

COMMON ENVIRONMENTAL ISSUES: ENVIRONMENTAL SCIENCE 101

(Alternate Title: Most Common Environmental Hurdles to Clear on the Way to Closing)

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There are several State and Federal laws to regulate environmental quality and protect soil and groundwater resources. Mortgage brokers, lenders, buyers, sellers, and realtors should have a general understanding of environmental impacts in order to recognize and solve environmental conditions.

Environmental issues could be present at any property. Look for the following concerns when evaluating the value of a property. Refer to the three previous issues of *The Florida Mortgage Broker* for strategies to resolve some of these problems. The solution may even represent opportunity in disguise.

RESIDENTIAL AND AGRICULTURAL LAND USES

New Development Over Agricultural Maintenance Facility – Urban sprawl often involves developing a former farm field. Pesticides, herbicides, fungicides, fuels, lubricants, and hydraulic fluids were often stored, mixed, and disposed in one central location. The location where the products were mixed and the equipment was rinsed is often contaminated.

Suggestion: Find out if the new development was agricultural land and if so, confirm that there were no maintenance facilities near the home you are financing.

New Development Over Cattle Dipping Vats (see related perspective article) – From 1906 to 1961, the State and Federal governments required the dipping of cattle to control Texas Cattle Fever that was caused by a tick. The vats are constructed of a concrete trench about three feet wide, five feet deep and thirty feet long. The pesticide used to control the ticks was a mixture of arsenic, DDT, toxaphene, and other chemicals. Beware of former cattle operations.

Heating Oil Tanks – The Summer 2000 issue of *The Florida Mortgage Broker* (Volume 4 No. 2) contains an article devoted exclusively to this subject. Many older homes used heating oil stored in underground storage tanks. Heating oil is a diesel product. The tanks can leak and it can cost thousands of dollars to do a cleanup. Suggestions when underwriting: Identify the current and historical heating system. Look for tank vent pipes or tank fill ports, and ask if a heating oil tank exists.

Potable Wells – any house with a potable well amplifies the concern due to potential ingestion of contaminated drinking water. Do it yourself oil changers that dump the waste oil out back can also create problems.

COMMERCIAL LAND USES

Dry Cleaners – A chemical called perchloroethylene (PERC) (PCE) or (TCE) is used in the drycleaning process. PERC is a hazardous waste that is more dense than water, so it sinks when it hits the groundwater. PERC will sink through our solution-riddled limerock until it hits a confining layer. A contaminated dry cleaner site can cost six to seven figures to cleanup.

The dry cleaning industry successfully lobbied for a cleanup program based on industry taxes that became effective in 1996. Facilities had until December 31, 1998 to “turn themselves in” and submit the appropriate paperwork to document site contamination. In exchange, if approved, the disclosed facility became eligible for a 100% state funded cleanup. The program was only open for a few years and less than 3,000 dry cleaners in the State became eligible. Many dry cleaners are not eligible for the program. Many properties previously had dry cleaners that few people know about. Most of these sites are not eligible for funding and represent significant liabilities to current and prospective owners. Suggestion: Determine if a dry cleaner exists or existed at the site. Many dry cleaners, especially older facilities are contaminated.

Storage Tanks

Gas stations, automotive facilities, businesses with a fleet of trucks, condominiums, golf course maintenance facilities, marinas, and numerous other properties have fuel storage tanks. Petroleum contamination is regulated in Florida by Florida Administrative Code Chapter 62-770, “Petroleum Contamination Site Cleanup Criteria”. Petroleum contamination is the most common problem and can cost five or six figures to clean up. Many sites are eligible for the Petroleum Cleanup Program, which is also a State funded cleanup program. Please refer to the Spring 2000 issue of The Florida Mortgage Broker (Volume 4, No. 1) for more information on this program. Above-ground tanks are visible. Look for petroleum soil stains. Above-ground tanks should have concrete containment beneath them. Determine if an underground storage tank exists or existed on site. Many current and former tank sites, especially older sites, are contaminated.

Automotive facilities are inspected frequently and are, therefore, usually well managed. All petroleum based automotive fluids are stored in tanks or drums, and most are hazardous waste. Many automotive facilities are contaminated.

Condominiums, apartments, hotels, or any multi-story building with an elevator, may have an emergency generator powered by diesel fuel, which is stored in a tank, usually underground. Find out if they have (or had) a diesel powered generator.

Print Shops – Most of the new print shops are well managed, but some older print shops are contaminated with inks, dyes, or solvents, which are volatile organic compounds. Of particular concern are old print shops with septic tanks, where the equipment is rinsed on site. The rinse water that drains through the septic tank can cause significant problems in the drain field area. Any rinse water that is discharged to the ground can be a problem.

Septic Tanks – A functional septic tank is generally not a concern, but septic tanks at sites where hazardous chemicals are used can be of concern for the same reasons as described for the print shop above. Any waste or wastewater disposal through the septic system can be a problem.

Industrial Facilities – Many industrial facilities generate hazardous waste. There are very strict regulations that govern these facilities. Permits are necessary for many applications. Non-compliance violations can lead to fines and expensive clean up costs. Diligent compliance audits may be necessary to underwrite these facilities.

As outlined above, there are numerous environmental concerns. Most of this article focuses on soil and groundwater contamination. Environmental permitting, wetlands, and endangered species are other property concerns that can limit or prevent development. Asbestos, lead paint, and indoor air quality are issues associated with buildings. You will likely encounter some or all of these issues during your career, and the foregoing information will help you to be prepared when these challenges arise.

The specific land use (past and present) obviously dictates the types of problems you may run in to. Environmental assessments focus on the current and historical activities at a site. There are several types of assessment methodologies with varying levels of investigation. The above knowledge will assist you in determining when assessments are necessary and what they should focus on. The most recognized Standard of Practice is known as the ASTM Designation E-1527-2000. This standard became effective in May 2000 and should be used when Phase I Environmental Site Assessments are necessary.

Many of the research tasks outlined above should be conducted and evaluated by an environmental professional. If any of the above issues exist at a site, an environmental consultation and solution will likely be required to close the loan. The solutions are usually manageable and can usually be factored in to the economic equation.

We have seen the movies and heard the stories. Health problems and economic disasters can result from improper diligence. There are many ways to manage environmental risks and close loans. The first step is recognizing the potential for a problem. As in medicine, proper diagnosis is half the cure.

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