The Cleanup Conundrum

by Daniel Johnson

Examine the pros and cons of remediating environmentally contaminated properties before selling.

As infill developers move back into urban cores and others seek land for large-scale suburban projects, they come up against a looming redevelopment obstacle: environmentally tainted properties.

Given land shortages and other factors, environmental cleanup challenges may be well worth the effort. Fair-market-value estimates of the more than 500,000 contaminated sites nationwide that sit abandoned are extraordinary, perhaps as much as $100 billion or more.

Furthermore, a new breed of investor with highly specialized skills, capital, and resources has emerged. These investors often specifically target contaminated properties for acquisition.

Buyers, sellers, and lenders are looking more closely at properties with environmental issues for several reasons. Regulatory reforms, such as clearer due diligence guidelines, are reducing property owners' liability and increasing protection for them. Improved remediation technologies and risk assessments make it easier, or at least more routine, to alleviate certain contaminants' effects.

These recent changes make the risks associated with environmentally impaired sites more manageable than ever, encouraging more buyers. While this does not necessarily mean higher purchase prices for sellers, it gives them more options concerning remediation decisions.

To Remediate or Not?

Contaminated properties often have lives of their own, bringing about complex legal and technical issues. How well a remediation system will work and how regulatory agencies will respond are two concerns that frequently top sellers' lists.

Without knowing how remediation may affect value, some owners choose to sell contaminated properties prior to cleanup, which can be beneficial for several reasons. Owners may be able to transfer risk to prospective purchasers in exchange for cash outs, without incurring additional hold time or hard costs associated with remediation. For public companies, removing a contingent liability from the balance sheet and the stigma associated with it can enhance their financials and improve their public images.

On the other hand, there are several drawbacks to selling properties without prior remediation. First, the marketplace translates uncertainty into price discounts, which could be great, since remediation risks include associated hard costs and prolonged hold time, as well as possible remediation failure or negative regulatory response. In addition, the buyer may ask for unusual indemnification or risk-transfer provisions in the purchase and sale documents, and seller carry-back requirements may emerge due to lack of conventional financing. Finally, companies could garner negative publicity if deals to sell unremediated properties fall through because of shifting liabilities or regulatory agency orders that are contrary to contractual agreements.

It is difficult to compare the benefits of selling properties prior to remediation versus sale profits after remediation. Yet, all other factors being equal, it may be beneficial to hold, remediate, and then sell contaminated property, since the risk discount may exceed the future return on investment to remediate the property. However, in hot commercial real estate markets with excessive amounts of equity chasing too few deals or with purchase time constraints such as 1031 exchanges, this premise may not hold.

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For example, an owner postponed the decision to remediate solvent contamination at a 60,000-square-foot industrial park and marketed the property knowing that remediation was necessary. The market translated the uncertainty into a large discount due to the seller's desire for a walk-away position on the transaction and lack of an approved remediation plan. While the purchaser initially thought the risk discount was sufficient, the remediation took longer than assumed, and currently the buyer is stuck in a protracted stalemate with a regulatory agency. Even though much progress has been made, including some cleanup, the buyer is considering selling the site at a sizable discount just to get it off his company's books.

Photos: Environmental Business Solutions

San Diego's Petco Park site was remediated prior to construction in early 2002. The San Diego Padres Major League Baseball team begins its 2004 season in the park in late April.

In contrast, consider another commercial real estate transaction involving a large industrial park contaminated with biomedical manufacturing solvents. The property owner attempted to market the site with the known issues but was unable to achieve the return rate he wanted. After thorough investigation, a complete health-risk assessment, source removal, and the application of molasses to enhance the solvents' degradation, the owner eventually sold the site with minor institutional controls, including land-use changes and limits on areas where excavation could take place. The marketplace responded with a fair market value without a risk discount applied. The process took 18 months, and the owner invested approximately $200,000 — a significant rate of return on the investment.

Regulatory Reforms and Due Diligence

State and federal regulatory agencies have tailored due diligence reforms to help developers understand and minimize contaminated property remediation liabilities, while providing for productive use quickly and inexpensively.

The Comprehensive Environmental *Response, Compensation, and Liability* Act and Superfund Amendments and Reauthorization Act are driving forces in due diligence. In general, Superfund always has had an out by allowing the innocent landowner defense assertion to liability, requiring that "all appropriate inquiry into the previous ownership and uses of the property be consistent with good commercial or customary practice."

Yet until recently, the innocent landowner qualification criteria were uncertain at best. Fortunately, the 2002 Small Business Liability Relief and Brownfields Revitalization Act clarifies what constitutes "all appropriate inquiry." The act initially embraces E1527-00, the American Society for Testing and Materials Standard Practice for Environmental Site Assessments. The U.S. Environmental Protection Agency is considering new guidelines establishing all appropriate inquiry standards; final rulemaking is set for early this year.

Buyers acquiring contaminated properties must perform Phase 1 site assessments that meet or exceed EPA guidelines. Conducted by qualified environmental consultants, typical Phase 1 assessments include site reconnaissance, interviews with on-site and off-site sources, regulatory reviews, and thorough analyses of the site and its vicinity's history.

For contaminated properties, a Phase 1 assessment is just the starting point. After reviewing existing data, the consultant can develop a plan of attack to address the data gaps and unknowns. A typical next step is a Phase 2 investigation, which might include the drilling and sampling of various media, including soil, soil vapor, and groundwater. The investigation's objectives may include identifying or quantifying the contamination level

and comparing the concentrations of constituents of concern, or CoCs, to cleanup or risk standards.

Depending on the proposed use and construction plans and what CoCs were detected at what concentrations, remediation may be necessary. If CoCs exceed cleanup levels, the consultant may conduct a feasibility study to determine appropriate remediation technologies. For example, in the case of solvent or gasoline-impacted soils that exceed cleanup levels, the study would assess the feasibility of conducting soil vapor extraction (in which the vapors are removed under vacuum from extraction wells). The study would assess whether the soils are appropriate for this remediation technique and provide critical design information, such as the size of the blower needed to achieve the critical radius of influence around the extraction wells.

Promising Remediation Technologies

Improved remediation technologies result in more cost-effective cleanups, and, equally important, agencies responsible for the cleanup oversight now more efficiently respond due to improved regulatory procedures. At the same time, risk assessment — the process of evaluating the possible human and ecological risks associated with contamination — also has improved dramatically.

In fact, risk-based corrective action is an increasingly important risk assessment methodology that underpins remediation projects. The coupling of thorough site investigations and sound risk assessment practices clears the way for many properties that previously were subject to "knee-jerk" regulatory requirements. Instead, many are found not to pose risks and require no remediation.

Promising and proven approaches to remediation include the following.

Risk Assessment Combined With Thorough Site Investigations. This process may obviate the need to conduct remediation and result in a closure or no-further-action letter. With regulatory approval, this approach leaves residual contaminants that pose no risk in place. However, this ruling is based on existing land use and may include a re-opener clause should the land use change.

In addition, the closure may be predicated on institutional controls — land-use restrictions or agreements to properly manage or leave residual contamination undisturbed. While this sounds prohibitive, even fully remediated sites often have residual contaminants and are subject to the same requirements.

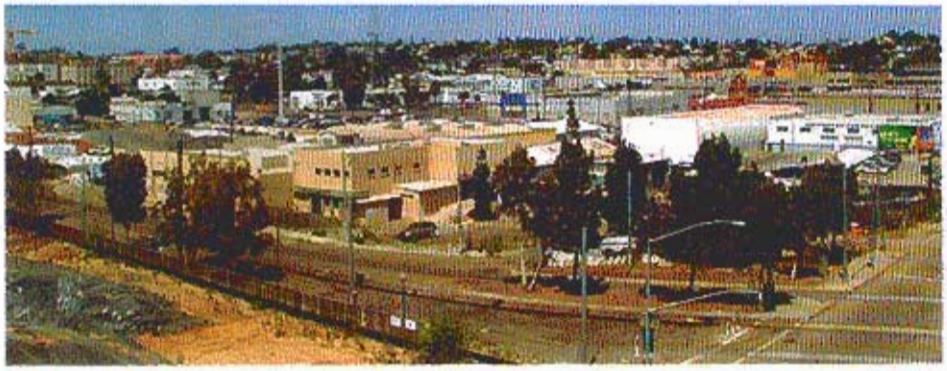
A variation on this approach is source removal — excavation of the most contaminated materials — in combination with engineered controls such as a cap or barrier to prevent contaminant exposure. This cap may be as simple as a layer of soil with specific physical properties between end users and contaminants or an engineered membrane beneath a building footprint to keep volatile contaminants out of occupied properties.

Natural Attenuation Remediation. Many contaminants degrade successfully in the environment by themselves. This approach documents natural attenuation to ensure that contaminants are degrading and ultimately achieve cleanup goals.

Bioremediation. With this variation on natural attenuation, naturally occurring microorganisms break down contaminants by creating environmental conditions that enhance and stimulate the contaminants' natural metabolic breakdown. At its simplest, the process involves introducing oxygen and nutrients to a groundwater system using proprietary slow-release compounds to accelerate chemical degradation. An interesting variation is the addition of molasses to a groundwater system to encourage the chlorinated solvent breakdown.

Soil Vapor Extraction, Air Sparing, and Groundwater Extraction and Treatment. These proven techniques remove and control contaminant migration. For example, soil vapor extraction is used for contaminated soil remediation at gas stations or dry cleaners that have volatile contaminants. This process involves applying vacuum to extraction wells in the soil with appropriate treatment of the extracted contaminants.

Air sparing injects air into a groundwater system to enhance volatilization and degradation or extraction with soil vapor extraction. Groundwater extrac-



A Phase 1 environmental site assessment revealed more than 100 underground storage tanks in downtown San Diego's Ballpark District, which is receiving a $1 billion redevelopment, the largest project of its kind ever conducted in San Diego County.

Sell or Hold?

The following checklist can help owners decide whether to sell or hold contaminated real estate.

- ✓ Consult with debt financing sources to determine if a deal can be financed.
- ✓ Conduct a trade-off analysis to evaluate the rate of return on investment in remediation versus discount for uncertainty in the marketplace.
- ✓ Consider environmental insurance to package risk.
- ✓ Obtain and package disclosures and collect all available information.
- ✓ For development projects, incorporate risks and known contamination areas into a project's design to help minimize remediation costs.
- ✓ Evaluate legal protections and include all available possibilities.
- ✓ Determine the level of regulatory agency participation and whether such oversight encumbers the transaction.
- ✓ If deciding to remediate, select a remediation program and clearly define the objectives and work scope.
- ✓ Allocate cleanup costs and establish a workable cleanup standard.
- ✓ Evaluate disclosure obligations to determine what to say to prospective tenants or buyers once the property is acquired or redeveloped.

tion and treatment involves groundwater pumping to control or influence contaminant migration.

Phytoremediation. This promising new technology uses green plants to remove, contain, or render harmless environmental contaminants such as solvents, PCBs, heavy metals, or explosives. An example of this technology is the use of poplar trees to remove and detoxify the toxic solvent trichloroethylene, or TCE, from groundwater. This process currently is being studied at contaminated sites in Tacoma, Wash.

Getting the Deal Done

Once property buyers examine due diligence efforts and possible insurance coverage, they still must determine how to incorporate these processes and expenses into the overall acquisition. (Learn about environmental insurance developments at www.ciremagazine.com.)

Access to specialized assistance and counsel is critical. Interview companies experienced in executing these projects, not just in conducting due diligence. Serious investors also should hire independent consultants to review or manage the due diligence or remediation process. Doing so can be helpful because the intellectual capital required for more-complex projects is substantial, and most small and medium-size developers do not have these internal resources.

Needless to say, real estate investments always carry their share of risks. For developers considering contaminated property acquisitions, the desired return rate must be balanced against such factors as time constraints, land-use limitations, scope of necessary due diligence, liability risks, and insurance costs. Keep in mind that the fundamentals of any real estate transaction still apply. Some properties truly are "upside down" and, even if available at zero cost, are not worth it. However, in a case where the pros outweigh the cons, investing in a contaminated site can be rewarding. ■