

VALUATION OF CONTAMINATED PROPERTY TAKEN THROUGH EMINENT DOMAIN

by Daniel Sorrells

Under the best of circumstances, the valuation of environmentally contaminated property is a difficult assignment for the appraiser. The changes created by contamination may affect a subject property's highest and best use, which obviously has a direct impact on its market value. And in determining a revised highest and best use, the appraiser must take into account the type of contamination, the extent of the contamination, the various remediation strategies, the time that will be required pursuing those strategies, and the regulatory environment that may have defined a certain standard of remediation.

By comparison, eminent domain appraisals consider the value of the subject property assuming no influence from the project (the "Before" value), and then re-appraise the remainder (if any) accounting for the influence of the project (the "After" value). Generally, the property owner is, at a minimum, compensated for the property taken, and will also receive reimbursement for any net damage to the remainder's property value that occurs due to the influence of the project. This total amount is referred to as "just compensation."

However, combining these multiple factors in the single assignment of determining just compensation for contaminated property taken through eminent domain adds a host of unique issues. For instance, the remediation program required by the condemnor may cost drastically more than the property owner's remediation program, due to the immediacy of the project. Should those increased costs be reflected in the Before value, the After value, or not considered at all?

Ultimately, because it is case specific, the valuation of contaminated property taken through eminent domain is similar to the valuation of contaminated property in general. But special care needs to be taken to preserve the constitutional requirement for just compensation. This article provides a brief overview of some relatively common general approaches to the valuation of contaminated property and dis-



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For an appraiser, environmental contamination is virtually uncharted territory. Consultant Daniel Sorrells provides some lucid guidelines.

cusses the strengths and weaknesses of each approach.¹

Following this exposition is a series of case studies that involve a right-of-way acquisition and highlight issues that are likely to have an impact on determining just compensation. And finally, the author suggests some guidelines that may assist both the appraiser and agency in approaching the valuation of contaminated property taken through eminent domain.

ONE SIZE DOES NOT FIT ALL

There has been much disagreement about what should be regarded as the market value of contaminated property, especially within public agencies and other entities with the power of eminent domain. Many believe that a proper formula is the market value of the property as though uncontaminated less the direct costs of remediation. And if the costs of remediation exceed the uncontaminated value of the property, then the market value is \$0, or possibly even a negative value. However, this approach may be oversimplified and ultimately insupportable in the courts.²

Guidelines from the appraisal industry have been limited. Other than Advisory G-9, issued by the Appraisal Foundation in 1993, none of the major appraisal organizations have comprehensive guidelines that would assist the appraiser who has been assigned to value a contaminated property. Very few states have implemented a formal policy for the valuation of contaminated property, especially for those taken through condemnation. Because the issue of contaminated property value is relatively recent, there has been little guidance from the courts. And to compound the confusion, what little direction there has been can be contradictory.

On the other hand, an increasing number of articles have been published over the last few years in the appraisal and real estate literature. Most of these have focused on how contamination may affect the income stream of the property, or how property value may be affected by the concept of stigma. A significant number of articles also deal with various hazards (EMF from transmis-

sion lines, proximity to landfills, etc.).

Much of the literature has developed from tort litigation and has focused on how to modify and apply the income approach for commercial properties. The reasons for this focus are based on the unique circumstances (differing types of environmental contamination, uses specific to a given location) and the typical lack of comparable sales. However, not all properties are income producing.

Further, certain property types, such as residential, may be more affected by hazards that are either real or perceived (transmission lines, noise, etc.). The effects of such hazards are typically not going to be measured through an income approach and may require other methods, ranging from a straight application of the sales comparison approach (the use of comparable sales), paired sales analysis, or other, more sophisticated statistical analyses, i.e., multiple regression analysis.

THREE TRADITIONAL APPROACHES

In any appraisal assignment, the three basic approaches—sales comparison, cost, and income—should be considered. For eminent domain appraisals, the requirements are the same, though typically, the greatest weight is put on either the sales comparison or income approaches, depending on the type of real property that is being appraised. In some instances, a church for example, the greatest weight may be put on the cost approach, since the church is not considered an income producing property, and the motivation for buying a church is likely to be different than for other properties.

Though much of the literature focuses on how contamination and its subsequent remediation affects an income stream, there is no reason why each of the three traditional approaches could not be used in the appraisal of a contaminated property. But because of the nature of the property, the nature of the contamination, and the way the market perceives these factors, more care must be taken by the appraiser to determine which approach best reflects the market.

If comparable sales exist, obviously, they should be used. In some cases,

there may be markets that are not as greatly affected by the presence of contamination. For instance, there may be active markets for gas stations affected by soil contamination. On the other hand, if groundwater contamination is present, or if little is known about the effects of a certain type of contamination, the market may be much more reluctant to buy. This points to what is often the biggest practical limitation to using the sales comparison approach—lack of sales.

Even when there are available sales, what makes the sales comparison approach problematic is the difficulty of determining comparability between one contaminated property and another. For instance, if the subject property is affected by groundwater contamination, the sale of another property with groundwater contamination may not be comparable due to a different remediation strategy, different level of contamination, or a variety of other factors.

If a defensible method of adjustment can be devised by the appraiser, he or she may be able to adjust the sale for the contamination. Otherwise, the appraiser is taking a considerable risk by simply discounting the comparable sale to the market and applying that percentage to the subject property.

In order to appraise either undeveloped contaminated properties or properties with a changing highest and best use, the cost approach may be useful. The reason is that in order to develop raw land, it is likely that the contamination will need to be remediated first. In other words, remediation is another cost of development, along with other hard costs (site work, vertical construction, etc.).

However, remediation costs estimates are frequently expressed in ranges, and the range of costs estimates may vary greatly. Further, there may be the temptation on the appraiser's part to simply net remediation costs against the raw land value. The problem with this is that a remediation strategy may be a multi-year effort. Without discounting those costs for time and risk, the appraiser is likely to greatly overstate the remediation costs. Further, any interim value (value-in-use) for improvements on the property must also be considered to avoid overestimating

the discount due to contamination in applying the cost approach.

More significant, however, is the problem within the cost approach of accounting for a residual discount in property value subsequent to the remediation, frequently referred to as stigma. Stigma can be defined as a diminution in value to the property in addition to the costs to remediate.³ Because a previously contaminated property can never be guaranteed as "clean," stigma refers to the ongoing uncertainty that may be present in the market subsequent to a property's remediation.⁴

One line of thought has been to interpret stigma as the equivalent of external obsolescence, the effects of which should be capitalized, discounted to present value, and subtracted from the value assuming no external obsolescence. External obsolescence is defined as a discount caused by conditions outside the property, and it is considered incurable.

The effect of stigma may resemble external obsolescence in that it could be considered incurable. While this may shoehorn the concept of stigma into a recognizable box of the cost approach, it

may be more appropriate to measure the effects of stigma for income producing properties by using the income approach.

For income-producing properties, the income approach is typically used in straightforward appraisals. The idea is that buyers of such properties are acquiring the rights to a future stream of income. The price they are willing to pay for that future income stream is influenced by the likelihood that they will actually receive those future benefits (risk), and how that compares to other income streams with a similar level of risk.

Because the presence of contamina-

tion affects the risks associated with a property, it is also likely to affect the price a knowledgeable buyer would be willing to pay. By understanding the changes in how the market perceives those risks, as well as understanding how the knowledge of contamination may increase the regulatory risk, i.e., changes in the rules and definitions of "how clean is clean," and the risk that the estimated remediation timing and costs may also change, the appraiser may be able to estimate a value of the income stream associated with the use of the property. The



Photo by: Earl Denney

additional discount for stigma is also based on a perception of increased risk, possibly due to uncertainty with respect to the long-term effectiveness of the remediation, or even irrational fear.

There are extra considerations to this approach that the appraiser should be aware of, however. For instance, the use of the property may be affected by the remediation process, which would affect the income stream. Or, in a worst case scenario, the improvements may have to be completely removed in order to remediate the property. And, as with the sales comparison approach, obtaining market data (cap rates, dis-

count rates, etc.) may be difficult, due to a lack of sales.

Clearly, whatever combination of approaches is used, the appraiser will need to have a thorough understanding of the remediation process, the regulatory environment, and how these factors are perceived within the market.

JUST COMPENSATION

Whatever the approach, the goal in eminent domain is just compensation. Separate from the question of whether

or not a property is contaminated, when it comes to a taking, the condemnor's constitutional obligation to the property owner is to fully compensate the property owner for the property required, as well as to reimburse the owner for damages that occur due to the public use—an amount referred to as "just compensation." Just compensation is generally regarded by the courts as market value, or fair market value.⁵ Within this simple guideline, it should follow that the calculation of just compensation will reflect how the market treats contaminated property.

However, no two cases of contamination

are alike. Add to this mix the possibility that a property owner may not be the polluter, or that the landowner and condemnor may disagree about the remediation costs, or even that remediation may not be necessary, and the appraiser's task becomes more complex.

To illustrate how these specific issues can affect the approaches the appraiser takes, I have outlined the following five simple valuation problems, with varying levels of complexity. Note that none of these examples take into account the time required to complete a remediation program. And for the sake of simplicity, there is no lost

income unless specifically stated in the assumptions.

Example 1: Determining just compensation if the subject property to be taken is known to be contaminated, and there is no argument over the necessity to remediate or over the costs of the remediation.

Assumptions

1. Taking agency and the property owner agree that the market value of a gas station (assuming no contamination) is \$1 million.
2. The property owner (a major oil company) acknowledges that it is the polluter.
3. Remediation is necessary, and both sides agree that costs should be approximately \$100,000.
4. Complete take.

Given these assumptions, no one is likely to disagree that just compensation is \$900,000. And although one would not expect a property owner to acknowledge being the polluter, it is not unheard of and is becoming more common. But it is less likely that there will be agreement between taking agency and property owner with respect to either the method or costs of remediation.

A variation of this example could include the previous sale of a gas station from one major oil company to another. Generally speaking, a gas station site is a solid candidate for potential contamination. However, the sale of this station may not reflect any discount, even if contamination was discovered prior to the act of sale. While this may not be typical if groundwater is contaminated, there have been examples of no discount where the soil is contaminated.

It may be that the market for gas stations understands the risks involved with underground storage tanks, further understands the costs of remediation, and considers those costs as a necessity of being in the gas station business. In such a case, it seems unlikely that the appraiser would find a discount. Regardless, it's a question that is specific to the market.

Example 2: Determining just compensation if the property owner's remediation program (timing, method, costs,

etc.) differs from the taking agency's remediation program.

Assumptions:

1. A taking requires the demolition of an office building containing asbestos.
2. Prior to the take, the building owner had a plan approved by the appropriate regulatory agencies to manage the asbestos in place, at a cost of \$25,000 per year.
3. Also, prior to the take, the building owner was able to rent the office space at market rents—no discount.
4. Under the manage-in-place strategy, the discounted cash flow of the building (at market discount rates) would be \$5 million. (This amount includes the costs of demolition at the end of the building's economic life and the disposal of the building materials in an approved land fill.)
5. Analysis of comparable buildings with no asbestos suggests a value of \$5.5 million.
6. Total take.
7. Due to the take, demolition of the building is immediate, and the cost of removal and disposal of the asbestos is \$1 million.

Using these assumptions, is just compensation \$5 million (based on the manage-in-place strategy), \$4 million ("as is" market value less the remediation costs of \$1 million), or \$4.5 million (the uncontaminated value of \$5.5 million, less the remediation costs of \$1 million)?

In this case, it appears likely that the market has already taken into account the fact that there is asbestos in the building, that it can be managed in place at a reasonably certain cost, that the asbestos is not causing any decrease in market rents, and that the asbestos will not become an issue until the end of the building's economic life, at some time in the future. More importantly, the market has come to a conclusion as to the value of the building based on these facts, and that conclusion results in a \$5 million market value.

By contrast, the \$1 million remediation cost is unique to the taking agency. Assuming the current use is the property's highest and best use, there would be no reason for the current property owner to demolish now, incur the \$1 million in remediation costs, and re-

build another office building. However, if the current use is not the highest and best use, the \$1 million in remediation costs is going to affect the market value more directly. (Presumably, the property owner fits the definition of a knowledgeable seller and would have already developed the subject property to its highest and best use.) Further, care would need to be taken to assure that the applied discount rate reflects the market's perception of the risks involved.

In the first two examples, the property owner knew it owned a contaminated property and acknowledged its responsibility, if not outright guilt. However, there are often cases where a property owner is innocent of contaminating the property and may not know of its existence. The next two examples focus on this dilemma.

Example 3: Determining just compensation for an innocent property owner when the contamination would not have been discovered with normal due diligence.

Assumptions:

1. The property is a shopping center that has significant (and previously unknown) groundwater contamination in a deep aquifer, which apparently migrated from off-site.
2. A DOT freeway project requires a total take of the shopping center and will also entail significant excavation near the shopping center for a major interchange.
3. The existence and level of contamination underneath the shopping center was unknown until excavation was well under way.
4. Because construction is at a critical stage, immediate remediation is necessary and will cost \$750,000.
5. The uncontaminated value had already been determined to be \$1 million.

This example highlights two important details in the final determination of just compensation. First is the assumption that the property owner is innocent of contaminating the property. Second is determining the appropriate standard of due diligence.

An important concept in valuing contaminated property taken through eminent domain is understanding what

constitutes adequate environmental due diligence within the marketplace. The correct standard of due diligence may change based on the property's highest and best use. For instance, the typical standard in the marketplace for industrial properties may not be as stringent as for single family residential properties. On the other hand, regulatory agencies have been known to be inflexible in enforcing a highly rigid standard.

The assumptions in this example suggest that the contamination would not have been discovered but for the construction of the project. Unless there is some reason to believe that a typical buyer for this property would have needed to excavate (perhaps for underground parking), it is probably unreasonable to believe that on-site environmental testing would have revealed the presence of the contamination. However, such a fact would have to be confirmed in the market.

If the marketplace would have had a different (and lower) standard of due diligence, it is difficult to believe that just compensation for this property

would be less than the full \$1 million, especially because the property owner is innocent of the contamination.

Of course, Example 3 assumes that normal due diligence would not have discovered any contamination. How would the appraiser estimate market value if normal due diligence would have discovered contamination?

Example 4: Determining just compensation for an innocent property owner when the contamination would have been discovered with normal due diligence.

Assumptions

1. Strip shopping center property is located across from a large dry cleaning plant.
2. Significant groundwater contamination has been discovered, which migrated from adjacent to the facility.
3. The current property owner owned the property prior to the construction of the dry cleaning plant and, therefore, prior to the contamination of the subject property.
4. The plant is the known source of the contamination.

5. The fact that the property is contaminated is well known in the marketplace.
6. Not considering the threat of condemnation, the remediation costs are expected to be \$750,000, compared to an uncontaminated market value of \$1 million.
7. Total take.

While this problem is similar to Example 3 in that the property owner is not the polluter, the crucial difference is how this property would be perceived in the market. Specifically stated, the contamination is widely known, and it is reasonable to expect that this fact would be reflected in the market value. The exact discount that the market would assess to the subject property would have to be researched by the appraiser through one or more of the methods detailed above.

This example also points out that the appraiser's role is to estimate value. As a matter of policy, the condemnor may be willing to buy this property at an uncontaminated value and then pursue a cost recovery against the dry cleaning plant.

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Of course, the easiest method of estimating the value in the above example would be a sale of the above property:

Example 5: Determining just compensation for an innocent property owner who knew about the contamination and bought at a contaminated value.

Assumptions

1. Strip shopping center property is located across from a large dry cleaning plant.
2. Property was acquired by a buyer fully aware of the contamination and associated remediation costs.
3. The buyer paid a price (\$250,000) that reflected the contaminated value.
4. Total take.

It would seem plain from the assumptions that market value is \$250,000, and therefore, just compensation would also be \$250,000.

CONCLUSION

From an appraisal standpoint, even though the valuation of contaminated property isn't for the novice, the assignment can be completed with a thorough analysis of how the market perceives the problem.

However, for the acquiring agency, the presence of contamination can create unique problems.

While some agencies may have some policy for the acquisition of contaminated property, most do not have a formal policy for its valuation. Further, the acquisition policy may be nothing more than avoidance of contaminated sites. And in many cases, particularly with a construction date bearing down or an inflexible route, avoidance is impossible.

Because it is the appraiser's role to value the property, it is up to the acquiring agency to set both appraisal and acquisition guidelines that are fair and equitable. In addition to considering the issues discussed in the examples above, other issues that the agency must address include the following:

- Should the property owner be forced to clean the site prior to the condemnor taking possession, and if so, will that requirement unduly delay construction of the project?
- On the other hand, should the agency take possession, remediate, and pursue a cost recovery if costs exceed the original estimate?

- What happens if the remediation costs exceed the "as is" property value? Should the agency try to pursue an offer of \$0 (or negative value) for just compensation?
- If remediation costs can only be estimated within a wide range, say between \$200,000 and \$500,000, how will that be reflected in the appraisal?
- Will the agency treat innocent property owners differently from polluters?

There may be other issues specific to a local jurisdiction that will also need to be considered in the formulation of a policy. But regardless, the emphasis should be on fairness. □

NOTES

1. The International Right of Way Association offers Course 407-Valuation of Contaminated Properties, that also provides an introduction to some of the major issues to be considered in the valuation of contaminated property.

2. In *The Department of Transportation of the State of Illinois v. Parr*, (Ill. App. 3 Dist.), the state attempted to award a negative compensation for the taking of contaminated property. At least in this case, the court ultimately held that the evidence that the property was contaminated was speculative and, therefore, was inadmissible. According to one source within the Illinois attorney general's office, however, the court may have been upset that the state was seeking a negative value, which it considered to be inequitable.

3. IRWA Course 407-Valuation of Contaminated Property Student Manual, pg. 52. International Right of Way Association, Gardena, California.

4. It is important to note that stigma does not always occur. It is a market driven concept and should only be applied if it can be measured in the market.

5. Nichols on Eminent Domain, Revised 3rd Edition, (New York, Matthew Bender, 1994): 12.02[1].

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