

*Modern Real Estate Practice in Illinois, 6<sup>th</sup> Edition*  
**Filmore W. Galaty, Wellington J. Allaway, Robert C. Kyle**  
**Laurie MacDougal, Consulting Editor**

**Chapter 22: Environmental Issues and the Real Estate Transaction**

**Learning Objectives**

*After reading this chapter, students should be able to:*

- Identify the basic environmental hazards an agent should be aware of in order to protect his or her clients' interest.
- Describe the warning signs, characteristics, causes, and solutions for the various environmental hazards most commonly found in real estate transactions.
- Explain the fundamental liability issues arising under environmental protection laws.
- Distinguish lead-based paint issues from other environmental issues
- Define the following key terms: asbestos; Brownfield's legislation; capping; carbon monoxide; CERCLA; chlorofluorocarbons; electromagnetic fields; encapsulation; groundwater; innocent landowner immunity; joint and several liability; landfill; lead; mold; MTBE; polychlorinated biphenyls; radon; retroactive liability; strict liability; underground storage tanks; urea-formaldehyde; and water table.

**Why Learn About Environmental Issues?**

Environmental issues are at the forefront of consumer concerns today, and are an important factor in the practice of real estate. Consumers are becoming more health conscious and safety concerned and are enforcing their rights to make informed decisions. Scientists are learning more about our environment, and consumers are reacting by demanding that their surroundings be free of chemical hazards. These developments affect sales transactions and various persons related to the transaction such as appraisers, developers, lending officers, and property managers.

**Suggested Items to Bring to Class**

1. Copies of government brochures on the hazards of lead-based paint and asbestos.
2. Newspaper articles about how environmental issues impact real estate transactions.
3. Informational packets from waste management companies and operators of landfill sites describing the construction and maintenance of landfills.

## **Lecture Outline**

### **I. Environmental Issues**

**IN ILLINOIS . . .** *the Illinois Environmental Protection Agency is charged with maintaining and enhancing the state's air, land and water quality through education, inspection, regulation, enforcement, and recycling and prevention activities. The Pollution Control Board and Hazardous Waste Advisory Council are two of the many bodies created to assist the IEPA in specific areas. State agricultural, transportation and energy agencies (among others) also have specific environmental protection responsibilities. Most Illinois environmental regulations are required by statute to be identical in substance to environmental protection regulations established by the U.S. Environmental Protection Agency.*

### **II. Hazardous Substances**

#### **A. Asbestos**

Asbestos is a mineral that was once used as insulation because it was resistant to fire and contained heat effectively. Before 1978 (the year when the use of asbestos insulation was banned), asbestos was found in most residential construction.

- The Environmental Protection Agency (EPA) estimates that about 20 percent of the nation's commercial and public buildings built before 1978 contain asbestos.
- Asbestos is friable: as it ages, asbestos fibers break down easily into tiny filaments and particles. When these particles become airborne, they pose a risk to humans.
- Asbestos is costly to remove because the process requires state-licensed technicians and specially sealed environments.

#### **B. Lead-Based Paint and Other Lead Hazards**

*Lead* was used as a pigment and drying agent in alkyd oil-based paint.

- The federal government estimates that lead is present in about 75 percent of all private housing built before 1978, when its use was banned.
- An elevated level of lead in the body can damage the brain, kidneys, nervous system, and red blood cells.

**IN ILLINOIS . . .** *anyone who performs lead abatement or mitigation activities without a license is guilty of a Class A misdemeanor. The Department of Public Health (DPH) oversees the qualification, training, and licensing of lead abatement contractors and lead abatement workers in Illinois.*

**1. Disclosure**

Persons selling or leasing residential housing constructed before 1978 are required by federal law to disclose the presence of known lead-based paint.

- A lead-based paint disclosure statement must be attached to all sales contracts and leases regarding residential properties built before 1978, and a lead hazard pamphlet must be distributed to all buyers and tenants.
- Purchasers must be given ten days in which to conduct risk assessments or inspections for lead-based paint or lead-based paint hazards. Purchasers are not bound by any real estate contract until the ten-day period has expired.

**IN ILLINOIS . . .** *the Illinois Lead Poisoning Prevention Act (410 ILCS 45) requires physicians to screen children younger than six years old for lead poisoning when the child lives in an area considered by the state to be at high risk for lead exposure. High risk areas include slum and blighted housing, proximity to highway or heavy local traffic, proximity to a lead-using or lead-generating industry, incidence of elevated blood lead levels, poverty, and the number of young children in the area.*

**C. Radon**

A radioactive gas produced by the natural decay of other radioactive substances. When radon is trapped in high concentrations, it can cause health problems.

- Opinions differ as to minimum safe levels.
- Because radon is odorless and tasteless, it is impossible to detect without testing.

**IN ILLINOIS . . .** *The Illinois Radon Awareness Act, effective January 1, 2008, requires a seller to provide to a buyer, before the buyer is obligated under any contract to purchase residential property, a Disclosure of Information on Radon Hazards form, along with a pamphlet entitled, "Radon Testing Guidelines for Real Estate Transactions." The disclosure document: has a Radon Warning Statement; requires that a seller provide an Illinois Emergency Management Agency pamphlet about general radon information and disclose any radon information to the buyer; requires that real estate agents sign the disclosure and requires that all parties involved sign the disclosure.*

*The Act does not require that all homes in a real estate transaction be tested or that the home be mitigated if the test results are elevated.*

**D. Urea-Formaldehyde Foam Insulation (UFFI)**

Gases leak out of UFFI as it hardens.

- Urea-formaldehyde is known to cause cancer in animals, though the evidence of its effect on humans is inconclusive.

**E. Carbon Monoxide**

A colorless, odorless gas that occurs as a by-product of burning such fuels as wood, oil, and natural gas due to incomplete combustion.

**IN ILLINOIS . . .** *Illinois requires that all residences be equipped with working carbon monoxide detectors.*

**F. Electromagnetic Fields**

The movement of electrical currents generates electromagnetic fields (Em's). Current research is inconclusive regarding harm to humans.

**G. Polychlorinated Biphenyls (PCBs)**

PCBs may be present in electrical equipment, such as transformers, fluorescent light ballasts, and hydraulic oil in older equipment. They are suspected of causing health problems and are known to linger in the environment. The manufacture and commercial distribution of PCBs was banned in 1979.

**H. Mold**

Mold is a fungus. It is impossible for homeowners to distinguish between toxic and benign molds because they come in a variety of colors. Some molds can cause serious health problems. Mold is an increasingly important issue for licensees.

**III. Groundwater Protection**

Groundwater is water that exists under the earth's surface within the tiny spaces or crevices in geological formations. Groundwater forms the water table. Numerous state and federal laws have been enacted to preserve and protect the water supply, led by the safe drinking water act and its 1996 and 2000 amendments.

**IV. Underground Storage Tanks**

Over time, neglected tanks may leak hazardous substances into the environment. This permits contaminants to pollute not only the soil around the tank, but also adjacent parcels and groundwater.

- State and federal laws impose very strict requirements on landowners where underground storage tanks are located to detect and correct leaks in an effort to protect the groundwater.
- The federal UST program, regulated by the EPA, applies to tanks that contain hazardous substances or liquid petroleum products and that store at least 10 percent of their volume underground.

- Certain types of tanks are exempt from the federal regulations.

**IN ILLINOIS . . .** *the Leaking Underground Storage Tank (LUST) program governs the detection, identification, monitoring, mitigation and removal of buried underground storage tanks). The program is administered by the state fire marshal and the IEPA and is authorized to disburse money from a special fund to assist property owners in complying with mandatory remediation activities. The fund derives from permit fees, fines and payments required under such acts as the Motor Fuel Tax Law and the Environmental Impact Fee Law.*

**A. Methyl-T-Butyl Ether Fuel Oxygenates (MTBE)**

A highly problematic water problem has been triggered by the groundwater spread of methyl-t-butyl fuel oxygenates (MTBE). Consumers and real estate professionals should be vigilant in locating any underground storage tanks that might be leaking MTBE.

**V. Waste Disposal Sites**

A *landfill* is an enormous hole, lined with clay or a synthetic liner to prevent leakage of waste material into the water supply. A system of underground drainage and ventilation pipes permits monitoring of leaks and leaching. Waste is layered with topsoil until the landfill is full.

- *Capping* is the process of laying soil over the top of the site and then planting grass or some other vegetation to enhance the landfill's aesthetic value and to prevent erosion.
- Federal, state, and local regulations govern the location, construction, content, and maintenance of landfill sites.
- Hazardous and radioactive waste disposal sites are subject to strict state and federal regulation.

**IN ILLINOIS . . .** *the construction and maintenance of waste disposal sites is regulated by statute (415 ILCS 5/20 et seq.). In establishing regulations, the legislature stated that the purpose of the law is "to prevent the pollution or misuse of land, to promote the conservation of natural resources and minimize environmental damage by reducing the difficulty of disposal of wastes and encouraging and effecting the recycling and reuse of waste materials, and upgrading waste collection, treatment, storage and disposal practices . . ."*

**VI. Brownfields**

Defined as defunct, derelict, or abandoned commercial or industrial sites, many of which have toxic wastes. *Brownfields Legislation* became law in 2002, giving states and localities up to \$250 million a year for five years to clean up polluted

industrial sites. The law encourages the development of these properties, some of which are located in prime real estate areas.

## **VII. Environmental Protection**

### **A. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**

Created in 1980, it established a fund of \$9 billion, called the Superfund, to clean up uncontrolled hazardous waste sites and to respond to spills; it also created a process for identifying potential responsible parties (Preps) and ordering them to take responsibility for the cleanup action.

- CERCLA is administered and enforced by the EPA.

#### **1. Liability**

A landowner is liable under CERCLA when a release or a threat of release of a hazardous substance has occurred on his or her property.

- Liability includes the cleanup not only of the landowner's property, but also of any neighboring property that has been contaminated.

#### **a. PRPs**

EPA first attempts to identify the potentially responsible parties (PRPs) who must agree about how to divide the cost.

- If the PRPs do not voluntarily undertake the cleanup, EPA may hire its own contractors to do the necessary work and bill the Preps for the cost.
- If the Preps refuse to pay, EPA can seek damages in court for up to three times the actual cost of the cleanup. Liability is strict, joint and several, and retroactive.

### **B. Superfund Amendments and Reauthorization Act (SARA)**

In 1986, the U.S. Congress reauthorized the Superfund and created the *innocent landowner immunity*. The innocent landowner immunity clause established the criteria by which to judge whether a person or business could be exempted from liability.

## **VIII. Liability of Real Estate Professionals**

- Sellers often carry the most exposure.
- Purchasers may be held liable, even if they didn't cause the contamination.

- Lenders may end up owning worthless assets if owners default on the loans, rather than undertake expensive cleanup efforts.
- Real estate licensees could be held liable for improper disclosure.

**A. Discovery of Environmental Hazards**

An environmental site assessment is often performed on a property to show that due care was exercised in determining if any environmental impairments exist. The assessment can help prevent parties from becoming involved in contaminated property and work as a defense to liability. It is often requested by a lender, developer, or a potential buyer.

**B. Environmental Impact Statements (EIS)**

A federally-funded project requires that an environmental impact statement (EIS) be performed. These statements detail the impact that the project will have on the environment.

**C. Disclosure of Environmental Hazards**

State laws address the issue of disclosure of known material facts regarding a property's condition. These same rules apply to the presence of environmental hazards. A real estate licensee may be liable if he or she should have known about a condition, even if the seller neglected to disclose it.

**Discussion Questions**

1. How important is it for a licensee to be aware of environmental hazards? How might they impact a transaction?
2. There is a lot of controversy surrounding environmental regulations. Why do students think the regulations arose in the first place? Are they important? What would happen if they were abolished?

**Classroom Exercise**

1. Arrange to have an environmental engineer speak with your class or secure publications about environmental hazards, how they affect property value, and the paperwork involved in reporting and documenting such hazards.