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Testimony of
William C. Harvey, II, CCIM, MAI
On behalf of the Appraisal Institute

Before Subcommittee on Housing and Community Opportunity
Of the
House Committee on Financial Services
On

**The Erosion of Communities and Home Values
by Leaking Underground Storage Tanks**

Presented by
William C. Harvey, II, CCIM, MAI
President, William C. Harvey & Associates
Great Falls, Virginia

September 12, 2002

Testimony of William C. Harvey, II, CCIM, MAI
On Behalf of the Appraisal Institute
Before the
Subcommittee on Housing and Community Opportunity
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Madam Chair and members of the Subcommittee, I am William C. Harvey, II, MAI, President of William C. Harvey & Associates in Great Falls, Virginia. I am pleased to be here today on behalf of the Appraisal Institute, the largest group of real estate appraisers in the United States. The Appraisal Institute is an international membership association of professional real estate appraisers, with more than 18,000 members and 99 chapters throughout the United States, Canada and abroad. Its mission is to support and advance its members as the choice for real estate solutions and uphold professional credentials, standards of professional practice and ethics consistent with the public good. The Appraisal Institute is an association of professionals who provide reliable information and analysis regarding real estate.

The association is the acknowledged worldwide leader in residential and commercial real estate appraisal education, research, publishing and professional membership designation programs. Its extensive curriculum of courses and specialty seminars provides a well-rounded education in valuation methodology for both the novice and seasoned practitioner. Members of the Appraisal Institute form a network of highly qualified professionals throughout the United States and abroad. They are identified by their experience in and knowledge of real estate valuation and by their adherence to a strictly enforced Code of Professional Ethics and Standards of Professional Appraisal Practice.

I want to thank you for holding this hearing. As we have witnessed in communities in many parts of the country, leaking underground storage tanks can have a wide-ranging impact on the health and productivity of our citizens and the economic condition of our communities.

The Appraisal Institute has had a great deal of experience and expertise with this issue. The Appraisal Institute has developed and continually teaches seminars relating to environmental issues impacting the value of real estate¹. The Appraisal Institute has also published numerous academic articles addressing this issue. In addition, the Appraisal Institute has published a book entitled, *Environmental Site Assessments and Their Impact on Property Value: The Appraiser's Role*, which is viewed as the authoritative publication on the issue of valuation of contaminated properties.

A vast network of federal, state and local laws and regulations define the natural and man-made conditions that constitute environmental liabilities affecting property values. Natural areas to be protected include wetlands, aquifer replenishment areas, and habitats for endangered or threatened

¹ *Appraising Environmentally Contaminated Properties and Introduction to Environmental Issues for Real Estate Appraisers*, offered continually by the Appraisal Institute

species. Man-made liabilities may be indicated by the presence of leaking underground storage tanks, asbestos, PCBs or other hazardous materials.

While real estate appraisers are not expected to be experts in the detection or measurement of hazardous substances, like buyers and sellers in the open market, real estate appraisers must often rely on the advice of others. It is the responsibility of appraisers to analyze the impact of the hazardous materials on the value of the property being appraised. With this, the roles and responsibilities of real estate appraisers in detecting, measuring, and considering environmental substances affecting a property are set forth in Advisory Opinion 9 of the Uniform Standards of Professional Appraisal Practice and Guide Note 9 of the Appraisal Institute's Guide Notes to the Standards of Professional Appraisal Practice. These standards are commonly accepted and used by real estate appraisers throughout the United States.

Specifically, I am here to address the issues of valuing pre-contaminated property and the effect of contamination from leaking underground storage tanks on a housing market.

Appraising contaminated property in its pre-contaminated condition requires that the appraiser invoke a hypothetical condition that the property is free of contamination and clearly indicate such in any report. Three categories of effective appraisal dates—retrospective, current, or perspective—may then be used, according to the purpose and function of the appraisal assignment. A retrospective appraisal occurs when the effective appraisal date is prior to the date of the report. This type of appraisal is most commonly developed for purposes of estate administration, condemnation proceedings, and litigation to recover damages.

Since a retrospective appraisal is complicated by the fact that the appraiser knows what has occurred in the market after the effective appraisal date, it is critical that the appraiser establish a logical cut-off date for the consideration of subsequent data that no longer reflects the relevant market. While this can be a difficult determination to make, studying the market conditions as of the effective appraisal date will aid the appraiser in judging where to make this cut-off. The effective appraisal date should be considered as the cut-off date for data considered by the appraiser, absent evidence that data subsequent to the effective appraisal date were consistent with the market expectations at that time.

Once the context of the appraisal is established, a retrospective appraisal is developed like any other appraisal through the proper development of the applicable approaches to value that are typically used to value vacant land and improved property.

The reliability of an appraisal relates to the extent to which the valuation process yields the same results on repeated trials. To that end, retrospective appraisals can be as reliable as any other appraisal so long as a complete appraisal process is utilized. In developing a complete appraisal, the appraiser will use all applicable valuation procedures and the value conclusion will reflect all known information relative to the subject property, market conditions, and available data.

By contrast, in a limited appraisal, the appraiser and client agree before the commencement of the assignment that the appraiser *will not* use all applicable valuation procedures, or that the value

conclusion *will not* reflect all known information about the subject property, market conditions, and available data. Thus, to ensure the highest level of reliability, the process should involve a complete appraisal.

On the issue of impact on the affected housing market, my personal experience in appraising properties affected by environmental contamination varies from single residences with minor onsite releases to communities comprised of hundred of homes sitting atop large plumes of hazardous materials. Notwithstanding the differences in the case studies, the effects on value generally followed what has become known as the Detrimental Condition (DC) Model.² This model, a copy of which is attached hereto, graphically illustrates the fundamental effects that environmental contamination can have on local housing markets.

While the DC Model includes all possible stages, each detrimental condition must be analyzed on a case-by-case basis because of the potential for a variety of impacts on value during the property's life cycle. The first step with any detrimental condition analysis is to consider the *unimpaired value* of the property as if there is no detrimental condition. This is reflected as Point A on the model.

Upon the occurrence or more likely, discovery of the detrimental condition, the value may fall to Point B, if the facts and market data support such a decline. The value during this period is often the lowest, and in some instances the property is unmarketable until the magnitude of the detrimental condition can be ascertained. Nevertheless, in a retrospective appraisal where all assessment, remediation, and ongoing issues are studied, a reliable determination of Point B can be made.

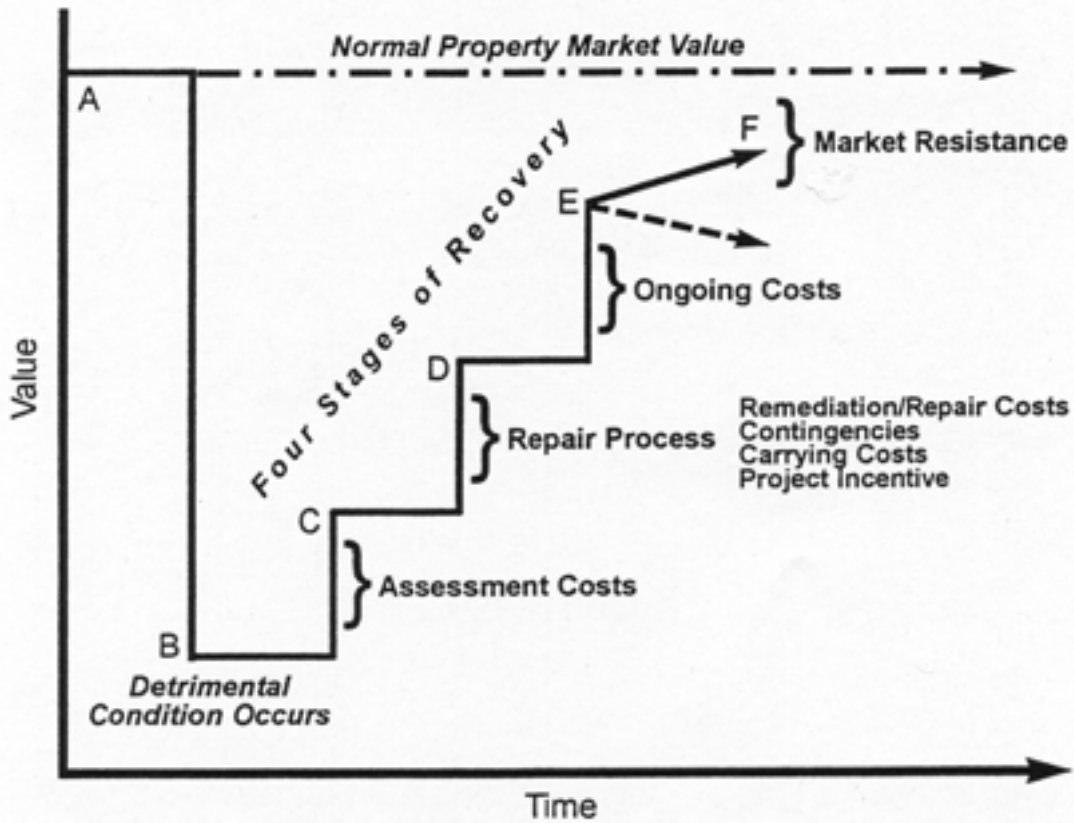
Four stages of recovery generally occur along the time continuum. The assessment stage involves the empirical analysis of the detrimental condition, which usually results in a simple increase to Point C after greater awareness of the problem becomes known. If remediation is required, the value will generally increase upon its completion, as reflected by Point D. Point E reflects the value of the property during the ongoing stage when aftermath issues such as monitoring and continuing maintenance costs can be encountered. The last recovery stage recognizes that market resistance or risk may continue to impact the value of the property, which, like any value issue, can have a variety of impacts. Therefore, Point F is reflected with multiple arrows to illustrate the variety of stigma that may result.

While the DC Model suggests an orderly process, each detrimental condition must be analyzed on a case-by-case basis due to the variety of impacts on value. Although my experience has shown that no two cases are alike, the analysis of environmental contamination should begin with the DC Model.

Thank you for this opportunity to testify. I am pleased to answer any questions you may have.

² Randall Bell, MAI, *Real Estate Damages: An Analysis of Detrimental Conditions* (Chicago: Appraisal Institute, 1999), 15.

Detrimental Condition Model



Worksheet for Valuation of an Environmentally-Impacted Property

VIII = Value of a contaminated property \$ _____

Equals:

V₁ = Value as if not contaminated \$ _____

Less:

AC = Property assessment costs

Site assessments	\$ _____
Phase I	\$ _____
Phase II	\$ _____
Intrusive testing	\$ _____
Well monitoring	\$ _____
Other	\$ _____
Subtotal	\$ _____

RC = Remediation or repair costs

Administrative	\$ _____
Agency oversight	\$ _____
Backfill	\$ _____
Disposal	\$ _____
Engineering	\$ _____
Excavation	\$ _____
Insurance	\$ _____
Legal oversight	\$ _____
Permits	\$ _____
Remediation	\$ _____
Repairs	\$ _____
Samples and analysis	\$ _____
Soils compacting	\$ _____
Transport and hauling	\$ _____
Treatment	\$ _____
Trenching and backhoe	\$ _____
Other	\$ _____
Subtotal	\$ _____

Demolition and reconstruction costs

Structure	\$ _____
Landscape	\$ _____
Paving	\$ _____
Utilities	\$ _____
Well-site removal	\$ _____
Moving	\$ _____
Other	\$ _____

Subtotal \$ _____

CT = Contingencies \$ _____

CC = Carrying costs \$ _____

PI = Project incentive \$ _____

PVAC = Present value of absorption costs or loss of utility

Fixed operations	\$ _____
Lost rents	\$ _____
Tenant relocation	\$ _____
Leasing commissions	\$ _____
Other	\$ _____

Subtotal \$ _____

PVOM = Present value of oversight and maintenance

Operations and maintenance program	\$ _____
Periodic reviews	\$ _____
Eventual repairs remediation	\$ _____
Reinstallation of wells	\$ _____
Post-remediation monitoring	\$ _____
Other	\$ _____

Subtotal \$ _____

PVFI = Present value of excess financing and insurance \$ _____

PVRU = Present value of restrictions on use \$ _____

MR = Market resistance \$ _____

Plus:

PVIR = Present value of insurance and recoveries

WILLIAM C. HARVEY & ASSOCIATES, INC.

APPRAISER'S QUALIFICATIONS - WILLIAM C. HARVEY, II, CCIM, MAI

PROFESSIONAL EDUCATION:

- Undergraduate:
 - Wesley Junior College; Dover, Delaware (9/71-5/72)
 - University of Maryland; College Park, Maryland (9/72-5/75)
- Appraisal Institute (AI):
 - Course 101, Residential Property Valuation (5/82)
 - Course 1A1, Real Estate Appraisal Principles (3/84)
 - Course 1A2, Basic Valuation Procedures (3/84)
 - Course 8-2, Residential Valuation (10/79)
 - Course 1B-A & B, Capitalization Theory and Techniques, Parts A & B (2/85)
 - Course 2-1, Case Studies in Real Estate Valuation (7/84)
 - Course 2-2, Valuation Analysis and Report Writing (7/84)
 - Course 510, Advanced Income Capitalization (9/95)
 - Course SPP-A & B, Standards of Professional Practice, Parts A & B (5/85, 3/89, 11/92 and 07/01 - Part B only)
 - Course SPP-C, Standards of Professional Practice, Part C (11/97)
- Commercial Investment Real Estate Institute (CIREI):
 - Course CI 101, Financial Analysis for Commercial Real Estate (3/97)
 - Course CI 201, Market Analysis for Commercial Investment Real Estate (2/98)
 - Course CI 301, Decision Analysis for Commercial Investment Real Estate (6/98)
- National Association of Securities Dealers (NASD):
 - Series 7 Exam, NASD/NYSE Registered Representative (4/84)
 - Series 63 Exam, NASD Uniform Securities Agent (4/84)
- Northern Virginia Community College (NOVA):
 - Principles of Real Estate I (7/75)
 - Principles of Real Estate II (9/75)
- Related Seminars:
 - Appraising Residential Condominiums (AI-6/83)
 - Subdivision Analysis (AI-10/86 and 4/92)
 - Appraisal of Fractional Interests (AI-6/91)
 - Appraising Residential and Commercial Real Estate in a Distressed Market (AI-6/91)
 - Marina Valuation Issues (AI-6/91)
 - Techniques of Residential Inspection (AI-6/91)
 - Discounted Cash Flow Analysis (AI-4/92)
 - Environmental Risk and the Real Estate Appraisal Process (AI-4/94)
 - Faculty Training Workshop-Level II Curriculum (AI-10/94)
 - Regression Analysis: The Appraisal Approach of the Future (4/95)
 - Mid-Year 1995 Real Estate Colloquium (AI-5/95)
 - Automated Valuation Models (AI-10/97)
 - Appraising High-Value and Historic Homes (AI-11/97)
 - Appraisal Instructor Training (4/98)

APPRAISER'S QUALIFICATIONS – W.C. HARVEY (CONT.)



PROFESSIONAL EDUCATION (CONT.):

- Appraising From Blueprints and Specifications (AI-11/99)
- FHA and The Appraisal Process (AI-11/99)
- Internet Search Strategies for Real Estate Appraisers (AI-11/99)
- Valuation of Detrimental Conditions in Real Estate (AI-11/00)
- 2001 USPAP Update for Instructors & Regulators - DC (2/01)
- Eminent Domain and Condemnation (7/01)
- Linear Rights-of-Way: Federal Agency Rent Schedules Reforged (AI-12/01)
- 2002 USPAP Update for Instructors & Regulators - DC (1/02)

PROFESSIONAL EXPERIENCE - REAL ESTATE APPRAISAL:

- William C. Harvey & Associates, Inc., President, servicing client's real property appraisal and consulting needs throughout the Washington, D.C. metropolitan area, 1986-Present.
- Legg Mason Appraisal Group, a division of Legg Mason Realty, Inc., Vice President and Regional Manager, managed a commercial appraisal staff in the Tysons Corner, Virginia office, 1983-1986.
- Appraisal Service of America, Inc., a subsidiary of Trustbank Federal Savings, F.S.B., President and Director, set-up and supervised an appraisal firm with offices in McLean and Virginia Beach, Virginia, 1981-1983.
- Accredited Real Estate Appraisal Service, Inc., Staff Appraiser, performed various appraisal assignments throughout the Washington, D.C. metropolitan area, 1977-1980.

PROFESSIONAL EXPERIENCE - REAL ESTATE BROKERAGE:

- Harvey Realty Group, L.L.C., Realtor Associate, licensed real estate salesperson in the Commonwealth of Virginia, specializing in buyer agency for commercial, industrial and residential transactions, 1997-Present.
- Harper and Company, Realtors, Realtor Associate and Assistant Property Manager, licensed real estate salesperson in the Commonwealth of Virginia specializing in residential transactions, 1976-1997.

PROFESSIONAL MEMBERSHIP:

- Appraisal Institute (AI):
 - MAI, Member of the Appraisal Institute (No. 7367), 1986-Present.

PROFESSIONAL MEMBERSHIP (CONT.):

- Member, Ethics and Administration and Review and Counseling Divisions, Region VI; National Standards Panel, 1987-1998.

APPRAISER'S QUALIFICATIONS – W.C. HARVEY (CONT.)



- Member, Experience Review Committee, General; Wash. D.C. Metropolitan Chapter, 1988-1998.
- Chair, Experience Review Committee, General; Wash. D.C. Metropolitan Chapter, 1990-1992.
- Director, Washington, D.C. Metropolitan Chapter, 1994-1998.
- Chair, Government Relations Committee; Wash. D.C. Metropolitan Chapter, 1995-1996.
- Regional Representative, Region VI Regional Committee, 1995-1999.
- Chair, National Experience Review Committee, General; Region VI, 1995-1999.
- Assistant Regional Member, Ethics and Administration Division, Region VI, 1996-1998.
- Secretary, Washington, D.C. Metropolitan Chapter, 1997.
- Member, National Government Relations Committee, Region VI, 1997-Present.
- Treasurer, Washington, D.C. Metropolitan Chapter, 1998.
- Member, National Appraisal Journal Review Panel, 1999-2001.
- Screener, National Experience Review Panel, 1999-Present.
- Member, National Public Affairs Committee, 2001-Present.
- Vice Chair, National Government Relations Committee, 2001-Present.
- Commercial Investment Real Estate Institute (CIRESI):
 - Certified Commercial Investment Member (CCIM) designation (No. 8430), 1998-Present.
- District of Columbia Board of Appraisers (DCBA):
 - Certified General Real Estate Appraiser (No. GA10390), 1997-Present.
- International Association of Assessing Officers (IAAO):
 - Associate Member (No. 016486), 1994-Present.
- Maryland Real Estate Appraisers Commission (MREAC):
 - Certified General Real Estate Appraiser (No. 04-10182), 1992-Present.
- National Association of Realtors (NAR):
 - Member, 1976-Present.
- National Association of Securities Dealers (NASD):
 - Registered Representative, 1984-1986.
- New York Stock Exchange (NYSE):
 - Registered Representative, 1984-1986.
- Northern Virginia Association of Realtors (NVAR):
 - Member, 1976-Present.
- U.S. Dept. of Housing and Urban Development (HUD):
 - Direct Endorsement Lender Selection Roster of Appraisers-Richmond, Va. and Washington, D.C., 1994-2000.
- U.S. General Services Administration (GSA):
 - Panels 1, 2 and 3 for the Washington, D.C. Metropolitan Area, 1998-Present.

PROFESSIONAL MEMBERSHIP (CONT.):

- Virginia Real Estate Appraiser Board (VREAB):
 - Certified General Real Property Appraiser (No. 4001-000731), 1991-Present.
 - Certified Instructor (No. 4002-000076), 1996-Present.
- Virginia Real Estate Board (VREB):
 - Licensed Real Estate Salesperson (No. 0205-056843), 1976-Present.

ACADEMIC AFFILIATIONS AND ACTIVITIES:

- Appraisal Institute, Level II Faculty - Associate Instructor, Course 510 - *Advanced Income Capitalization*, 1995-Present.
- Northern Virginia Association of Realtors, Associate Instructor, *Environmental Influences and the Valuation Process Seminar*, 1994-1996.
- Northern Virginia Association of Realtors, Associate Instructor, *Environmental Issues, Agency and Fair Housing Seminar*, 1995-1996.
- William C. Harvey & Associates. Inc., Instructor, *Appraisals for Litigation: New Business Opportunities*, 1997-Present.
- William C. Harvey & Associates. Inc., Instructor, *Environmental Influences and the Valuation Process Seminar*, 1997-Present.
- William C. Harvey & Associates. Inc., Instructor, *Virginia State 3-Hour Board Mandated Seminar*, 1997-Present.

PROFESSIONAL LECTURES:

- 1994 NVAR Convention and Trade Show, Guest Lecturer, “*Environmental Issues in Appraising*,” October 11, 1994.
- 1995 ASTSWMO Brownsfield Workshop, Guest Lecturer, “*Deed Restrictions, Institutional Controls, and Future Land Use Issues*,” August 17, 1995.
- 1995 Appraisal Institute Region VI Fall Conference, Guest Lecturer, “*Environmental Influences & the Valuation Process*,” October 19, 1995.
- U.S. Court of Federal Claims 12th Judicial Conference, Guest Panelist, “*Experts – Who Needs Them?*” November 16, 1999.

PUBLICATIONS:

- William C. Harvey, II, CCIM, MAI, *Appraisals for Litigation: New Business Opportunities Seminar Workbook* (Great Falls: William C. Harvey & Associates, Inc., 1997).
- William C. Harvey, II, CCIM, MAI, *Environmental Influences and the Valuation Process Seminar Workbook* (Great Falls: William C. Harvey & Associates, Inc., 1997).

APPRAISER'S QUALIFICATIONS – W.C. HARVEY (CONT.)



- William C. Harvey, II, CCIM, MAI, "Appraisal Issues Relating to Wireless Telecommunication Facilities," *Telecom Land Management Law Report* (April 1999): 6-9.


REPRESENTATIVE CLIENTS:


Attorneys, banks, builders, corporations, developers, government agencies, insurance companies, private investors, and savings and loans.

APPRAISAL ASSIGNMENTS:

Mr. Harvey has twenty-four (25) years of commercial and residential real estate appraisal and consulting experience including, but not limited to, appraisals of apartment complexes, condominium projects (residential, commercial and industrial), cooperatives, hotels, industrial facilities, vacant land (raw and developed), mansions, motels, nursing homes, office buildings, planned unit developments, retail facilities, right-of-ways, shopping centers (neighborhood strips, community centers and regional malls), and special-purpose properties (fiber optic cables, high-tech facilities, etc.). Valuation appraisals as well as evaluation assignments (market studies, feasibility analyses, etc.) have been completed on existing, partially completed, and proposed improvements.

Mr. Harvey has testified as an expert witness on appraisal matters in the following courts: (1) Circuit Court for Arlington County, Virginia, (2) Circuit Court for Fairfax County, Virginia, (3) Circuit Court for Loudoun County, Virginia, (4) Circuit Court for Montgomery County, Maryland, (5) Circuit Court for Prince William County, Virginia, (6) General District Court for Loudoun County, Virginia, (7) U.S. Bankruptcy Court for the District of Maryland, (8) U.S. Bankruptcy Court for the Eastern District of Virginia, (9) U.S. Bankruptcy Court for the District of New Jersey, (10) U.S. Bankruptcy Court for the Southern District of New York, (11) U.S. Court of Federal Claims (court-appointed expert), and (12) U.S. District Court for the Eastern District of Virginia.

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