or concerns, and to develop partnerships.

Step 4

Determine Financing Needs and Resources

Identify the potential costs and resources for redeveloping the site. In addition to private lenders or investors public financing is available to encourage the assessment and cleanup of brownfields. Identify if available federal or state technical or financial assistance programs fits the needs of the redevelopment project. *(Please see the Resources and Contact section of this guide.)*

Step 5

Consider Potential Liability Issues and Protections

Both a prospective buyer and current owner of a brownfield site should be informed how liability issues and protections work. This can be a complex area to understand, and as such, consultation with an attorney experienced in brownfield law and regulations is advisable. State and federal law provide liability protections for both a prospective purchaser and current landowner depending upon the specifics of the situation at hand, and broadly speaking if/how due diligence has been executed.

Important Iowa issues to understand:

- Pre-sale environmental assessment obligation
- Duty on finding and reporting “hazardous conditions”
- How responsibility for assessment and clean up is managed
- How cleanup liability for a regulated substance (such as petroleum) is treated differently than for general hazardous conditions
- How lender liability for assessment and cleanup is determined, and
- Third party liability protection.

The primary federal law addressing land pollution cleanup and reuse is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq. Congress amended CERCLA in 2002 (Brownfield Amendments) to define certain conditions under which property owners may avoid CERCLA liability. The brownfield amendments established a set of procedures and criteria that are intended to provide liability protections for three basic situations. In all three situations, the owner must satisfy the pre-sale “all appropriate inquiry” standards; and after purchase, the owner must satisfy the “continuing obligation” standards.

Key federal terms include:

- Innocent Landowner
- Bonafide Purchaser Liability Exemption, and
- Contiguous Property Owner Liability Exemption

(Please see the Brownfield Liability Basics section of this guide for more information.)

Step 6

Assess Need for Environmental Site Assessment (ESA) Phase I and/or Phase II

Consider the need for a Phase I, and or/Phase II ESA. To address any financing concerns and to establish liability protections, a Phase I ESA should be conducted. A Phase I researches the site's development history, past uses, and environmental records in and around the site area to determine if there is a likelihood that the site could have been adversely impacted by environmental contaminants. If a Phase I indicates that past uses or site conditions may have created the likelihood of an environmental release, consider physically investigating soils and groundwater at the site to determine if contamination is actually present, and to what extent and concentration.

A Phase II can be critical component of a brownfield redevelopment plan, and should be closely discussed between the buyer and seller. Because a Phase II can be a more costly than a Phase I, the cost is often negotiated between the buyer and seller. Phase II results may entail additional responsibility for the current site owner if substantial contamination is found. An experienced environmental consultant can assist with interpreting the findings of a Phase II, but most potential buyers also seek to have the Phase II reviewed by the state regulatory agency.

(Please see the Environmental Assessment and Clean Up section of this guide for more information.)

Step 7

Consider Using the Iowa Land Recycling Program (LRP)

The LRP is a voluntary clean up program administered by the Iowa Department of Natural Resources (IDNR). The purpose of the LRP is to facilitate moving contaminated property sites into productive use.

Participants successfully completing the LRP are provided a "No Further Action" Certificate (NFA) from the IDNR. Once an NFA certificate is issued, the LRP statute grants "protected parties" protection from further assessment, remediation and regulation by the IDNR or any other state agency as to those environmental conditions that have been fully evaluated under the LRP rules. The NFA certifies that no further response action is required at the enrolled sites for those conditions classified as no further action,

except for any continuing requirements specified in the NFA certificate such as monitoring or maintenance of institutional and technological controls when required.

(For more information please see the Land Recycling Program section of this guide.)

Step 8

Anticipate a Cleanup Strategy

A Phase II may indicate the need for further assessment and cleanup, or the site owner or prospective buyer may opt to voluntarily clean up the site to increase its value by opting to participate in the Land Recycling Program. There are a number of options available to successfully remediate a site. The type and levels of contaminants and any pathways of contamination migration along with planned end use of the site (e.g. residential, commercial, industrial, recreational) will drive the cleanup plan. For example, if redeveloping the site for residential use, such as for adult senior care housing or child care, the clean up requirements are likely to be more stringent than those required for a commercial or industrial end use. Cleanup and

contaminant management alternatives generally fall within three categories of action: institutional controls, technological controls, and cleanup technologies. A comprehensive cleanup plan may combine a number of these alternatives.

(For more information, please see the Environmental Assessment and Clean Up section of this guide.)

Step 9

Identify Other Compliance Requirements

In addition to any brownfield redevelopment approvals needed, identify if other environmental or compliance requirements will be needed as redevelopment progresses. For example, moving more than one acre of soil as reconstruction or renovation begins will require stormwater permits. Installing some type of equipment at an industrial or commercial site may require air quality construction permits. Oversize hauling or transporting permits may come into play. Assistance is available to help you determine if other compliance requirements apply and to help meet timelines.

(See the Resources and Contacts section of this guide for more information.)

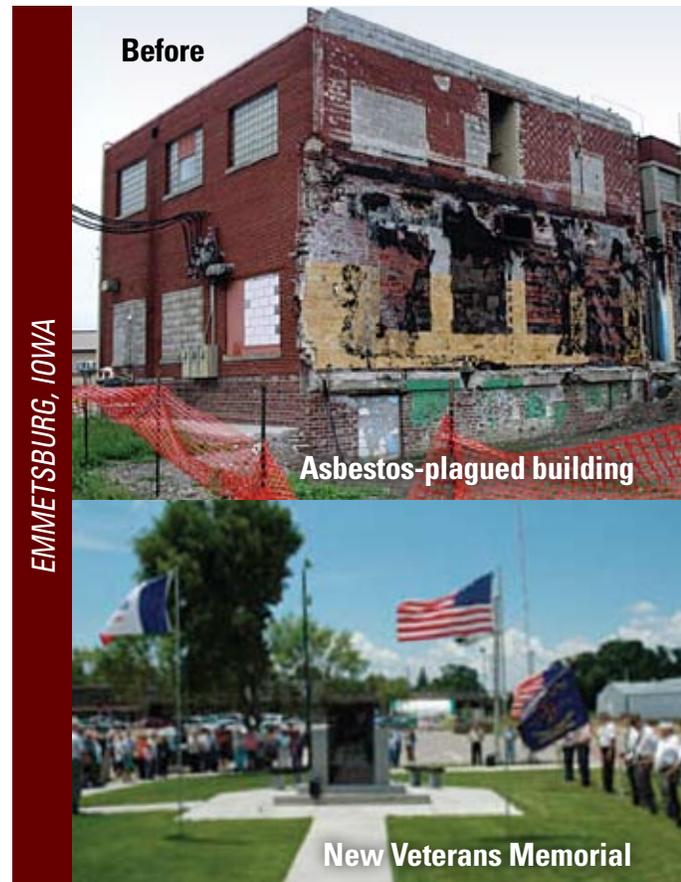
Bringing It All Together

With good planning and research, and property assessment and cleanup, you can turn your brownfield site from an initial obstacle to an opportunity and success story! Using this guide, along with professional scientific and legal advice, you can ensure that you approach your project with the necessary due diligence to explore the environmental issues, determine strategies to cleanup or negate any significant contamination, and leverage financial and technical resources to achieve your ultimate goal – getting the site back into productive use!

Success Stories

From Hazardous Site to Veteran's Memorial

A former warehouse with asbestos contamination was a key issue of concern for Emmetsburg, Iowa. Owners of the warehouse began demolition of the building without testing for potential asbestos. The site was a relatively small parcel located near a major highway. After discovering the hazardous material, the owner removed the asbestos improperly and was eventually cited for improper disposal of a hazardous material. Emmetsburg was left with a blighted building that potentially exposed citizens to harmful asbestos. Community leaders contacted the Iowa Department of Natural Resources (IDNR) for assistance to transform the site into productive use. Working with the IDNR Brownfield Redevelopment Program, county and city leaders crafted a redevelopment strategy to construct a memorial park for the military veterans of Palo Alto County. Emmetsburg received a grant from Palo Alto County in the amount of \$8,000 and covered the remaining costs for asbestos abatement and demolition. The community raised an additional \$27,000 through donations to finalize the project. The Palo Alto Memorial Park was dedicated on Memorial Day 2006.



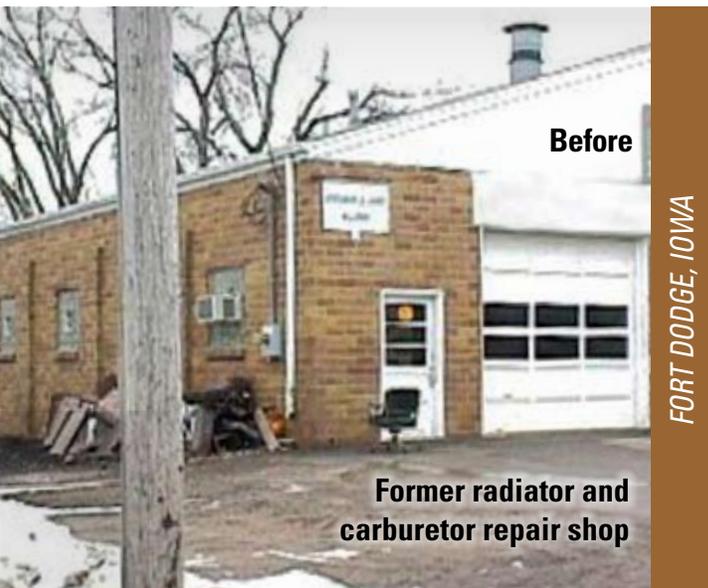
EMMETSBURG, IOWA

Before

Asbestos-plagued building

New Veterans Memorial

Former Radiator Shop Revitalized into Residential Project



Before

Former radiator and carburetor repair shop

FORT DODGE, IOWA

The opportunity to revitalize a former industrial site into new residential housing posed a challenge for Fort Dodge. A radiator and carburetor repair shop had been located at the site which signaled that soil or groundwater contamination could be present and therefore jeopardize redevelopment. The site owner assisted by providing access to the property to conduct environmental site assessments (ESAs), sold the property to the city, and relocated his business. Costs to conduct the necessary (ESAs) were around \$20,000, posing another barrier. Fort Dodge successfully applied for and received a grant from the



After

New Park View housing

FORT DODGE, IOWA

Environmental Protection Agency (EPA) to conduct a Phase I ESA and review the site's historic use. The Phase I report recommended that a Phase II ESA be carried out to collect soil and groundwater samples. Fort Dodge contacted IDNR's Iowa Brownfield Redevelopment Program for assistance with the final due diligence step. IDNR's collection of site samples

reported various contaminants including, petroleum, solvents, and heavy metals. The IDNR analysis concluded that elevated levels of contaminants did not exist in the soils or groundwater and, as a result, the site was deemed appropriate for residential use. Fort Dodge has moved forward to complete the housing redevelopment on the parcel, including two single-family homes. Upon its completion, the revitalized neighborhood will be named Park View.

Forging Ahead with Industrial and Commercial Redevelopment



Before

Cleared industrial tracts at former White Oliver Company

CHARLES CITY, IOWA

For more than a decade a once vital industrial site in the heart of Charles City lingered empty and abandoned. The seventy-five acre site was home to the White/Oliver Farm Equipment and Tractor Factory which for over ninety years employed more than two thousand people and built one hundred tractors a day during its prime. In 1994 the company finally succumbed to the farm recession and closed. The company's buildings were demolished and acres of concrete slabs left behind. The Charles City Area Development Corporation (CCADC) was granted property rights in lieu of delinquent property taxes. Phase II Environmental Site Assessments (ESAs) to collect soil and groundwater samples were deemed necessary. Because the property was so extensive, costs to conduct the ESAs were estimated at \$80,000. CCADC contacted IDNR's Brownfield Redevelopment Program for assistance and the Phase II ESA was completed in July 2004 at no cost to CCADC. CCADC is proceeding with redevelopment planning to bring commercial and industrial redevelopment to the site. The site has been surveyed and platted into various parcel sizes to encourage the establishment of new businesses, large and small, that can utilize access to two rail lines, city infrastructure, and tax increment financing and an enterprise zone designation. Through redevelopment Charles City is reclaiming a proud past for a successful future.



After

Oliver Development Park

A New Beginning Along the Cedar River



Located immediately south of Waterloo's central business district, the Rath neighborhood is comprised of 350 acres that was once a thriving commercial and industrial quarter anchored by the Rath Packing Company. The company which started as a small regional packing house became the nation's single largest meatpacking facility, operating branch facilities in twelve states. Fierce industry competition and the farm recession drastically impacted the Rath Packing Company and it ceased operations in 1985. City officials are moving forward with a long-term comprehensive strategy to revitalize the Rath community, partnering with EPA and the state of Iowa.

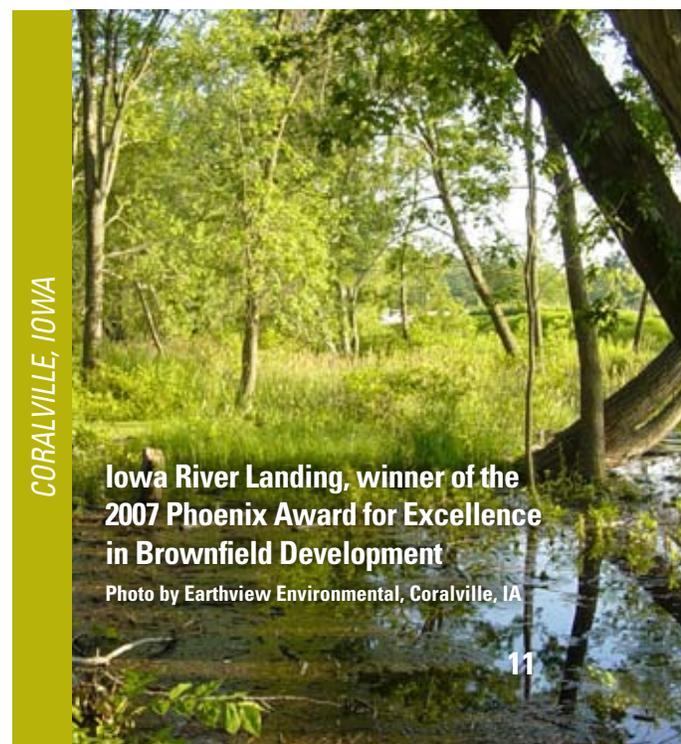
Waterloo began its ambitious brownfield initiative on the riverfront by leveraging an EPA Brownfield Assessment Grant, and a combination forgivable loan/grant from the IDED Brownfield Redevelopment Program. Waterloo's objectives include eliminating contamination concerns, developing financial incentives for reinvestment and upgrading infrastructure. The city's long-term plan will link the revitalized Rath neighborhood with surrounding businesses and create green spaces and landscaped walkways throughout the Cedar River and central business district.

Iowa River Landing Renaissance Captures Phoenix Award

Coralville has successfully harnessed the economic benefits of its proximity to the University of Iowa but is not relying upon this factor alone for its competitive future. Coralville has undertaken the task of revitalizing a former industrial park located in the strategic Iowa River Landing area for an entertainment, retail and dining district.

Planning has involved citizen groups, the city council and consultants with expertise in a variety of areas. Coralville has also worked closely with the EPA, Iowa Department of Transportation (IDOT), U.S. Army Corps of Engineers, and the IDED. These partnerships have accessed several resources such as EPA assessment grants and state and local funding to implement corrective measures for sites impacted by petroleum and other hazardous waste.

The Iowa River Landing is currently home to the new Coralville Marriot Hotel which opened in 2006, the Antique



Iowa River Landing, winner of the 2007 Phoenix Award for Excellence in Brownfield Development

Photo by Earthview Environmental, Coralville, IA



CORALVILLE, IOWA

Iowa River Landing

Photo by Earthview Environmental, Coralville, IA

Car Museum of Iowa, Johnson County Historical Society, and River Bend, a new luxury commercial and residential complex. Coralville’s plans also call for an intermodal facility with park and ride. The renaissance of the Iowa River Landing has captured the community’s imagination and has also earned the prestigious Phoenix Award, which is nationally widely recognized as the highest level of excellence for brownfield redevelopment.

Driving Redevelopment with Revitalized Infrastructure

Poised on the banks of the Mississippi River, Clinton offers unparalleled views of the great river memorialized forever in Mark Twain’s literature. Home to Eagle Point Park and Riverview Drive, Clinton is known for providing excellent opportunities to see the America bald eagle in majestic flight. Like other Iowa communities Clinton has faced challenges as a result of the farm crisis of the 1980s which triggered population and job loss, and which was exacerbated by Union Pacific Railroad’s decision to close its repair and maintenance facility in south Clinton.

Clinton is revitalizing its community by focusing on the Liberty Square, a 220-acre neighborhood located within a state designated enterprise zone. Property south of Camanche Avenue will be remediated with Liberty Avenue constructed as an east-bound three-lane, one-way road, and Camanche Avenue as a three-lane, one-way westbound road. The road project will connect the earlier Lincoln Way expansion and project to Clinton’s downtown area via U.S. Highway 30.

According to the U.S. 30 Coalition of Iowa, the direct impact from redevelopment will include the creation of 1,653 jobs with a payroll of approximately \$54 million. Working with several key partners such as the IDOT and IDED, Clinton has undertaken ESAs, property acquisitions and is pressing ahead with this key community revitalization project.

I O W A



GREAT PLACES

Clinton was designated an Iowa Great Place.



Clinton’s vision for the future

Environmental Site Assessment (ESA) and Clean Up Process

Phase I ESA

A Phase I ESA is conducted in order to determine if the site could have been adversely impacted by environmental contaminants. A Phase I researches the site's development history, past uses, and environmental records that may be available. A walk-over of the site is completed but does not include direct sampling or analysis of soils or groundwater. Phase I findings are compiled in a written report summary. Completing a Phase I does not subject the current landowner, or prospective purchaser to any direct liability at the time it is completed. It is for information only and benefits both the buyer and seller by providing a summary of the property's past history.

ASTM Standard

A Phase I is conducted by a consulting contractor, usually an environmental or engineering consulting firm. While such firms are not required to have a specific license or permit to conduct a Phase I, there are industry standards which should be followed, and the firm and individuals hired should be familiar with the Phase I process. The American Society for Testing and Materials (ASTM), an international standards organization that develops and publishes voluntary technical standards has developed a standard practice for conducting Phase I. It is referenced as *ASTM E1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental*. A contractor or consultant hired to conduct a Phase I should use this standard.

Phase I components:

Going on site to view present conditions (for example, chemical spill residue, die-back of vegetation) to note any hazardous substances or petroleum products usage (presence of above ground or underground storage tanks, storage of acids), and to evaluate any likely environmentally

hazardous site history, a Phase I consulting contractor will be:

- Evaluating risks of neighboring properties to the subject property,
- Interviewing persons knowledgeable of the property's history (past owners, present owner, key site manager, present tenants, neighbors)
- Examining municipal or county planning files to check prior land usage and permits granted,
- Conducting file searches with public agencies (IDNR, fire department, county environmental health department) which may have oversight relative to the site and knowledge of water quality and soil contamination issues,
- Reviewing historic aerial photography of the vicinity,
- Evaluating current USGS maps to scrutinize drainage patterns and topography, and
- Examining chain-of-title for environmental liens and/or activity and land use limitations (AULs).

If a Phase I does not indicate a likelihood of environmental impact this may be sufficient documentation to satisfy a potential lender or legal counsel. Completing a Phase I prior to purchase assists with establishing "all appropriate inquiry" under federal law, if this is a consideration. (*Please see the Brownfield Liability Basics section of this guide.*) If a Phase I indicates the likelihood of an environmental release, consider a Phase II to physically investigate soils and groundwater at the site to determine if contamination is actually present, and to what extent and concentration.

Phase II ESA

A Phase II ESA is used to confirm if contamination is present in the site and involves collecting soil and groundwater samples in and around areas where hazardous materials were manufactured, stored, or transferred on the site. A Phase II also looks at areas where there is evidence

of contamination, such as stained soil, distressed vegetation, and areas where wastes may have been dumped, buried, or burned on site.

A Phase II is an important component of a brownfield redevelopment plan, and should be closely discussed between the buyer and seller. A Phase II can be more costly than a Phase I and as a result are often negotiated between the buyer and seller. Phase II results have the potential to require additional site investigation by the current site owner if substantial contamination is found or causation established. *(Please see the Brownfield Liability Basics section of this guide for more information.)*

The simple presence of a contaminant is not sufficient cause to immediately abandon redevelopment plans. The concentration, extent, and need for cleanup of the contaminant(s) need to be established. This information coupled with the site's planned end use will determine any further need for assessment and cleanup. While a reputable environmental consultant can assist in interpreting Phase II findings, most prospective purchasers request the report be reviewed by the appropriate state regulatory agency. This is done to seek concurrence on any potential need for clean up.

A Phase II submitted to the Iowa Department of Natural Resources (IDNR) is reviewed by a team of environmental specialists. Variables evaluated include: concentrations of contaminants reported, how the site is currently used, and if exposure pathways are evident or may be likely through soil contact or groundwater ingestion. Subject to this review, IDNR may determine that no further action is warranted. If there are indications that contaminant concentrations are high enough to cause adverse impacts to public health or the environment IDNR may require further action.

Buyers and sellers should discuss potential implications of conducting a Phase II prior to the collection of soil and groundwater samples, as requirements for reporting hazardous conditions, and appropriate follow up, may come in to play if the Phase II notes significant contamination.

Clean up Process

A Phase II may indicate the need for further assessment and cleanup, or the site owner or prospective buyer may opt to voluntarily clean up the site to increase its value or improve its ability to be sold. (Please see the Land Recycling Program section of this guide.) There are a number of options available to successfully remediate a site. The type and levels of contaminants and any pathways of contamination migration along with planned end use of the site (e.g. residential, commercial, industrial, recreational) will determine the cleanup plan.

Cleanup and contaminant management alternatives generally fall within three categories of action: Institutional Controls, Technological Controls, and Cleanup Technologies. A comprehensive cleanup plan may combine a number of these alternatives.

Institutional Controls

These controls are legal measures, defined and recorded, to prevent the use of, and access to, areas or resources at a site that have been impacted by contaminants. Usually stated on the property deed, an institutional control may restrict the installation of drinking water wells on the site in order to avoid contact with contaminated groundwater, or a restriction on property use, such as banning residential use at a site, in order to avoid long-term contact with soils. Institutional controls are designed to prevent exposure to contaminants, and are useful when complete cleanup is not necessary or feasible to get a site back in to productive use.



Technological Controls

These controls reduce the potential for contaminants to come in to contact with people and the environment, or to migrate off of a site. These types of controls usually involve the construction of a physical barrier to prevent exposure or to limit migration of the contamination. A technological control could be as simple as installing fencing around a portion of a site with contamination, or the installation of an asphalt parking lot as a 'cap' over contaminated soil to prevent exposure. Some technological controls are designed to stop the further spread or migration of contaminants, such as a buried wall of materials designed to stop or react to groundwater contaminants to prevent their spread. Technological controls may not fully clean up contaminants but assist in ensuring that exposure to the contaminants does not occur.

Cleanup Technologies

If institutional controls or technological controls are insufficient to contain exposure risk, when deed restrictions or physical barriers are not desirable, or when levels of contamination are unacceptable, then direct cleanup of contaminants may be the only measure to ensure the



contamination is dealt with completely. Cleanup technologies may be as simple as removing contaminated soils from the site, and disposing of it properly, or as involved as installing a groundwater pump and treat system. Site cleanup is usually done under the direction and approval of IDNR. Cleanups may vary in duration from a few weeks to remove contaminated soils to several months if groundwater is to be cleaned up and monitored.

Technical and Financial Assistance

State and federal resources are available to assist with brownfield assessment and cleanup

Iowa Department of Natural Resource (IDNR)

Phase I and Phase II Environmental Site Assessment (ESA) Grants

IDNR grants are available to cover the cost of conducting a Phase I ESA or asbestos inspection. IDNR may also conduct a Phase II ESA on behalf of an eligible applicant.

Cleanup Cost-Share Grants

Cost-matching grants of up to fifty percent of the cost to cleanup environmental contaminants,

including but not limited to, asbestos, petroleum, heavy metals, and solvents are available from the IDNR. Maximum cost share is \$25,000.

Cleanup Revolving Loan Fund – Forgivable Loan

IDNR may make up to \$250,000 in brownfield cleanup funds available to eligible applicants and projects. Up to forty percent of the loan is forgivable if the goals of the project are met on a timely basis. Repayment terms and loan percentages are negotiable.

For information on IDNR programs please visit: www.iowabrownfields.com.

IDNR Applicant and Site Eligibility:

Cities, counties, non-profits, and local economic development agencies are eligible to apply. A site proposed for assistance must meet the definition of a brownfield, and have a reuse plan containing one or more of the following redevelopment objectives:

- Provide notable economic redevelopment, including but not limited to: creation of jobs, increase in property valuation, and other positive economic impact to the community;
- Public, or non-profit use that provides significant value to the community from a cultural, historical, or social perspective;
- Public open-space, recreation, green space, or preservation or reintroduction of natural resource protection areas.

Sites and projects that are not eligible include those that involve the primary benefit being one or more of the following: parking lots, storage of public use vehicles and equipment, and projects where building demolition is conducted through burning.

Iowa Department of Economic Development (IDED)

Acquisition, Remediation or Redevelopment Grants and Loans

IDED makes \$500,000 available on a competitive basis annually for the acquisition, remediation, and redevelopment of qualified brownfield sites. A city, county, site owner or non-owner of a site may apply for funding. A site owner or non-owner of a site must secure local city or county sponsorship before applying. Financial assistance is limited to twenty five percent of eligible activity costs. Assistance may be awarded in the form of a grant, forgivable loan, conventional loan or some combination. For more information please visit: <http://www.iowalifechanging.com/business/brownfields.html>.

Effective July 1, 2009, Iowa companies may be eligible for tax credits relating to Brownfield projects. For up-to-date information, contact Matt Rasmussen at 515.242.2906 or e-mail matt.rasmussen@iowalifechanging.com.

United States Environmental Protection Agency (EPA)

Assessment and Cleanup Grants

EPA grants may be used to address sites contaminated by petroleum and hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum). Funding includes:

- Brownfield Assessment Grants (up to \$200,000 over three years),
- Brownfield Revolving Loan Fund (RLF) Grants (up to \$1,000,000 over five years) and
- Brownfield Cleanup Grants (up to \$200,000 over three years).

Applications are typically accepted in October of each year. For more information please see: www.epa.gov/brownfields.

Federal Brownfield Income Tax Deduction - IRS Code, section 198(c) (1) (B)

The federal brownfield tax deduction allows a taxpayer to deduct qualified environmental remediation expenditures at a property held for use in a trade or business or for the production of income. The taxpayer takes the deductions from federal income in the year that the expenditures were paid or incurred, rather than depreciating them over several years.

The federal income tax deduction for brownfield properties has been extended to include eligible environmental costs incurred from December 31, 2005 to December 31, 2007, and expanded to include both federally defined hazardous substances and petroleum products.

For more information visit: http://www.epa.gov/brownfields/tax_incentive_faq.htm.

Frequently Asked Questions (FAQs)

What does it cost to clean up a brownfield site?

Like a typical development project, total cost is affected by several variables. The type, volume, and concentration of contamination all factor into clean up costs. Completing a thorough environmental assessment and site investigation will provide most of the information needed to establish a cleanup cost estimate and help assess the feasibility of a given project. In Iowa there are technical and financial assistance available for site assessment, investigation, clean up, and redevelopment. *(Please see the Program Resources and Contact section of this guide.)*

How long does it take to clean up and redevelop a brownfield site?

Once a clean up plan is started, a project will not take significantly more time than a standard development project. In some cases, it can take place at the same time as the clean up activities. Consult with the Iowa Brownfield Redevelopment Programs at the Iowa departments of Natural Resources and Economic Development to help reduce the potential for delays. *(Please see the Program Resources and Contact section of this guide.)*

Who will be responsible for contamination of a site?

Both a prospective buyer and current owner of a brownfield site should become informed on how liability issues and protections work. Generally speaking, state and federal law provide liability protections for both a prospective purchaser and current landowner depending upon the specifics of the situation at hand, including whether due diligence has been exercised in identifying if contamination exists and if no causation can be established. Consulting with an experienced brownfield attorney is advisable. *(For more information, please see the Brownfield Liability Basics section of this guide.)*

Is a brownfield site the same as a Superfund site?

No. The United States Environmental Protection Agency (EPA) designates a site as a Superfund site when there is severe contamination that poses an imminent and substantial threat. Keep in mind that a brownfield may or may not have actual contamination present. If there is contamination present, it is typically well below the level required for Superfund designation.

Will I be able to obtain financing for a redevelopment project?

Commercial lenders are becoming more familiar with brownfield redevelopment and are increasingly willing to finance these projects. In Iowa there are several public financing sources to assist with assessment, investigation, remediation planning, clean up and redevelopment. These sources are typically combined to complete a project. *(Please see the Program Resources and Contact section of this guide.)*

What is the difference between a Phase I and a Phase II Environmental Assessment?

The Phase I identifies areas of environmental concern on a property through historical record review and visual inspection. The Phase I inspections usually identify the scope of area of potential concern. The Phase II is used for taking samples of groundwater and soils. The samples are used to make a reasonable assessment of whether areas of environmental contamination exist on the property. It is common practice in today's commercial/ industrial property transaction market to perform Phase I and Phase II Environmental assessments. *(Please see the Environmental Site Assessment and Clean Up section of this guide.)*

Brownfield Liability Basics

The following is a brief overview of brownfield liability issues under Iowa law, as well as a summary of applicable federal law. This is not intended to be a complete discussion of the law and should not be relied upon as legal advice. Consultation with an attorney experienced in brownfield law and regulations is advised. However, this discussion does provide a foundational basis of the law, as well as guidance on how to research the issue further.

Iowa Law

Pre-Sale Environmental Assessment Obligations

Under Iowa law, there is no legal requirement or obligation to conduct a soil and groundwater investigation, “environmental site assessment” (ESA) or what are commonly referred to as a “Phase I” or “Phase II” prior to purchasing property. As will be discussed below, buyers and sellers may choose to conduct ESAs and lenders may use this step for the purpose of assessing the viability of their future collateral, or to protect themselves from liability (if contamination is present) under federal law. Therefore, under Iowa law, the failure to conduct a pre-sale environmental assessment has little or no bearing on the buyer’s regulatory liability (i.e. liability to the state).

A pre-sale environmental assessment that discovers contamination may provide a basis for the Iowa Department of Natural Resources (IDNR) to require a property owner or other responsible party to conduct a soil and groundwater investigation and risk assessment. If the assessment determines that soil and groundwater must be cleaned up, the IDNR has only the authority to require property owners or other persons to cleanup contamination if it can show these persons caused, contributed to, or aggravated the contamination.

Finding and Reporting “Hazardous Conditions”

Iowa Code section 455B.386 requires that certain defined persons notify the IDNR of the occurrence of a “hazardous condition” within six hours of discovery. A “hazardous condition” is defined as “... any situation involving the actual, imminent, or probable spillage, leakage, or release of

a hazardous substance onto the land, into a water of the state, or the atmosphere, which creates an immediate or potential danger to the public health or safety or to the environment.” Although there is room for interpretation, the IDNR believes that property owners are among that class of persons required to notify of a “hazardous condition.” The results of an environmental assessment which discovers concentrations of contaminants above IDNR threshold standards (sometimes referred to as “action standards” or “statewide standards”) may be sufficient to require a duty to report. An individual failing to report such a condition within six hours of discovery could be subject to an automatic civil fine.

Iowa law defines a “hazardous substance” very broadly as “... any substance or mixture of substances that presents a danger to public health or safety and includes, but is not limited to, a substance that is toxic, corrosive, or flammable, or that is an irritant or that generates pressure through decomposition, heat, or other means.”



Who Has Responsibility for Assessment and Cleanup of Contamination under Iowa Law?

The Iowa Supreme Court in 1995 interpreted several Iowa Code provisions dealing with environmental regulatory liability other than for underground storage tanks. In **Blue Chip Enterprises et al v. Iowa Department of Natural Resources, 528 NW2d 619 (Iowa 1995)**, the court generally held that there must be sufficient evidence that a person actively “caused” the contamination in order to impose full environmental liability for assessment and cleanup. However, the court held that the IDNR did have authority to require property owners to conduct some degree of soil and groundwater investigation and assessment and to develop a remedial plan even if they did not actively “cause” the condition. However, they cannot be made to “cleanup” contamination without evidence that they “caused” the condition.

In the brownfield context, the key item is that when pre-sale audits are conducted and result in the discovery of contamination: (1) there may be a duty to report the contamination; (2) the IDNR must determine whether under the circumstances additional soil and groundwater investigation and risk assessment must be conducted; (3) if assessment is required, the IDNR must decide who should do it; and (4) if cleanup is required, the IDNR must determine if there is a responsible party (a person who caused the condition) who is financially able to perform the work.

Petroleum Underground Storage Tank (UST)

Cleanup liability for the release of a “regulated substance,” including petroleum, from an underground storage tank (UST) is dealt with separately from general hazardous condition liability as previously discussed. The owners or operators of an UST are responsible for cleaning up environmental contamination that is caused by the release/leaking/leaching/dumping/spilling of a regulated substance from an UST. The UST law can be interpreted to place both assessment and cleanup liability on an owner or operator of the USTS. [See Iowa Code sections 455B.471 (5), and 455B.471 (6).]

In the brownfield context, if a buyer acquires a site with USTS still in existence, the new property owner may be considered the owner of the USTS and therefore liable for assessment and cleanup costs, regardless of whether they caused the release. This contrasts with the causation requirements established under the Blue Chip decision.

It will generally be in the interests of a prospective buyer to have USTS removed prior to acquiring ownership of the property. This will help eliminate any question of liability as an owner/operator of the USTS.

It is the IDNR’s policy to first establish and attempt to enforce environmental regulatory liability against owners and operators of the USTS before it would consider looking to the “innocent” property owner. In most cases, the IDNR will have already identified a liable owner/operator and the owner/operator may be eligible for financial assistance through the Iowa UST Fund “remedial benefits” program. In any case, one should always contact the IDNR and the Iowa UST Fund prior to purchase to determine the regulatory status of the contaminant condition and the status of the responsible UST owner/operator.

For more information on the UST Fund remedial benefit program, contact the UST FUND Administrator at 515/225-9263 or visit: <http://www.iowadnr.gov/land/ust/ustfundindex.html>.

Lender Liability for Assessment and Cleanup

Iowa law provides a liability exemption, generally referred to as the “lender liability exemption.” It is referenced in several parts of the Iowa Code. Under these provisions, lenders are generally exempted from environmental regulatory liability as long as they manage the collateral in the normal course of doing business and do not undertake management of the facility operations such that they become an “operator.” [See Iowa Code section 455B.171 under the definition of “person,” Iowa Code section 455B.381(7) and 455B.392(7) dealing with “hazardous condition” liability, Iowa Code section 455B.474 under definition of UST “owner” and Iowa Code section 455B.418(4).]

This exemption generally applies even if the lender acquires ownership of the property through foreclosure or other voluntary methods in lieu of foreclosure. However, under Iowa Code section 455B.392(7), if a lender acquires title to property and the state subsequently expends funds to cleanup the property during this ownership, the state may recover the lesser of the amount expended or the “post-cleanup market value” received by the seller.

Third Party Liability Protection, Iowa Code Section 455B.751

Under this section of the Iowa Code enacted in 2004, property owners are protected against claims and lawsuits by adjoining property owners and persons who assert “third party claims”, (i.e. personal injury, economic damages and property damages) arising out of contamination present at the site. To satisfy the conditions for immunity from suit, the property owner must establish that (1) the owner did not knowingly cause or permit a new release that results in injury or damage; (2) the owner is not a potentially responsible party (i.e. a person whose acts or omissions are the cause of the environmental condition or whose negligent actions resulted in exposure to the condition, even if they did not cause it); and (3) the owner is not a person affiliated with a responsible party.

Identifying Records of Contamination for a Property

The IDNR maintains lists and databases of sites where contamination issues have been investigated and/or remediated. Applicable files and records for these sites are available for public viewing at the IDNR Records Center at the Wallace State Office Building, 502 E. 9th Street, Des Moines, IA 50319-0034. Database records which are available include:

- **UST/LUST Database** - includes all regulated registered tanks and LUST sites.
- **Contaminated Sites database** - records of some hazardous condition and contaminated sites currently available through IDNR Records Center. (Consult with the records center.) Many sites and recent site records are now available to view and/or download from the online Contaminated Sites Section database. See <http://programs.iowadnr.gov/contaminatedsites/pages/search.aspx>
- **Hazardous Waste Registry** – Contains a list of contaminated properties that have been placed on the hazardous waste registry pursuant to authority under Iowa Code sections 455B.424, 455B.426 and 455B.427. The IDNR maintains an assessment file for each site listed in the Registry. These files are located in the Central Records Section of the IDNR Des Moines office or may also be accessed through the IDNR website at the Contaminated Sites Database sited above.

Voluntary Clean Up

The Iowa Land Recycling Program (LRP) was enacted by the legislature to facilitate the assessment and cleanup of sites for productive use. The primary advantages of participation is that the LRP offers a more clear and predictable set of technical standards that one must satisfy in order to reach a no further action classification (NFA) which in turn provides some limitation on the conditions under which the IDNR can reopen regulation of the site. The issuance of an NFA certificate also provides limited liability protection to “protected” parties.

Generally speaking, any party who can demonstrate that they are willing and financially able to complete the LRP assessment and remedial actions necessary to reach an NFA classification can enroll in the program, including persons who are legally responsible for corrective action. Persons who enroll can choose to withdraw from the program. However, persons who are legally responsible for addressing contamination cannot avoid responsibility by withdrawal.

After a site receives an NFA certificate, the state can only reopen regulation of the site if there is a new release, a condition arises that was not within the scope of the assessment conducted as part of the LRP or an institutional control (ex. a land use restriction) fails to achieve its intended purpose. If reopened, the participants are not obligated to undertake further corrective action unless the person is otherwise legally liable for the contaminant condition. Even if the person is legally responsible, the IDNR must establish that there is a new release or newly discovered historical condition which constitutes an “imminent and substantial threat to public health, safety and welfare.”

For more detailed discussion of the specifics of the LRP, please see Iowa Code chapter 455H, 567 Iowa Administrative Code Chapter 137.

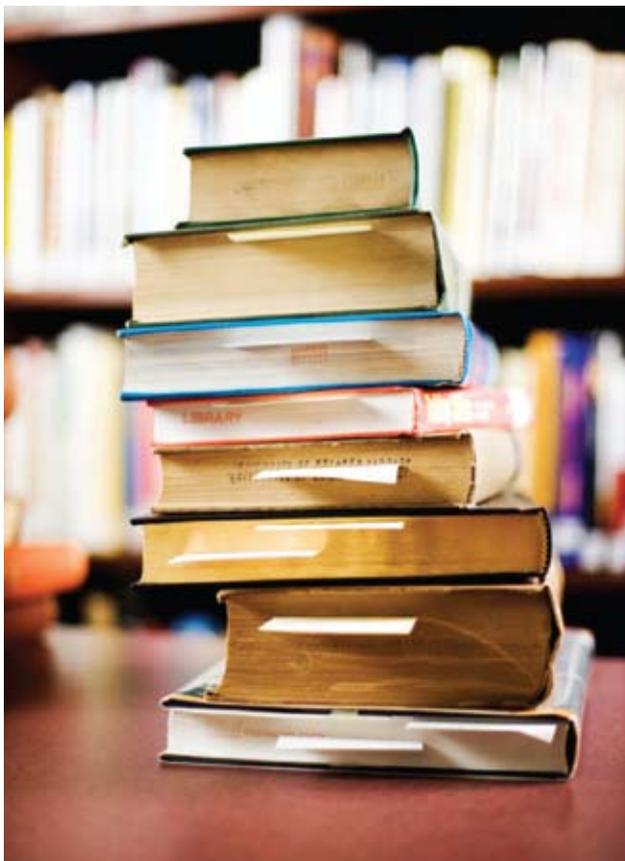
Visit: <http://www.iowadnr.gov/land/consites/lrp/conLRP.html>.

Federal Law

The primary federal law addressing land pollution cleanup and reuse is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq. Under CERCLA, a person may be held strictly liable for cleaning up hazardous substances at properties that they either currently own and operate or owned/operated at the time of disposal. In 2002, Congress amended CERCLA (e.g. CERCLA Brownfield Amendments) to define certain conditions under which property owners may avoid CERCLA liability.

Brownfield Amendments Liability Protections

The brownfield amendments established a set of procedures and criteria that are intended to provide liability protections for three basic situations. In all three situations, the owner must satisfy the pre-sale “all appropriate inquiry” standard, and after purchase, the owner must satisfy the “continuing obligation” standards.



- **Innocent Landowner Defense** - this defense arises when a prospective buyer conducts pre-sale due diligence and determines that there is no reasonable likelihood that the site is contaminated but the site is later found to be contaminated.
- **Bonafide Purchaser Liability Exemption** - this exemption from property owner liability arises when the prospective buyer conducts pre-sale due diligence and determines that either the site may be contaminated or confirms that it is contaminated.
- **Contiguous Property Owner Liability Exemption** - this exemption applies when the prospective purchaser conducts pre-sale due diligence on a property that adjoins a contaminated site and has no reasonable basis to assume the adjoining property is the source of contamination.

“All Appropriate Inquiry”

The EPA has adopted final regulations that establish the pre-sale “all appropriate inquiry” standards. [See “Standards and Practices for All Appropriate Inquiries”, 70 Federal Register 66070, (November 1, 2005), (40 CFR Part 312).] EPA has also issued interim guidance (“Common Elements Guidance”) which further summarizes its interpretation of the “continuing obligations” standards that must be satisfied after purchase of the site. The continuing obligations include the duty to stop any continuing release, prevent any threatened future release, and prevent or limit any human, environmental or natural resource exposure to previously released hazardous substances. [See 42 USC 9601(35) (B) (i) (II).] For more information visit: <http://www.epa.gov/compliance/resources/policies/cleanup/superfund/common-elem-guide.pdf>.

The inquiry standards basically require that a Phase I and if deemed necessary, a Phase II environmental audit be conducted prior to purchase.

Phase I – This is an investigation into a site’s previous ownership, uses and environmental conditions conducted by a qualified environmental professional. The EPA published its final rule setting federal standards for the conduct of all appropriate inquiries in the Federal Register on November 1, 2005. The final rule establishes specific regulatory requirements for conducting all appropriate inquiries for the purpose of qualifying for the three situations described above.

As of November 1, 2006, parties must comply with the requirements of the All Appropriate Inquiries Final Rule, or follow the standards set forth in the ASTM E1527-05 Phase I Environmental Site Assessment Process, to satisfy the statutory requirements for conducting all appropriate inquiries.

The Phase I will develop a property overview, historical information for the property and surrounding properties and perform a physical reconnaissance of the site. These findings are summarized in an assessment report. For more information see: <http://epa.gov/brownfields/regneg.htm>.

Phase II - If the environmental professional conducting the Phase I determines that contamination is likely to be present, a Phase II assessment must be completed. A Phase II assessment is a more in-depth analysis of the environmental conditions identified by a Phase I, including sub-surface soil and groundwater sampling and analysis. When a Phase I suggests that contamination is likely present at the site, a Phase II identifies the specific nature and extent of the pollution. (Please see the Environmental Site Assessment (ESA) and Clean Up Process Section of this guide for more information.)

Iowa law defines a “hazardous substance” very broadly as “... *any substance or mixture of substances that presents a danger to public health or safety and includes, but is not limited to, a substance that is toxic, corrosive, or flammable, or that is an irritant or that generates pressure through decomposition, heat, or other means*”.

The Iowa Land Recycling Program (LRP)

The “Iowa Land Recycling Program and Remediation Standards Act” was enacted by the Iowa Legislature in 1997. The LRP is a voluntary clean up program administered by the Iowa Department of Natural Resources (IDNR). The purpose of the LRP is put contaminated sites back into productive use.

Administrative rules governing the LRP are found in Iowa Administrative Code (IAC) Chapter 137. The LRP addresses “known and identified contaminants of concern.” The LRP is not a substitute for a Phase One or a Phase Two Environmental Assessment (ESA) which is used to identify the historical use of a site and to obtain soil and groundwater samples to determine if contamination above certain concentrations are present.

Eligibility

There are two basic requirements for a contaminated site to be eligible for participation in the LRP.

Known Contaminants

The first requirement is that the site has known and identified contamination above a “statewide standard” within an “affected area.” The “statewide standards” are minimum concentrations of soil or groundwater contaminants which the IDNR has established by administrative rule. An affected area is defined in the LRP rules to mean “*any real property affected, suspected of being affected, or modeled to be likely affected by a release occurring as an enrolled site.*”

Feasible Action Plan

The second requirement is that participants in the program have the financial and legal capacity to complete an environmental assessment that defines the nature and extent of contamination for any affected area to statewide standards and complete a risk evaluation and response actions necessary to satisfy LRP remediation standards. This includes an agreement to obtain access to the site.

Property Owners and Others

The LRP is open to a broad range of participants including the owner of the site, a prospective owner, a bank, a trust, a governmental agency or other entity. The key factor is that the participant can ensure access to the property.

Fees:

Participants in the LRP must pay a \$750 application fee and be willing to pay up to a maximum of \$7,500 in oversight costs assessed by IDNR for overseeing the site as it completes the program.

Exclusions

The LRP is open to most types of contaminated sites but there are some statutory and administrative exclusion to participation:

1. Petroleum releases from underground storage



- tanks subject to regulation under IAC Chapter 135
2. Properties on or proposed to be included on the National Priorities List under the federal EPA “Superfund” program
 3. Animal feeding operations (AFOs) as defined in the LRP rules
 4. Properties subject to some types of enforcement actions or consent orders, unless the enforcing agency approves the enrollment, and
 5. Properties where this is a co-mingling of eligible and ineligible sites unless the IDNR determines enrollment is appropriate as described in rule.

Certain types of releases are also excluded:

1. Workplace exposures with respect to the claims of exposed parties against their employers
2. Emissions from engine exhaust
3. Specific nuclear materials, and
4. Pesticides used according to the product label.

LRP Framework

Key concepts which are the framework of the program include:

- Affected area
- Contaminants of concern
- Exposure route
- Statewide, Background and Site Specific Standards
- Institutional controls including use of environmental protection covenants
- Technological Controls and Standards, and
- No Further Action Certificate (NFA).

Affected Area

“Affected Area” is defined in administrative rules to mean: “any real property affected, suspected of being affected, or modeled to be likely affected by a release occurring at an enrolled site.” An enrolled site may have more than one affected area; each affected area will be dealt with individually, though they may be the subject of the same enrollment and participation process.

In some circumstances an affected area may cross property boundaries and the entire affected area is enrolled in the site. Address this type of situation carefully before applying because it will require the cooperation of the owners of

neighboring properties within the affected area. If there are potential problems related to securing the cooperation of neighboring property owners, discuss this with IDNR prior to enrolling the property.

Contaminants of Concern

Contaminants of concern are defined in administrative rules as “specific hazardous substances that are identified for evaluation in the risk assessment process.” The intent is, a site is enrolled because of concerns related to known contaminants in identified areas exceeding statewide standards. Successfully completing the LRP results in a “no future action” (NFA) certificate for those contaminants for which the site was enrolled and for which necessary steps have been completed. The statute grants a broad release of liability for “protected parties” after the gets receives a NFA certificate.

Exposure route

An exposure route refers to the means by which a person might be exposed to a contaminant, such as: ingestion, inhalation, or dermal contact. Greatest attention is given to the soil and groundwater ingestion route which is evaluated for all sites. The IDNR or the participant may determine that other routes of exposure are also of concern and that these should be evaluated. Protection under the “NFA” is only for those exposure routes that are evaluated.



Institutional Control

Institutional control is defined in administrative rules as “a nonphysical action which restricts land use to reduce or to eliminate exposure to the contaminants in an affected area.” Institutional controls are generally legal mechanisms which prevent certain uses or activities at a property or within a jurisdiction. The specific use restrictions prevent or reduce the likelihood that persons will be exposed to certain contaminants and provides an alternative to cleaning up contamination where there is no current unreasonable risk of exposure. Examples include a deed restriction on a specific property (environmental covenants), zoning regulations or local ordinances which restrict things like private well installation. These controls prevent certain activities (e.g. exaction or well installation) or uses of the property such as prohibiting residential or other high use contact uses.

It is increasingly viable to use institutional controls as an alternative to clean up procedures where there is no unreasonable risk of exposure under current land use activities or when cleanup is not technically feasible or is cost prohibitive.

Environmental Covenant

The environmental covenant is an “institutional control.” The legislature created a special kind of real estate instrument which can be used to impose enforceable restrictions on present and future land use activities and to place certain affirmative obligations on current property owners, future property owners or other persons who sign on to the covenant. See “Iowa Environmental Covenant Act” Iowa Code chapter 455I and Iowa Code section 455H.206.

The covenant “runs with the land,” and is enforceable by the signatories to the agreement, future property owners, municipalities and the DNR. Interested parties also have a procedure to modify or remove the restrictions from the covenant when the environmental conditions change such that exposure concerns no longer exist. The LRP statute requires use of an environmental covenant to restrict future land use to “non-residential” activities whenever the soil and groundwater conditions do not meet a “residential” standard for exposure.



Technological Controls

Administrative rules defines this as “a physical action whose main purpose is to reduce or eliminate exposure to the contaminants of an affected area.” In general, technological controls are not used to clean up contamination but to prevent exposure to it. In some cases, identical technologies may be used to clean up or to prevent exposure, depending upon the specific situation. For example, groundwater “pump and treat” might be viewed as a way to clean up contaminated groundwater in one situation, and as control in another situation to prevent a contaminated groundwater plume from reaching a neighboring well.

Other examples include fencing to control access or capping an area of contaminated soil. When a technological control is used, it must also be accompanied by an institutional control that will ensure ongoing maintenance of the technological control.

Standards

The most important aspect of the LRP to understand is the range of standards available for application at an enrolled site. There are three different standards which may be applied (or a

combination thereof) necessary to comply with the LRP and obtain a NFA certificate and the associated liability protection. Each standard has its own advantages and disadvantages. Selecting a background standard or a site specific standard will require approval by IDNR. A site-specific standard will also most likely require that an institutional and technological control be put into place.

The standards are:

- Background
- Statewide
- Site-specific

Background Standard

The background standard recognizes that some compounds (considered to be contaminants) exist naturally in the environment, or that there are situations where contamination is widespread and often historical. This standard is not applied where contamination can be traced back to an identifiable off-site source. The participant must be able to show that contamination at the site is no greater than background concentrations of the same material near the site in order that no further remedial action is required. This standard is seldom applied.

Statewide Standard

The statewide standard represents concentrations of contaminants in groundwater and soil which, if directly ingested are considered unlikely to pose an unreasonable threat to human health. The statewide standards represent a starting point for the evaluation and remediation of a site. IDNR is required to promulgate statewide standards and to make the standards available to the public. To satisfy statewide standards, soil and groundwater concentrations must not exceed these standards throughout the affected area.

Administrative rule requires that a statewide standard be exceeded to demonstrate eligibility for the LRP, this is known as an actionable level. When statewide standards are fulfilled after cleanup, the NFA will likely be free of institutional controls. The statewide standard will normally be used as the permissible exposure limit in the calculation of site specific standards.

Site Specific Standards

Site specific standards are, by nature, flexible. The standard is derived by applying exposure and risk assumptions specific to the conditions at the site in question. Some suggested options are spelled out in administrative rule, but the participant has the option of calculating a standard, provided it can be justified to IDNR. Because site specific standards generally entail leaving some contamination in excess of the statewide standard, it is typically necessary to put institutional and technological controls in place.

No Further Action (NFA) Certificate

Participants successfully completing the LRP are provided a “No Further Action” Certificate (NFA) from the IDNR. Once an NFA certificate is issued, the LRP statute grants “protected parties” protection from further assessment, remediation and regulation by the IDNR or any other state agency as to those environmental conditions that have been fully evaluated under the LRP rules. The NFA certifies that no further response action is required at the enrolled sites for those conditions classified as no further action, except for any continuing requirements specified in the NFA certificate such as monitoring or maintenance of institutional and technological controls when required.

To encourage participation in the program, the LRP identifies entities that are ‘protected parties’ after successfully completing the LRP. Iowa Code 455H.103 (1) defines this as:

- Any participant in the LRP
- Successor assignee of a protected party
- Commercial lender
- Parent or subsidiary corporation of a participant
- Party sharing a legal relationship with the participants (such as a co-owner or co-operator)
- Holder of a beneficial trust relationship in the enrolled property
- Mortgage or trustee of a deed or trust existing on an enrolled site as of the date of the NFA issuance
- Transferee of the participant
- Heir or devisee of the participant, and
- Governmental agency of political division that acquired the site through any means.

The IDNR issues an NFA to a participant in a form that may be recorded in county real estate records.

Protective Mechanisms

There are three key protection mechanisms provided by the NFA:

1. The participant and any protected party are not required to take any further action at the site related to any hazardous substance for which compliance with applicable standards has been demonstrated, except for any continuing requirements that are specified in the NFA. It is important to note that if the conditions specified in the NFA are not maintained, then there is a provision for re-opener.
2. A covenant not to sue is established. The covenant releases the participant and each protected party from liability to the state to perform additional assessments, remedial activities or response activities with regard to the release of hazardous substance for which the site has enrolled and complied with the LRP.
3. The participant and each protected party ceases to have any liability under certain designated environmental regulatory statutes (other than petroleum releases) to the state or any other person to any condition at the affected area that is covered by the NFA. This appears to prohibit private parties from using the citizen's suit provision in Iowa Code section 455B.111.

Process for Participating in the LRP

- Enrollment
- Participation agreement
- Site assessment of affected areas
- Public notice to adjacent property owners
- Risk evaluation (RE) /response action (RA) document
- Response action implementation,
- Final public notice
- Compliance monitoring, and
- Final report.

Although not all steps require IDNR approval or review a collaborative approach is recommended. Involving IDNR through the process helps secure the agency's approval and concurrence for the outlined action steps. If the participant elects to expedite one or more of the review steps, the information that would have otherwise been submitted earlier will be required in the final report.

Enrollment Form - required

The participant is required to complete an enrollment application form identifying contaminant of concern, property involved, and participant name. (A guidance manual for completing the application form is available.) After receiving the enrollment fee and application, IDNR has sixty days to respond by accepting or rejecting the application. If IDNR rejects the site for enrollment a reason for rejection must be provided. A rejection may be also be appealed by the applicant.



Participation Agreement - required

After IDNR accepts the site, a participation agreement is entered into between IDNR and the participant. The participation form covers property access for IDNR, reimbursement for oversight costs, financial assurances, project scoping, and the development of a general timeline for moving the site through the program.

Site Assessment Work Plan - recommended

IDNR recommends a site assessment work plan be submitted before completing field work. This will provide IDNR an opportunity to concur that the scope of the assessment is sufficient to determine the nature and extent of contamination for affected areas.

Site Assessment - required

The site assessment is required to identify all contaminants of concern detected above statewide standards in affected areas. The site assessment will also investigate all appropriate exposure routes (soil, ground water, surface water, and/or air) and extent of contamination (horizontally and vertically).

Site Assessment Report, review by IDNR – recommended

IDNR recommends that the agency approve the completed site assessment report to ensure the full nature and extent of contamination for affected areas and exposure routes were well defined.

RE/RA Document - required

After site assessment activities have been completed, the risk evaluation (RE)/ response action (RA) plan is developed. A risk evaluation document evaluates the current and future risks at the site based on the contaminant concentrations detected during site assessment activities, and the

desired use of the property (residential or non-residential). In addition, the participant also develops a strategy for addressing any unacceptable exposure or potential exposure which has been identified by appropriate response actions such as remedial actions and/or institutional controls

The standard which is to be applied (i.e. background, statewide, or site specific) is identified, in addition to any response action as needed, and action steps needed to verify compliance.

Implementing Response Actions, approval by IDNR - recommended

IDNR recommends that before moving forward with implementing the response actions (as presented in the RE/RA document) the agency approve the response action(s). This will help ensure that any response action steps, for example, compliance sampling is completed with the concurrence of the agency.

Demonstrating Compliance – required

The participant must demonstrate compliance. This involves environmental sampling in the affected area using protocols specified in administrative rule and it may require conduct monitoring over a period a time.

Approval of Final Report by IDNR - required

IDNR must approve the final report prior to issuing the NFA. The final work product for the participant summarizes any remedial activities, compliance sampling results and establishment of any necessary institutional/technical controls that are in place. In some cases, the NFA may be provisional based upon the results of some continued monitoring and/or maintenance of necessary institutional or technological controls.

Resources and Contacts

Iowa Department of Natural Resources

Brownfield Redevelopment Program

- Phase I and Phase II ESA grants
- Clean up Cost Share grants
- Revolving Loan Fund – forgivable loans
- GIS Historic Photographs Database
- Records of Contamination

www.iowabrownfields.com

Contact: Mel Pins

515.281.8489

mel.pins@dnr.iowa.gov

Contaminated Sites Program

- Assists with sites impacted by contamination from hazardous materials or release
- Works with EPA in administration of the CERCLA program
- Oversees emergency removal and remedial components of more seriously contaminated sites

<http://www.iowadnr.gov/land/consites/index.html>

Contact: Supervisor, Cal Lundberg, 515.281.7040
cal.lundberg@dnr.iowa.gov

Land Recycling Program (LRP)

- Voluntary clean up program for sites exceeding state standards

<http://www.iowadnr.gov/land/consites/lrp/conLRP.html>

Contact: Greg Fuhrmann, 515.242.5241
greg.fuhrmann@dnr.iowa.gov

Iowa Department of Economic Development

(confidential and non-regulatory)

Brownfield Redevelopment Program

- Acquisition, remediation or redevelopment financial assistance

<http://www.iowalifechanging.gov/business/brownfields.html>

Contact: Matt Rasmussen, 515.242.4906
matt.rasmussen@iowalifechanging.com

Regulatory Assistance Program

- Compliance and permitting assistance

Contact: Sherry Timmins

515.242.4901

sherry.timmins@iowalifechanging.com

Water Quality Advocacy Program

- Water quality information, issues, resources and assistance

http://www.iowalifechanging.com/business/environmental_issues.html

Contact: Jessica Montana
515.242.4871

jessica.montana@iowalifechanging.com

Small Business Environmental Liaison Program

- Environmental assistance and advocacy for small business

http://www.iowalifechanging.com/business/environmental_assistance.html

Contact: Jan Loyson
515.242.4761

jan.loyson@iowalifechanging.com

Iowa Environmental Business Assistance web site

- Air, water, waste and land quality permitting and technical assistance

<http://enviroassist.iowa.gov/>

Iowa Environmental Guide

- Comprehensive overview of Iowa's environmental compliance programs and expert resources.

www.iowalifechanging.com/business/downloads/iaregguide.pdf

U.S. Environmental Protection Agency

Brownfield Program:

- Public Law 107-118 (H.R. 2869) -Small Business Liability Relief and Brownfields Revitalization Act
- Apply for Funding
- Final Rule on "All Appropriate Inquiries"
- Federal Program Guide

<http://www.epa.gov/brownfields/>

EPA Region 7

- Brownfield Assessment, Cleanup, and Revolving Loan Fund Pilots and Grantees

<http://www.epa.gov/brownfields/reg7.htm>

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Resource Conservation and Recovery Act (RCRA)

- Regulates facilities generating, transporting, treating, storing or disposing of hazardous waste. In Iowa, RCRA is administered by EPA Region 7.

<http://www.epa.gov/Region7/waste/index.htm>

Iowa Waste Exchange Program (confidential and non-regulatory)

- Industrial by-products waste and recycling exchange

<http://www.iowadnr.com/waste/iwe/index.html>

Pollution Prevention Service Program (confidential and non-regulatory)

- Pollution prevention and technical assistance for business and industry

<http://www.iowap2services.com/>

Iowa Waste Reduction Center (IWRC) (confidential and non-regulatory)

- Pollution prevention and technical assistance for small business

www.iwrc.org

U.S. Department of Energy (DOE) Center of Excellence for Sustainable Development

<http://www.smartcommunities.ncat.org/>

U.S. EPA Green Communities

<http://www.epa.gov/greenkit/index.htm>

Smart Growth Network

<http://www.epa.gov/greenkit/index.htm>

United States Green Building Council

<http://www.usgbc.org/>



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