

Chapter 21: Environmental Issues and the Real Estate Transaction

LECTURE OUTLINE

Overview—Environmental issues are health issues of concern to consumers and, thus, real estate professionals.

I. Hazardous Substances (see Figure 21.1)

A. Environmental Protection Agency (EPA) created in 1970.

1. HUD rules also come into play.
2. State laws also concern environmental hazards.

B. Asbestos

1. Once used as insulation; banned as of 1978
2. About 20 percent of the nation's commercial and public buildings are contaminated.
3. Health hazard
 - a. Inhaling can result in respiratory diseases.
 - b. Harmful only when disturbed or exposed.
 - c. Highly friable (breaks down easily into tiny filaments and particles).
 - d. No safe level of asbestos exposure.
4. Used also in residential properties
 - a. To cover pipes, ducts.
 - b. Fire resistant property made it popular.
5. Costly to remove
 - a. Requires state licensed technicians and specially sealed environments.
 - b. Disposal at licensed facilities.
 - c. Encapsulation, or sealing off of disintegrating asbestos, may be preferable method of containment but must be monitored.

C. Lead-based paint and other lead hazards (see Figure 21.2)

1. Lead was used as pigment and drying agent in paint.
2. Present in about 75 percent of private housing built before 1978.

3. Elevated levels in body cause serious damage to brain, kidneys, nervous system, and red blood cells; children most vulnerable.
4. Lead particles can be present anywhere in soil and ground water.
5. Use of lead-based paint banned as of 1978.
6. No federal regulations state that homeowners must test for presence of lead-based paint.
7. EPA and HUD regulations require disclosure of any known lead-based paint hazards to potential buyers and renters. Must attach form to all residential leases and sales contracts along with hazard pamphlet.

C. Radon

1. Gas created by natural decay of radioactive substances.
2. Hazardous when trapped in buildings in high concentration.
3. Colorless/tasteless—impossible to detect without testing.
4. Levels of radon can be reduced by installing ventilation systems or exhaust fans.
5. Home radon-detection kits are available. The most accurate testing is done by radon-detection professionals.

D. Formaldehyde

1. Chemical primarily used in insulation; also found in some glues, resins, pressed wood, etc.
2. HUD has regulated use in plywood and particleboard since 1985.
3. Listed as hazardous air pollutant in 1990.
4. Causes several health problems.
5. Tests can be conducted to determine presence of or level of formaldehyde gas in home.
6. State may require disclosure.
7. Urea-Formaldehyde Foam Insulation (UFFI).

E. Carbon monoxide (CO)

1. Colorless, odorless gas byproduct of burning fuels due to incomplete combustion.
2. Improper ventilation of heating equipment, malfunction creates problems.
3. Detectors are available, mandatory in some areas.

F. Polychlorinated biphenyls (PCBs)

1. Were often used as insulating material in dielectric oil; may be present in electrical equipment such as transformers and fluorescent light ballasts.
2. Linger in environment and suspected of causing health problems.
3. Manufacture and commercial distribution of PCBs banned in 1979.
4. Hazardous if present in leaking containers stored on a site.

G. Chlorofluorocarbons (CFCs)

1. Nontoxic, nonflammable chemicals that deplete the ozone layer of the earth.
2. Manufacture mostly ended in 1996.
3. Homes may have products, especially air conditioners and refrigerators, that contain CFCs. Consumers should be aware of disposal issues.

H. Mold

1. Can grow on almost any organic substance if moisture and oxygen are present.
2. Gradually destroys what it is growing on and also causes serious health problems; triggers allergic reactions and asthma attacks; also produces potent toxins and irritants.
3. Construction practices that result in tightly sealed buildings may prevent adequate ventilation and promote mold. Other causes are roof leaks, unvented combustion appliances, and outside water being directed into building by gutters or landscaping.
4. EPA has published guidelines for remediation or cleanup.
5. Number and size of lawsuits growing.

II. Groundwater Protection

A. Contamination of underground water threatens the supply of pure clean water for private wells or public water supplies.

1. Contamination comes from runoff from waste disposal sites, leaking underground storage tanks, and the use of pesticides and herbicides.
2. Contamination can spread far from source.
3. Numerous state and federal regulations exist.

B. The Safe Drinking Water Act (SDWA)—requires that water suppliers report any health risk within 24 hours.

III. Wetlands Protection--Clean Water Act authorizes EPA to protect and improve the quality of wetlands.

A. Wetlands include swamps, marshes, bogs, river overflows, mudflats, and natural ponds.

B. Wetlands can be habitats for fish and wildlife, and also serve as water storage and drainage areas.

IV. Underground Storage Tanks

A. Underground storage tanks (USTs) are used for a number of purposes and can be found in a variety of locations.

1. Commonly found

- a. Where petroleum products used or gas stations/auto repair shops located
- b. Commercial/industrial establishments
- c. Printing/chemical plants
- d. Wood treatment, paper mills
- e. Paint manufacturers
- f. Dry cleaners
- g. Food processing plants
- h. Chemical storage or process waste plants
- i. Military bases and airports
- j. Residential heating oil tanks

2. Some are currently in use but others are abandoned; once common to bury toxic waste.

3. Cleanup can be expensive.

B. Legal requirements

1. EPA regulates tanks that contain hazardous substances or petroleum products at least 10 percent underground. Some state laws are more stringent than federal laws.

2. UST owners required to register tanks and adhere to strict requirements.

3. Regulations govern:

- a. Installation
- b. Maintenance
- c. Corrosion prevention
- d. Overspill prevention
- e. Monitoring
- f. Record-keeping

4. Exemptions

- a. Tanks less than 110 gallons
- b. Farm/residential tanks that hold 1,100 gallons or less of motor fuel used for noncommercial purposes
- c. Heating oil tanks for onsite use
- d. Tanks in basements (on or above floor of underground area)
- e. Septic tanks and rainwater and wastewater collection tanks

V. Waste Disposal Sites and Brownfields

A. Landfill used as disposal site for garbage

1. Clay or synthetic liner used to prevent leakage into water supply; layering process used until full.
2. Capping by laying two-to-four feet of soil over top and planting grass or other vegetation.
3. Ventilating with pipe through cap to release accumulation of natural gas.

B. Federal, state, and local regulations govern location, construction, content, and maintenance of landfill sites.

C. Hazardous and radioactive waste disposal sites subject to strict regulation to prevent escape of toxic substances.

D. Brownfields—defunct, derelict, or abandoned commercial or industrial sites; many have toxic wastes.

1. Legislation became law in 2002—provides funds to assess and clean up polluted industrial sites.
2. Law shields innocent developers from liability for toxic wastes at site prior to purchase; intended to encourage development of such sites.

VI. Environmental Legislation

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

1. Created Superfund to clean up uncontrolled hazardous waste sites and respond to spills.
2. Created process by identifying responsible parties (PRPs) and ordering them to take responsibility.
3. Administered by EPA.

B. Liability is strict, joint and several, and retroactive.

1. Landowner held responsible for cleanup regardless of whether responsible for contamination.
2. Cleanup of own property and any neighboring property.
3. If not responsible, can seek recovery of costs from previous landowners or other responsible party or the Superfund.

4. If potentially responsible parties (PRPs) do not voluntarily undertake cleanup, EPA can hire contractors, then bill PRP. If not paid, EPA can seek damages in court.

C. Superfund Amendments and Reauthorization Act (SARA)

1. Innocent landowner immunity—criteria created by which to judge if person or business could be exempt from liability.
 - a. That pollution caused by third party.
 - b. Property acquired after the fact.
 - c. No actual or constructive knowledge of damage by landowner.
 - d. “Due care” exercised to determine no damage existed.
 - e. Responsible precautions taken in exercise of ownership rights.

VII. Dealing with Environmental Issues

A. Actual and potential liability

1. Sellers carry the most exposure.
2. Buyers may be held liable.
3. Lenders may end up owning worthless property.
4. Real estate licensees can be held liable for improper disclosure.
5. Appraisers must identify problems; responsible to lenders who rely on them to identify.
6. Insurance carrier may be affected.
 - a. Mortgage insurance will protect lender.
 - b. Hazard insurance carrier may be directly responsible for damage if coverage included in policy.

B. Discovery of environmental hazards

1. Real estate licensees must be aware of possible hazard and where to look for professional help, but are not expected to have technical expertise themselves.
2. Seek scientific or technical experts such as environmental assessors.

C. Environmental site assessments

1. Often performed to show that due care was exercised.
2. Can prevent becoming involved in contaminated property or as a defense to liability.
3. Lenders often request.
4. No federal regulations define what must be included.

D. Environmental Impact Statement (EIS)

1. Federally-funded projects require an EIS to detail the impact of a project on the environment.
2. Can include information about air quality, noise, public health and safety, energy consumption, population density, wildlife, vegetation, and need for sewer and water facilities.
3. Increasingly being required for private development.

E. Disclosure of environmental hazards

1. State laws require disclosure.
2. Licensees may be liable if they should have known of a condition even if seller did not disclose.