THE CAUSES OF LOSS IN VALUE: A CASE STUDY OF A CONTAMINATED PROPERTY

by Robert W. Hall, CRE

A recent counseling assignment our firm undertook involved estimating the loss in value caused by certain contamination at the Shadyside Apartments. The case presented a multifaceted problem which required thinking through the entire valuation process and reviewing the reasons why an investor buys an apartment house in the first place. The identity of the complex has been changed, however, the facts are true.

Background

The subject property is located in a suburban growth area reasonably near a major midwestern city. In this area home ownership is over 70%, and the typical range of single-family housing is about $95,000–$200,000. Apartment rentals range from around $375 to over $600 depending on size, location and amenities offered. The Shadyside Apartments complex is small, of average quality and with sub-normal amenities. There are 32 units with enough land to build 40 more.

The apartments are in two brick buildings of colonial design. Each building has two-story plus basements and 16 units comprised of eight-1 bedroom units and eight-2 bedroom units. The basement areas are devoted to material storage, tenant storage lockers and the complex's management office. There is ample blacktop parking area. The property was built in 1970 and purchased by the present owner in 1972.

At a later date development plans were submitted to the municipality to build 40 more units on the site, and approval was obtained after lengthy negotiations. However, the municipal sewer plant was operating at capacity and plans to expand were being implemented. Consequently, the permits were held in abeyance until the additional capacity would be operational. This did not occur until about 1985.

In late 1987, residents in neighboring homes began to notice gasoline odors in their basements. They complained to the local health authorities who reported the problem to a local pipeline company. After considerable investigation, it was discovered that one of the pipelines had a corrosion leak, and by the time it was located and corrected, about 100,000 gallons of gasoline had escaped. Unfortunately for our client most of this lost product settled in a geological basin under the apartment buildings.

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The pipeline company, working closely with the EPA, made immediate efforts to recover the product. This included the drilling of test, monitoring and pumping wells, and the construction of an aerating tower system for purifying the water table upon which the gasoline was floating. In a period of two years about 60% of the lost product was recovered, and it was planned that operation of the emergency facilities would continue well into the foreseeable future. The EPA advised us that pumping, monitoring and aeration would continue for at least ten years, since the monitoring wells still indicated considerable amounts of benzene, toluene and xylene.

During the weeks and months following the spill, several unpleasant events occurred at Shadyside. Many residents panicked, broke their leases and vacated, especially smokers who were afraid of an explosion in their apartments. Vacancies, previously very low, began to mount, and new tenants became very difficult to find because of the publicity the gasoline leak had received in the news media and the very obvious appearance of the aerating tower. Consequently, income decreased while vacancies and expenses increased from cleaning, lawn maintenance and advertising. It became necessary not only to forgo planned rental increases, but to actually reduce rents in order to secure tenants. As the rental rates came down, the grade of tenancy declined and the complex took on a rather seedy appearance.

Meanwhile, the gasoline floating on the water table contaminated several nearby water company wells requiring permanent shutdown and the need to draw water from other resources. This closure raised the water table under the apartments, and in the basements continual flooding occurred ruining all interior finishes. Maintenance costs increased substantially.

Although the pipeline company was trying diligently to remedy the situation, the owner suffered considerable damages without apparent relief in sight. It was a year-and-a-half after the spill that we were engaged by the owner's counsel to estimate the extent of the damages. The law required conducting a before and after study as of the date of the occurrence on the theory that the damages suffered could be measured by subtracting the after value from the before value, exactly like a partial taking in condemnation. This required imagining the property as it existed on the date of the spill before any damage occurred. Even more difficult was visualizing the property as though all the effects of the spill were apparent and measurable as of the same date. Considerable research was done, and a great deal of judgment was exercised. Fortunately, the owner had kept good records which were made available.

A normal appraisal was conducted to determine the before value. The research uncovered many small apartment sales. The market approach generally indicated value around $30,000 per unit plus the value of the excess land for the additional 40 units, which was indicated at $10,000 per unit based on an abundant supply of land sales. That equaled approximately $1,350,000 from the market. This number was pretty well confirmed by the income approach. The owner's rent roll and expenses proved to be in line with market evidence, but some adjustment was needed to reflect proper management charges and to provide for a reasonable reserve. The market data indicated that a capitalization rate of 9% to 9.25% was appropriate. Nine percent was chosen since the property had an unusually good potential in that location, particularly with the opportunity to build additional units. When the extra land was added to the capitalized net income, value was indicated around $1.5 million. We believe that apartment houses are purchased for the income they produce, and therefore, the income approach is usually the most significant of the approaches. Thus, the before value was concluded at $1.5 million. So much for the easy part!

While we were generally familiar with contamination issues, little information was available to provide guidance in the measurement of contamination damages. In addition, most of what was written provided a very superficial approach to the measurement of value. The articles consulted implied that the cost to cure is the measure of damages. While, no doubt, this has validity in many cases, it certainly falls far short in the case of Shadyside. After all the physical problems at Shadyside were cured, the owner still lost a bundle of money.

Possible Factors In A Contamination Study

Presented here is a list of nine possible items which we think should be considered by a counselor in any contamination study. The objective in presenting these items is to call attention to those factors which appear to impact the value of a contaminated property, rather than to suggest methods and techniques for measuring the effects of those factors. Most professional real estate counselors are well-equipped to devise the necessary methods and techniques once the elements of value are recognized.

1. The Cost Of Cleanup

Cleanup should be the major consideration for any contaminated property regardless of the specific cause of the problem. Engineering studies of the particular situation and several estimates of the cost to cure should be obtained and thoroughly reviewed. Great care should be taken in the selection

of the estimators, because extreme variance between estimates is often the rule rather than the exception. These studies should be secured by the client rather than by the counselor.

In the Shadyside case the pipeline company only did what was required to recover the gasoline and to purify the water as much as possible. All increased maintenance, repairs and replacements were performed by the owner's staff. Although sizable, these items were actually the smaller elements of damage.

2. Liability To The Public

The owner of any contaminated property could be faced with a lawsuit claiming damages due to unhealthy conditions. Such suits may be brought by tenants, workmen or visitors to the property. Even if such claims are false or fraudulent, they must be defended, and related expenses can be very high. Often awards in these cases bear little relation to either the facts or reality, and the outcome can easily bankrupt a property owner, especially since such loses are often excluded from liability insurance policies. This consideration of contamination must influence a prospective purchaser of the property, and it can have a decidedly negative impact upon market value. After all, why buy somebody else's problems?

3. Stigma After The Cleanup

Admitting your property is or was contaminated is somewhat like admitting to having a venereal disease. Some buyers will have nothing further to do with the property, because they fear the problem is not removed, and still will have to be dealt with. So the usual attitude is either, "Why should I buy a headache?," or else, "I'll discount the price substantially and get a bargain." In either event, value is negatively impacted.

In the case of Shadyside, a very serious prospective buyer ended all negotiations shortly after the damaging incident. In addition, there is no longer any possibility, in the near term, to build the other 40 units. After the dismantling of the aerating tower (10 years or so hence) and after the pumping finally stops, the new construction may be a viable possibility, but certainly not now.

4. Loss Of Net Income

Since the only real reason to buy an investment property is to make money, the loss of net income can have a drastic effect upon the value of a contaminated property. The income can be affected in three separate ways, and often such a property experiences all three at the same time.

A. Reduced Rental Rates

Many affected properties cannot be rented for rates as high as those buildings which otherwise are equal but never have been contaminated. This is often the case even after an expensive cure has been administered. However, the condition may be alleviated over time, as people eventually do forget the contamination.

B. Increased Vacancies

The stigma dies hard, and a cured building can easily suffer additional losses from vacancies and increased collection problems, especially since a lower grade of tenant may result.

C. Increased Expenses

Additional testing, monitoring and extra supervisory personnel may be needed in a particular building. Utilities, supplies, advertising and other office expenses, and management and professional fees (engineering studies and appraisals fees) could easily increase, reducing net income and placing the property at a further disadvantage with its competition.

The result is a considerable reduction in net income, at least in the early years after a cure, and if there is less net income to capitalize, there must be lower value.

In the Shadyside case, all three factors came into play: Management was forced to drastically reduce rents so old tenants would stay and new tenants would move in; vacancies rose substantially along with collection problems; expenses soared. In considering the after value the only logical method of capitalizing income seemed to be a discounted cash flow analysis, since the picture would undoubtedly improve over time. But how much time? How long does it take for people to forget?

5. Financing Difficulty Or Inability

The tendency for most lenders is to avoid contaminated properties as if they had the bubonic plague. This attitude is quite understandable since several court decisions have held lenders liable for the cost of cleaning up the contaminated properties which were held due to foreclosure on defaulted mortgages, even though the lenders had nothing to do with the contamination process and were only trying to protect their investment. So, why buy trouble? It is much safer to eliminate the problem by refusing to consider a contaminated property as security for a loan (sometimes even a cured property).

Consequently, the increased difficulty or inability to secure mortgage financing creates great hardship on a property owner trying to sell. After all, the number of cash buyers is severely limited and any prospective purchaser will heavily discount the asking price if cash is used for payment. One possible solution is for the seller to provide financing for the buyer, but this also presents a burden on the ownership which is not generally found in clean properties.

At Shadyside, the owner could not find anyone who would have anything to do with the property.

The original mortgage balance was fairly well paid down, and refinancing would have been quite helpful to the owner in handling all the increased expenses during the extended rent-up time while income was depressed. The prospective purchaser could not have secured a mortgage even if it was wanted.

Occasionally some lenders will make loans on contaminated properties or properties which have been cured or are in process of being cured, upon terms more profitable to the lender and consequently more onerous to the property owner. The lender agrees to assume the added risks of lending on a contaminated property in exchange for some added incentive. This may take one or more, or all, of the following forms:

A. Reduced loan-to value ratio
B. Increased interest rate
C. Decreased loan term
D. Shortened call period
E. Extra fees and charges

Thus the financing of a contaminated property is not an easy job and at times is impossible. Substantial loss in value is usually experienced by the owners for this reason.

6. Business Disruption

In owner-occupied properties the loss of rental income is usually not an appropriate consideration. However, during the elimination of hazardous materials, substantial disruption may occur to the business conducted on the property. This can even happen to clean property that is part of an enterprise which owns or leases another property which becomes contaminated. A domino effect can occur.

7. Contingent Liability Forever

Both the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA) provide that any person in the chain of title to a contaminated property is individually liable forever for hazardous materials removed from a property, regardless of where the materials are stored or disposed, or by whom they were removed. This contingent liability cannot be eliminated, and forever is a long, long time! Some attorneys have commented that SARA should have been named RACHEL, standing for Retroactive Act Claiming How Everybodys Liable. This liability means that if hazardous material was removed from a property and disposed of in a regulated landfill before you bought the property, and years later the landfill began to leak and the materials migrated to adjacent properties, you could be held responsible for the entire cost to alleviate the problem, plus damages. Although such problems may seem remote, the possibility is very real, and sophisticated market participants will insist upon being compensated with a reduced sale price for this added risk.

At Shadyside the property owner had no control over the disposal of the recovered product or its handling, either on or off the property. In fact, he did not know anything about the disposal. Yet, according to the law, he is completely liable and can never get out of this position.

8. Increased Discount Rate

In appraisal literature reward is always equated with risk. If the risk is low, so will be the reward. However, as risk increases the reward must also become greater to properly compensate for the added risk. Reason would dictate that properties which are or were contaminated should provide their owners with a greater reward because risks were assumed (either voluntarily or involuntarily) which are considerably greater than those found in uncontaminated properties. This means that the discount or capitalization rate should be higher in contaminated properties and in those which were cured. And if the rate is higher, the property value is lower.

In the case of Shadyside, the road back to profitability will be long and arduous. The owner will suffer from reduced income, high vacancies, collection problems and extra heavy expenses. He may occasionally have to fund the investment and will probably be unable to secure any new financing. If this kind of investment does not deserve a higher return, what does?

In considering the discounted cash flow analysis for the after value, a 10-year forecast of income and expenses was used which began on the date of the spill. Fortunately, as previously noted, the owner kept very good records, and the increase in vacancies and expenses was documented on a month-by-month basis. We knew what had occurred for the first year-and-a-half.

Our forecast predicted a further decline in income and an increase in vacancies and expenses for an additional year, followed by a very gradual improvement over the remainder of the 10-year term, eventually returning to a situation similar to what existed just before the spill. After careful analysis, an ending capitalization rate of 12% was chosen to calculate the reversion. For discounting each annual net cash flow, a rate of 20% was selected for the first year. This was gradually reduced, so that in year six the rate was 15% where it remained throughout the balance of the analysis. This was justified by the assumption that each year the picture would improve somewhat and the involuntarily assumed risk would diminish, thus requiring less reward. In estimating the value of the additional land, we forecast that the value 10 years hence, on a per unit basis, would be somewhat greater than at the time

the contamination occurred. The future value was discounted back to the effective date of the appraisal. Our estimate of after value indicated that the total loss in value to the property would be about two-thirds of the before value.

9. Loss Of Marketability

Any property which is or was contaminated has lost some of its former marketability. This is true regardless of the type of contamination, because the market always becomes thinner when such problems exist, and it becomes progressively smaller as the hazards increase. In a situation where the cost to cure the condition exceeds the value of the cured property, it is no longer marketable and cannot be sold at any price or even given away. And if a property is not marketable, it certainly cannot have a market value. Although the loss in market value may be complete, the property may still provide substantial utility to its owner and thus provide a value-in-use which may be quite sizable.

As already mentioned, a serious prospective purchaser dropped the Shadyside deal like a hot potato once the extent of the problem was recognized. This property has extreme problems, both physical and financial, which will continue into the foreseeable future. Mortgage financing cannot be secured on the property. It appears the property has lost all marketability for the near term and possibly for a very long period. The land for the additional 40 units can only be mowed and only adds to the expenses.

We believe that these nine factors should be considered in any assignment where the measurement of contamination damages is the issue. While it will be a rare case, indeed, where all the factors are involved, there won't be any where some are not important.

Postscript

It has been said (although certainly not by Murphy) that every cloud has a silver lining. It certainly did in the case of Shadyside! A very satisfactory settlement was arranged out of court in which the owner was paid the full before value of the property and was able to keep the property. Although the credit for such a favorable conclusion belongs to the owner's legal counsel who handled the entire case with considerable skill and expertise, we like to think our careful research and analysis also contributed to the result.