

Measuring Environmental Property Value Damages: A Discussion of Damage Measurement and Brownfields

This article discusses current valuation theory as applied to the measurement of economic damages resulting from the presence of an environmental condition of concern, and how legislation such as the Illinois Brownfields might influence the market value of such property.

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Since 1980, with the advent of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, Superfund),¹ the issue of damage to the value of a property resulting from the alleged or actual presence or nearby presence of an environmental problem has been the subject of significant discussion and legal activity. During the past four to five years some of the concerns of environmental damage to property value, and the related issue of urban blight, have become focused in state actions in the form of "brownfields" legislation intended to bring environmentally troubled property back into productive use.² The recent Illinois initiative in this matter, *ILCS 5: Title XVII: Site Remediation Program* (Illinois

Brownfields) is probably one of the most far-reaching and important pieces of such legislation for the following reasons:

- Illinois Brownfields holds out the promise of placing primary control for the timing of actions and decisions in the hands of the property owner, as opposed to the bureaucrat. This is important simply because time is money to the property owner, an issue of less importance to the environmental agency.
- Illinois Brownfields holds out the promise of an absolute end to remediation activities, and their associated liability for remediation costs, something that is currently not available in other states or under the federal rules and regulations.
- Illinois Brownfields appears to put an end to "strict joint and several" liability, instead assigning liability proportionate to the phys-

ical contribution of the responsible parties with any portion for which a responsible party is financially unavailable (the "orphan" share) funded from a general public account established for this purpose.

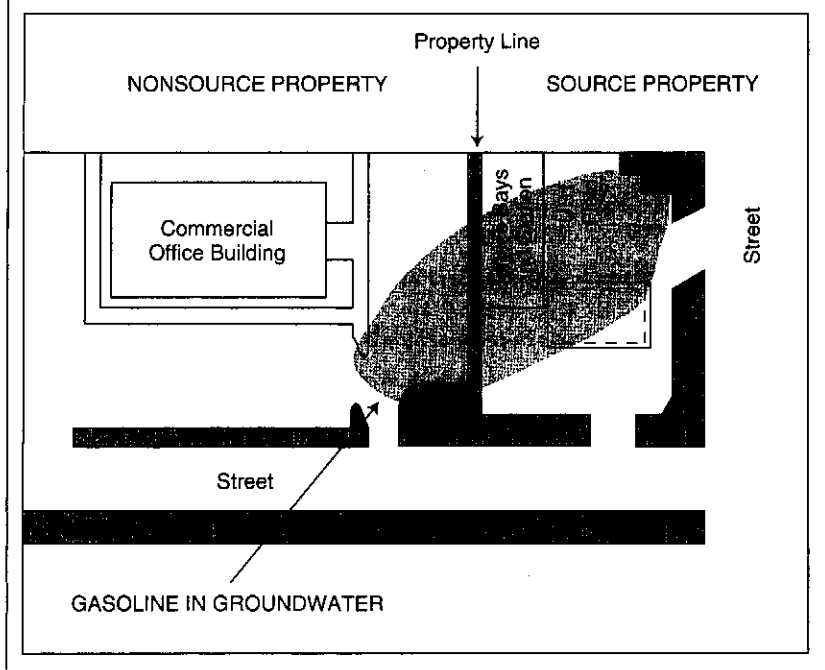
- Illinois Brownfields requires that the risk associated with a given environmental problem be the basis for the decisions to be made governing the need for and timing of remediation, as opposed to the past practice of a set of arbitrary standards set for the worst risk exposure situation, which may or may not be applicable in a specific case.

DEFINITIONS AND IMPAIRED PROPERTY VALUATION THEORY

Because the practice of the valuation of environmentally impaired property is a recent development (essentially within the last 10 of the over 200 years of modern appraisal

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EXHIBIT 1
Source and Nonsource Property Relationships



history), and one that is still undergoing change, it is necessary to carefully define a number of terms and ideas prior to a discussion of measurement techniques and consequences. These ideas have been discussed by the author elsewhere, and are only briefly reviewed here.³

Impaired Market Value

The (environmentally) impaired market value of real property is defined as the unimpaired market value less the direct costs of remediation and the impact of certain market factors related to the presence of the environmental condition. Briefly, the unimpaired market value is the value of the subject as if the environmental condition did not exist. The direct costs include the most likely cost of remediation, the most likely cost of any restrictions on use or changes in highest and best use resulting from either the condition or the remediation activities, and the most likely incremental cost of financing caused by the condition

or its remediation, net of the most likely value of any recoveries.

The market factors include the impact of such factors as the risk that the most likely costs will understate the actual costs, that the most likely recovery will overstate the actual recovery, and the impact of subjective factors that are sometimes referred to inappropriately as "stigma" and relate primarily to market attitudes and knowledge with respect to the specific environmental situation. For reasons that will be amply demonstrated later in this article, "stigma" effects would be more accurately described by the phrase "Temporary Market Adjustments" when related to most environmental conditions.

Source, Nonsource, and Adjacent Properties

The subject property may be one of three types—a source, a nonsource, or an adjacent property—with respect to the environmental condition of concern. A source

property is the property on which the release of a hazardous substance or waste occurred, or on which the condition of concern originated. Under CERCLA, the release is viewed as having created a facility.⁴ "Potentially Responsible Parties" (PRP) associated with the source property under CERCLA have strict joint and several liability for the remediation of the "facility."⁵

A nonsource property is contaminated by the release and therefore considered a part of the facility, but is not the property on which the facility originated. Under CERCLA a nonsource property does not generally have responsibility for remediation costs, a major component of any diminution to value. The example in Exhibit 1 of the source and nonsource property physical relationship is of a plume of contaminated groundwater created by a leak or spill of refined petroleum products from a gas station (the source property)⁶. The owner/operator of the gas station is responsible for remediation of the groundwater, including the groundwater underlying the nonsource property. This is emphasized by recent Environmental Protection Agency (EPA) policy statements wherein the EPA made clear that it would not pursue a nonsource property owner for contribution to remediation costs under certain circumstances and further would act to provide such protection to the nonsource property owner against third-party suits for contribution as are within its power.⁷

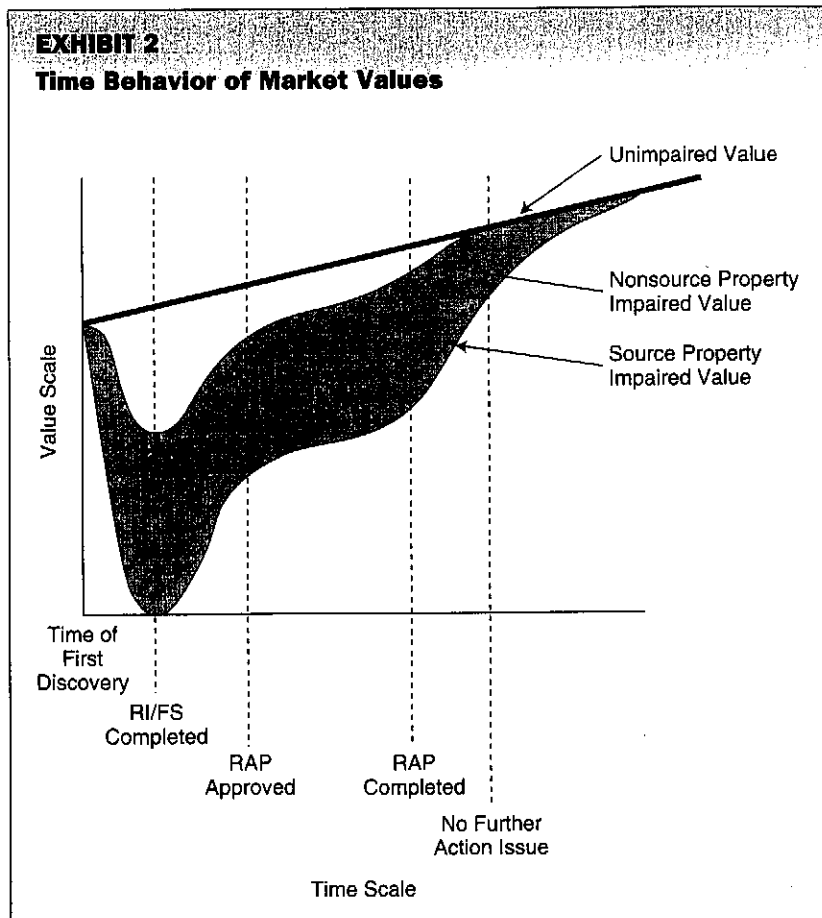
An adjacent property is not contaminated and therefore does not contain a portion of the "facility," but the allegation is frequently made that its value is influenced by the nearby presence of a source or

non-source property. The adjacent property does not have any cleanup cost responsibility.

Time and Valuation Theory

An appraiser, in establishing the market value of a property, does so at a specific point in time. This is an extremely important fact when evaluating the damage to value that may have resulted from the presence of an environmental condition, especially relative to non-source and adjacent properties. To understand this issue, it is necessary to understand the behavior of the impaired market value over time. The consensus opinion of virtually all recognized experts in the field may be represented by Exhibit 2, wherein the behavior of the unimpaired and impaired market values over time is illustrated.

Exhibit 2 depicts what may be considered to be the typical life cycles of value impairments given that the environmental condition may be successfully remediated within a reasonable period of time. The assumption is made for the purposes of illustration that both the nonsource and the source properties are identical in every respect associated with value except that the environmental condition originated on the source property. The adjacent property life cycle is not shown, nor will it be further explicitly discussed, simply because it is a relatively simple case with a very much shorter life cycle, and with less dramatic value impacts. An adjacent property does not experience remediation costs or restrictions on use or changes in highest and best use. Except for the discussion of changes in restrictions on use or changes in highest and best use which may be pertinent to the nonsource property, all comments that follow relative to the non-



source property are equally applicable to the adjacent property.

The value behavior of the properties as if there were no environmental condition is depicted by the broad unimpaired value line, increasing with time due to normal market forces. The source property impaired value indicates a steep decline immediately after the problem is first discovered, reflecting maximum uncertainty about impact on value, use, financing, cost of remediation, and development among other issues.

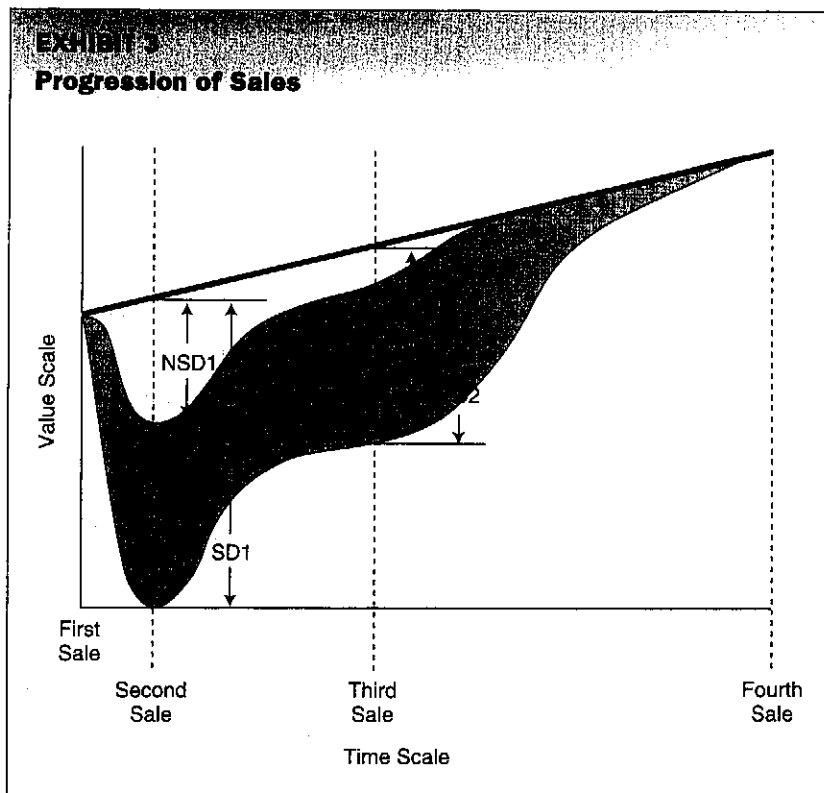
After a remedial investigation/feasibility study (RI/FS) or its equivalent has been completed, the value begins to recover because uncertainty is reduced as the condition and the approximate costs of remediation are better understood.

During the period in which the remedial action plan (RAP) is undergoing review and approval,

the value continues to increase because once again uncertainty is being dissipated as the governing environmental authority's requirements become known and finally approved.

As remediation takes place, the value again improves, essentially for the same reasons as those associated with the increase in value as construction on any property improvement progresses. When the RAP is completed, there is generally a period of time during which the environmental authority reviews the results of the work before it issues a "No Further Action" letter; and again with the passage of time, given no adverse findings, the value continues to improve.

After the No Further Action letter has been approved, the value undergoes a final improvement step until full unimpaired market value is achieved. In certain cir-



cumstances, particularly where the productive use of the property is not restricted and the contaminant is well known and remediation processes well understood, value recovery may not wait for the passage of all of the intermediate stages.

Except for the tangible changes in value associated with, for example, the progress of actual remediation activities, most of the changes in value noted previously are associated with what is frequently referred to as "stigma." The recovery in value is directly related to a decrease in uncertainty and, because of the temporary nature of the magnitude of uncertainty, exemplifies the reasons for the author's preference for the phrase "Temporary Market Adjustments" instead of "stigma" with its incorrect implication of permanency.

With respect to the nonsource property a similar behavior is noted, with one major difference. As soon as it is recognized that the

subject property is in fact a non-source property, the decline in value is generally halted and improvement in value begins. The timing of the recovery in value for a nonsource property is generally not dependent on what is happening on the source property.⁹ Depending on the circumstances the improvement in value, or the return to full unimpaired value, may be even more rapid than illustrated here, particularly if there is no restriction on use or change in highest and best use for the non-source property.

The valuation of a subject property under the circumstances noted in Exhibit 2 may be illustrated by considering a progression of sales in an efficient market. Suppose that both the source and nonsource properties are sold four times during the impaired value life cycle, on exactly the same dates. The sale dates are:

- The day before discovery of a problem. (Owner 1 sells to Owner 2.)

- At a point in time before the RI/FS data has been fully developed and assuming that, for this example, the unusual circumstance that identification of the non-source property as such does not take place until this point in time. Normally, the establishment of a property as nonsource occurs much earlier in time. (Owner 2 sells to owner 3.)
- At the midpoint of the remedial action plan. (Owner 3 sells to owner 4.)
- At the end of the impaired value life cycle. This progression of sales is illustrated in Exhibit 3. (Owner 4 sells.)

Also shown in Exhibit 3 are the differences between the unimpaired market value and the impaired market value for the source (SD_) and nonsource (NSD_) properties. There are only two each because there is no discernible difference in values on the date just prior to discovery, or after the impaired value life cycle has been completed. Note that the source property always suffers a greater diminution in value than the nonsource property.

Differences in Market Value as of a Specific Date

The differences between the unimpaired and impaired market values of the source and nonsource properties may be summarized as in Exhibit 4, assuming all the requirements of fair market value as defined in appraisal practice.

On the day before discovery no difference could have been discerned. Before the RI/FS is completed—at the time of greatest uncertainty with respect to the costs and type of remediation required—the difference would have been at its greatest in the amount SD1 for

the source property and NSD1 for the nonsource property. At a later point in time during the progress of remedial activities, the amount of difference would be less than the maximum difference and in the amounts of SD2 for the source property and NSD2 for the non-source property. After the completion of the impaired value life cycle the difference for either property would again be zero because both would have returned to full unimpaired market value (the nonsource property having completed its impaired value life cycle before the completion of the impaired value life cycle for the source property).

Because an appraisal or a sale represents the value of the property at a specific point in time, the differences between the unimpaired and impaired values described previously may not represent damages. This critical point has to do with the ownership of the property and represents a frequently misunderstood concept.

In Rem vs. In Personam

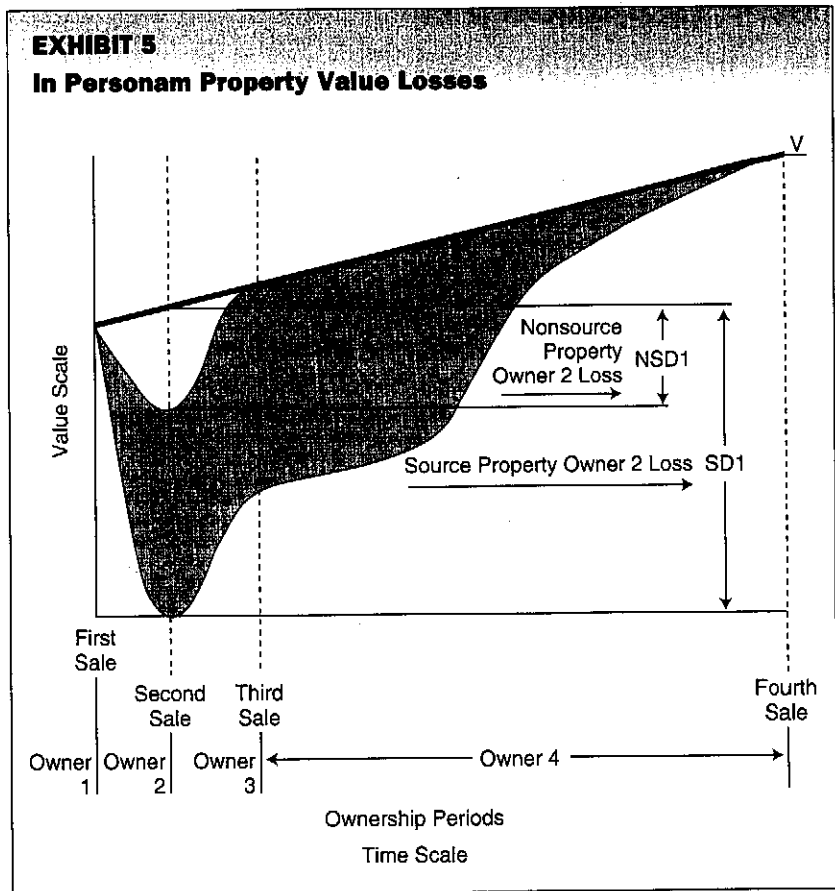
A legal and economic distinction must be pointed out, and the critical point earlier must be addressed if the objective of the analysis is to identify damage. Specifically, are damages suffered by the property (that is, in rem), or are they suffered by the owner (that is, in personam)?¹⁰ While the courts will have the final word on this subject with respect to environmental conditions, it is logical to assert that the latter is the case, i.e., the owner suffers the damage. Given this argument, note what happens with respect to the differences in value for each subsequent owner.

The party who purchased the property (whether source or non-source) on the day before the discovery of the problem and then sold the property on the day of

EXHIBIT 4
Differences in Market Value as of a Specific Date

Date	Source Property	Nonsource Property
Day Before Discovery	\$0	\$0
Before RI/FS Completed	SD1	NSD1
During Remediation	SD2	NSD2
End of Impaired Value Life Cycle	\$0	\$0

EXHIBIT 5
In Personam Property Value Losses



maximum uncertainty (Owner 2) indeed suffered damages in the amount of SD1 or NSD1. However, all subsequent owners *profited from* the environmental condition. The party who purchased the property from Owner 2 on the day of maximum uncertainty and sold during remediation (Owner 3) profited in the amount of SD2 – SD1 for the source property, and in the amount of NSD2 – NSD1 for the nonsource property. The party who purchased next and sold at

the end of the impaired value life cycle for unimpaired value V (Owner 4) profited in the amount of V – SD2 for the source property, and the amount of V – NSD2 for the nonsource property. These facts are summarized in Exhibits 5, 6, and 7.

As a general principle, it may be said that anyone purchasing a property after the time of greatest uncertainty with respect to the magnitude of the problem and its attendant potential remediation

EXHIBIT 6
In Personam Property Value Profits

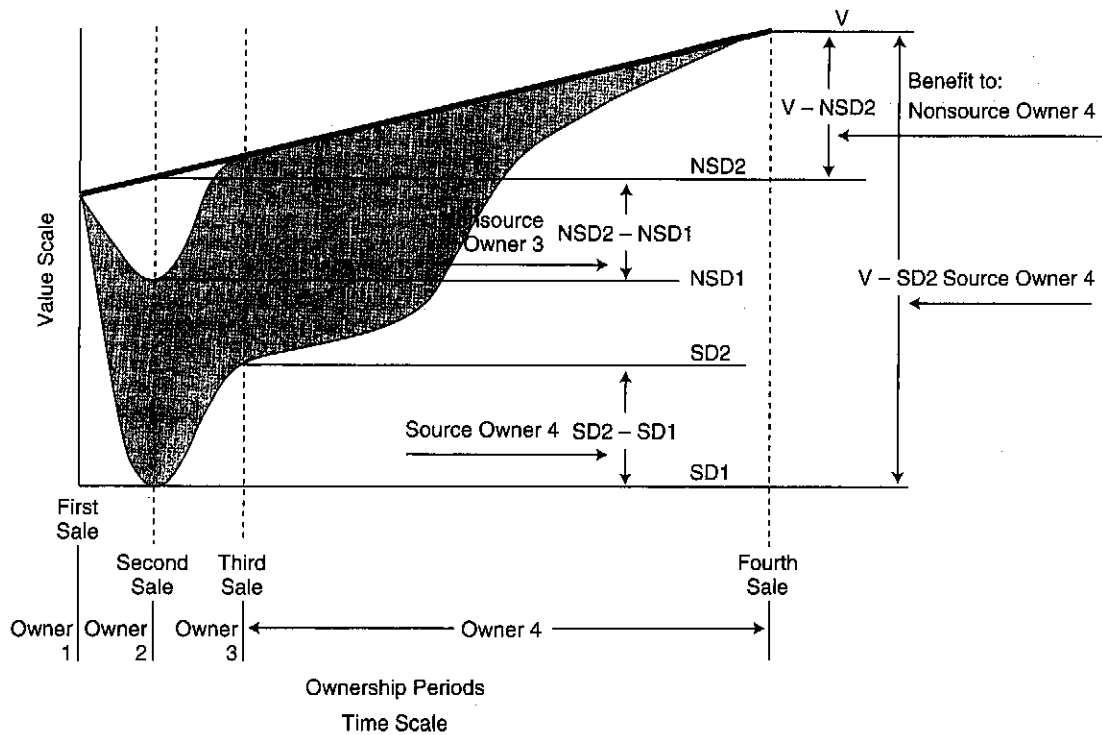


EXHIBIT 7
Seller Losses/Profits

Date	Source Property	Nonsource Property
Owner 1	\$0	\$0
Owner 2	Loss of: SD1	Loss of: NSD1
Owner 3	Profit of: SD2 - SD1	Profit of: NSD2 - NSD1
Owner 4	Profit of: V - SD2	Profit of: V - NSD2

costs and restrictions on use has passed will benefit from the situation through the action of increasing value resulting both from the normal (i.e., unimpaired) behavior of the marketplace, and from the remediation of the facility. It may further be said that anyone purchasing a property before the date of first discovery and holding it until after the end of the impaired value life cycle will not suffer damage under the conditions assumed to exist for this discussion. Only

those who buy before the identification of an environmental problem and sell during the impaired value life cycle may suffer the consequences of a diminution in value.

This logical conclusion is wholly consistent with economic theory. When a purchase is made at the peak of the market, a loss is suffered by the purchaser if a subsequent sale takes place at the bottom of the market. All purchasers who buy at or after the market low

point and sell while the market has still not passed its next peak will enjoy a profit: a source of significant satisfaction to the environmental "bottom fishers" that are emerging in the marketplace, and to the investors and lenders who have discovered a profitable niche in supporting their activities.

IMPACT OF ILLINOIS BROWNFIELDS ON IMPAIRED MARKET VALUE

The recent Illinois Brownfields law¹¹ may result in a considerable improvement in the market value of real property having an environmental condition. With respect to the foregoing discussion of the environmentally impaired market value the following points come to mind.

The intent of the Site Remediation Program was stated as "To establish a risk-based system of remediation based on protection of

human health and the environment relative to present and future uses of the site."¹² The idea behind the Brownfields movement has been to implement the scientific and engineering facts associated with relative risk, that some sites pose greater relative risks because of the use to which they are put than other sites that may have the same contamination, but a different use.

Remediation costs generally increase disproportionately as the amount of contaminants allowed at the end of the remediation process decreases. Depending on the site use, contaminants present, and other factors, Illinois Brownfields is intended to allow for a remediation goal at a level of contaminants that is greater for an industrial property than would be the case for a residential use property, resulting in a potentially significant decrease in remediation costs but without an increase in risk to human health or the environment. In addition, the remediation goal would be established in a manner that should be more objective than at present, reducing the uncertainty associated with the remediation cost component of the market factors.

One of the touchstones for determining an appropriate remediation goal for a site is the area background level.¹³ "... remediation objectives established under this Section shall not require remediation of regulated substances to levels that are less than area background levels."¹⁴ While this requirement may at first appear to be at odds with the ideal of cleaning up the environment, in scientific and engineering terms it is sound practice. It prevents the creation of a temporarily clean "hole in the donut" of otherwise surrounding volumes of soils and groundwater that have the same or

very similar conditions. If a site in such an area were rendered pristine, in almost all cases it would eventually revert to a level of contamination representing the average of the surrounding area, resulting in little having been accomplished for a potentially large expenditure of funds.

The law also contains an explicit acknowledgment that methods exist for reducing risk to acceptable levels in conjunction with or in place of traditional removal operations. That institutional controls can reduce risk to acceptable levels is a fact that has been known and well understood by the scientific and engineering communities, but one that has not been recognized in most existing rules and regulations. An institutional control might be a prohibition against using the groundwater, or the implementation of an effective Operations and Maintenance (O&M) program designed to maintain a low level of worker exposure, or a similar exposure control methodology.¹⁵

The effectiveness of institutional controls has been amply demonstrated by the asbestos-in-schools programs. The schools have demonstrated that the use of a well-designed O&M program can maintain a low level of risk to the health and safety of building occupants at a fraction of the cost of removal.

The foregoing factors in the Illinois Brownfields law indicate a potentially significant decrease in the cost of remediation activities and the uncertainties associated with those activities.

The Illinois Brownfields law also contains a very important provision that states that if a plan of action is filed with the governing environmental agency, and is

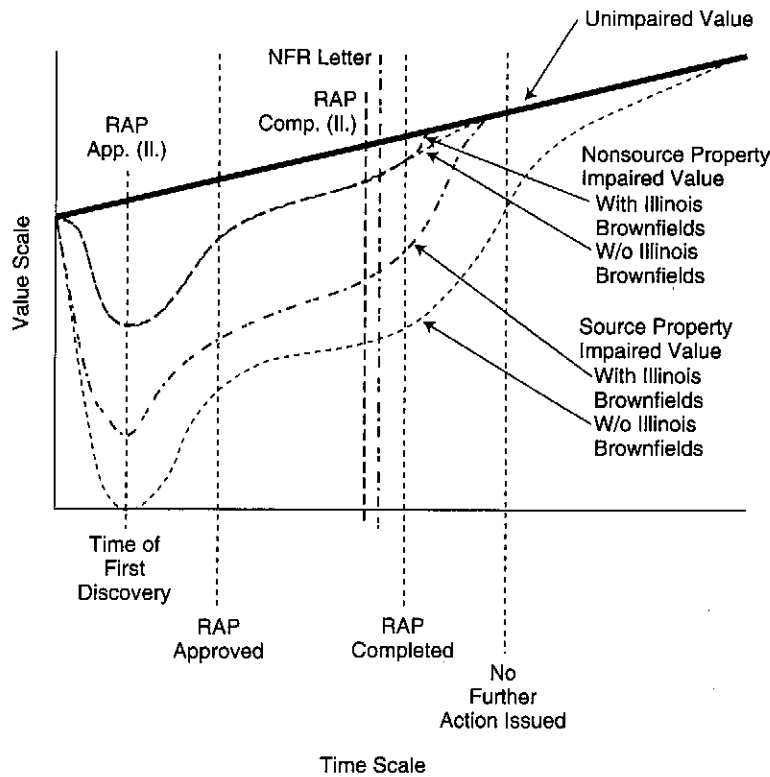
Illness, money, a home to which a bureaucratic agency is not always sensitive.

then subsequently completed by the owner, a "No Further Remediation Letter" (NFR Letter) will be issued. The NFR Letter is issued either by the governing agency or by the passage of an appropriate time interval in the event that the agency does not act. The NFR Letter is recorded as a part of the title of the property and "... shall be considered prima facie evidence that the site does not constitute a threat to human health and the environment and does not require further remediation under this Act, so long as the site is utilized in accordance with the terms of the No Further Remediation Letter."¹⁶ The NFR Letter extends to "Any successor-in-interest of the owner of the site."¹⁷ As a result, the competent remediation of a site under the Illinois Brownfields law establishes a basis on which successor owners can depend as protection from further remediation requirements and assurance that the site is safe for its intended use.

If the governing agency wishes to reopen the matter, it must prove that a provision of the Act has been violated or that the NFR Letter was obtained based on incorrect or fraudulent information. While the governing environmental agencies do not generally deserve the reputation they have for acting in an arbitrary and capricious manner, this provision of the Act insures that even in those limited cases where the agencies may have in the past behaved in such a manner, they will not be able to do so in the face of an NFR Letter.

The NFR Letter may be contrasted with the language of the No Further Action letter cited:

**EXHIBIT 8
Possible Influence of Illinois Brownfields on Impaired Value**



The Broward County Department of Natural Resource Protection (DNRP) has received and reviewed the (type of report) _____ dated _____ for the above referenced site. The (type of report) _____ is accepted. This case has been reclassified to inactive based solely on the information submitted by your consultant. . . .

Should additional information become available which indicates that the site status has changed, DNRP reserves the right to reclassify the site to active and to require further investigation and/or remediation as appropriate."¹⁸

This type of No Further Action letter leaves an owner and any successor owner in a vulnerable position; the remediation may be reopened by the governing authority for almost any reason, including a change in the remediation standards; and there is normally little available recourse other than

expensive litigation to prevent such a reopening of the issue. This is part of the uncertainty that is generally associated with the concept of stigma as applied to impaired property valuation and tends to extend and deepen the impaired value life cycle, particularly for a source property.

Lenders are offered protection that is generally equivalent to that originally attempted by the EPA in its proposed lender liability rules, although there are some differences.¹⁹ This should result in a greater availability of credit for purchase of impaired property, although the restrictions on credit for such property are not as great as commonly perceived. In three recent case-specific surveys of lenders, purchase mortgages have been available at the same terms and conditions as if the property

were unimpaired for a shopping center with gasoline contamination from off-site, for a commercial office building with the same condition (both nonsource properties), and for a small industrial building with soils contamination (a source property).²⁰ Essentially all of the lenders were prepared to provide financing at the same terms and conditions as they would have if the property had no problem.

There are several provisions in the law that, if they withstand the inevitable tests, will provide additional reasons to believe that an impaired property will not suffer as great a diminution in market value as it otherwise would. One of the major causes of a reduction in market value is the judicial interpretation of CERCLA as a "strict, joint and several" statute. Section 415 ILCS 5/58.9 appears to put an end to this notion by stating:

(a) Cost assignment. (1) . . . in no event may the Agency, the state of Illinois, or any person bring an action pursuant to this Act or the Groundwater Protection Act to require any person to conduct remedial action or to seek recovery of costs for remedial activity conducted by the state of Illinois or any person beyond the remediation of releases of regulated substances that may be attributed to being proximately caused by such person's act or omission or beyond such person's proportionate degree of responsibility for costs of the remedial action of releases of regulated substances that were proximately caused or contributed to by two or more persons.

A potentially less controversial part of the law immediately follows, starting at 415 ILCS 5/58.9 (2):

. . . in no event may the state of Illinois or any person require the performance of remedial action pursuant to this Act against any of the following:
(A) A person who neither

caused nor contributed to in any material respect a release of regulated substances on, in, or under the site that was identified and addressed by the remedial action taken pursuant to this Title.

A subtle but very important result of the Illinois Brownfields legislation is the partial removal of control over the timing of actions from the environmental agency, and the placement of more control over timing with the owner of the property. Time is money, a point to which a bureaucratic agency is not always sensitive. The Illinois Brownfields places the owner in the position to propose the remedial action plan with the agency required to respond within a specific time frame or, by default, the plan is approved. Similarly, when the owner believes the remediation has been completed, the owner may propose the form of the No Further Remediation Letter and the agency must act within a specified time frame or the proposed NFR Letter becomes effective.

On balance, the Illinois Brownfields law appears to offer significant reason to believe that the Impaired Market Value of a number of properties in Illinois will be far greater than otherwise, a fact that should be welcomed by owners, lenders, and the general public, including property taxing authorities. Exhibit 7 indicates how Illinois Brownfields might influence the values of the hypothetical properties discussed earlier in this article.

SUMMARY AND STRATEGY SUGGESTIONS FOR REDEVELOPMENT

With or without the Illinois Brownfields law the sale, purchase, financing, and redevelopment of property having a condition of environmental concern is

occurring throughout the nation, often at prices, terms, and conditions approximating those applicable to a property without such a condition. Buyers and sellers have become more sophisticated in dealing with such properties. Many lenders have also become more astute in dealing with impaired property, even in some instances recognizing significant and highly profitable lending opportunities associated with such properties.

The reality is that it is the ability of a property to generate a profit for its owner, and to provide a cash flow sufficient to service its debts, that truly governs the market value of an income producing property, as has always been the case. Given that these conditions exist, the property will have a market value and can be bought and sold.

The problems with an environmentally impaired property are primarily ones of uncertainty and the possibility of a lack of profitability or ability to provide sufficient cash flow to service its owner's and creditor's requirements. These conditions result from both the operation of the physical facts of the environmental problem, especially uncontained impairment types where the physical parameters of the problem are difficult or impossible to establish with certainty or precision, and from the operation of law and the governing agencies that frequently take the approach of requiring the property owner to sign a blank check to cover an unknown cost of remediation.

The Site Remediation Program established in Illinois appears to address these major areas of concern. The problem of the uncontained impairment is partially addressed by the concept of using the area background as a remedi-

The law puts an end to the blank check problem by clearly establishing that the issue is closed for that owner and any successors.

ation goal. This concept prevents the owner from having to meet an impossible and impractical standard of cleanliness and concentrates attention on the true issue of the risk to human health and the environment, a risk that is primarily dependent on the use to which the property will be put and the risk control programs established to address those risks.

The legal problems are also addressed by allowing the owner or responsible party to know, at least within the limits of the engineering precision available, the cost of remediation required to obtain a reasonable level of risk. Further, the law puts an end to the blank check problem by clearly establishing that—once an approved remediation program has been successfully completed—the issue is closed for that owner and any successors. Assuming that all of the scientific and engineering data associated with the implementation and successful completion of the remedial action program is available to a successor in interest to the property, the market value of the property should reflect the fact that the problem has been successfully addressed and need not be a point of further concern. It is even possible that a property having a NFR Letter will be more desirable than one that is pristine because the user of the property need only be concerned with not increasing the level of contamination on the property beyond that of the established area background level, a background level that would presumably be zero for a pristine property.

From a purely environmentalist's point of view the latter point

should be one of the strongest in favor of this legislation, and cause to consider supporting similar legislation at the state and national level. The Illinois law should, given responsible implementation, prevent the spread of contamination to areas not currently subject to such problems while simultaneously stopping an increase in the existing level of contamination at already contaminated sites.

The investment strategy that is most strongly recommended is the same one that has proven successful in other environmentally impaired situations; there is no substitute for competent and careful analysis of the likely costs of dealing with the condition. Given such an objective and realistic analysis, very profitable investment in the ownership and redevelopment of a brownfield is possible, and in Illinois it would appear to be not only more profitable, but significantly less risky to the owner and lender as a result of the Site Remediation Program.

An interesting strategic possibility emerges from the Illinois Brownfields law: An owner may wish to aggressively pursue a NFR Letter as a means of improving the value of the property on a time frame that is more appropriate to the earnings from the property than might be the case if the subject is allowed to wait until a sale is imminent. A proactive approach along these lines is likely to gain support from both environmental authorities and lenders, and may be beneficial to the owner's financial position given both the existing Internal Revenue Service position as set out in IRS Revenue Ruling 94-38,²¹ and, if the owner is publicly traded, the requirements of the Securities and

Exchange Commission's Staff Accounting Bulletin 92.²² This would, of course, be in addition to any benefits resulting from the improved market value of the property once the NFR Letter has been obtained. ❏

Notes

¹ 42 USC §§ 9601 (as amended) et seq. The Superfund law, as amended by the Superfund Amendments and Reauthorization Act of 1986 spells out the liability parameters of polluters under the "polluter pays" principle. Based on judicial interpretation, Superfund assigns "strict joint and several" liability for all remediation costs to the "owner, operator, or transporter" of a hazardous substance released into the environment, including the owner of the property on which the substance was released.

² Although there is currently no generally accepted definition of a "brownfield," the general usage implies that a brownfield is a property on which a contaminant is present, but at levels that are not sufficient to qualify that property for superfund (federal or state) status.

³ See Albert R. Wilson, "Emerging Approaches to Impaired Property Valuation," *Appraisal J.* 155 (Apr. 1996) and "Defining the 'Environmentally Impaired Market Value' of Real Property," *3 J. Envtl. L. & Prac.*, 10 (May/June, 1996).

⁴ A "facility" may be defined for practical valuation purposes as that volume of soils or groundwater contaminated by the release of a risk source. More formal legal definitions are available and should be consulted in specific circumstances.

A facility as defined by section 101[9] of CERCLA means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or any site or area, where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel.

55 Fed. Reg. 8815 (Thursday, March 8, 1990) Rules and Regulations.

⁶ The author recognizes that USTs are governed by the Resource Conservation and Recovery Act (RCRA) rather than CERCLA, but for purposes of discussion and

generally for the purposes of valuation, the distinction is not critical.

⁷ See Final Policy Toward Owners of Property Containing Contaminated Aquifers, *BNA's Environmental Due Diligence Guide*, EDDG App. 501:1401 (June 1995). Once again, this policy is based on CERCLA, not RCRA, but again the distinction may not have a major impact on valuation.

⁸ Remediation need not include the removal of a substance. Under such laws as Illinois Brownfields for example, remediation may include institutional controls that prevent exposure while leaving the substance in place.

⁹ Effects on the value recovery of the adjacent property may occur even more quickly than for a nonsource property, possibly even simultaneously with the publication by a reputable authority of the fact that a property is, in fact, uncontaminated (that is, does not contain a part of the "facility").

¹⁰ The author has been bothered for years by an inability to express this difference. Full credit for pointing out this distinction and providing the legal language for elucidation of it is due to Jon Furlow, Esq. of the firm of Michael, Best and Friedrich, Madison, Wisconsin.

¹¹ 415 ILCS 5/Title XVII, Section 58 et seq.

¹² *Id.*, Intent.

¹³ "Area Background" means concentrations of regulated substances that are consistently present in the environment in the vicinity of a site that are the result of natural conditions or human activities, and not the result solely of releases at the site.

¹⁴ 415 ILCS 5/58.5(b)(1).

¹⁵ "... In determining Tier III remediation objectives . . . all of the following factors shall be considered: . . . (B) The use of appropriate exposure factors for the current and currently planned future land use of the site and adjacent property and the effectiveness of engineering, institutional, or legal controls placed on the current or future use of the site." 415 ILCS 58.5(d)(3)(B).

¹⁶ 415 ILCS 5/58.10 (a).

¹⁷ 415 ILCS 5/58.10 (d)(7).

¹⁸ Broward County (FL) DNRP reclassification form letter as of July 1, 1995.

¹⁹ 415 ILCS 5/58.9(a)(2)(E).

²⁰ Albert R. Wilson and Arthur A. Alarcon, *Lender Attitudes with Respect to Source and Nonsource Impaired Property Mortgages*, draft paper.

²¹ IRS Rev. Rul. 94-38, Relating to Tax Treatment of Certain Hazardous Waste Cleanup Costs, IRB 1994-25 (June 24, 1994).

²² Staff Accounting Bulletin 92, 17 CFR pt. 211, [Release No. SAB 92], 58 FR 32843 (June 14, 1993).