

# REAL ESTATE ENVIRONMENTAL AUDITS FOR YOUR BUSINESS AND INVESTMENTS

by

**Campbell, Foss & Buchanan Inc.**

Property owners selling commercial or residential real estate may be liable for any clean-up of contaminated soil or underground water months or years after the sale has been consummated. To offset this risk, a comprehensive environmental audit or assessment of the property by experienced, professional hydrogeological personnel prior to sale is advisable. As part of prudent business practices, buyers are now under increasing pressure to require a favorable environmental assessment if the sale is to be closed. In the broader sense, however, the commercial real estate world, including anyone involved in buying, selling, financing or insuring real estate, has over the past few years been faced with a serious new problem: the possibility of dealing with contaminated property. Legislators have assumed the task of adopting fairly drastic measures to insure the clean-up of contaminated areas in as brief a time as possible.

## LAWS & REGULATIONS

Numerous laws and regulations on both the state and federal level have been passed which assign liability for environmental damage to various parties deemed responsible for that property, including owners, managers, and in some circumstances even lenders. The costs of clean-up and restoration incurred as a result of such liability can be staggering and may in some cases exceed the property's value.

The most publicized source of environmental liability is federal law, particularly the statute known as "CERCLA" (Comprehensive Environmental Response, Compensation and Liability Act) or "Superfund". It imposes liability upon persons and organizations responsible for creating environmental problems, including owners, operators, and lenders

under certain conditions (if the lender is a participant in the activities of the owner or operator of that property, or if the lender purchases contaminated property at a foreclosure sale, for example).

Liability under CERCLA is imposed without regard to fault and any responsible party may be held liable for all cost and expenses associated with the site. Owners may be liable even if they did not cause or contribute to any release of a hazardous substance at the site. One of the few exceptions to liability under the CERCLA statute is the "innocent landowner" defense. This protects purchasers who have no knowledge of environmental problems despite "all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary practice," taking into account "the ability to detect contamination by appropriate inspection."

Compliance with laws requiring the performance of a site assessment should satisfy the innocent landowner defense. The purchaser needs to have the site history investigated by an experienced, hydrogeological firm to determine whether soil and ground-water sampling is necessary. If there is reason to believe that hazardous substances have been used, stored or disposed on the property, soil sampling and possibly ground-water sampling probably is necessary to invoke the protection of the innocent landowner defense. Other federal statutes concerning environmental liability are:

1) Resource Conservation and Recovery Act of 1976 ("RCRA") which imposes a "cradle-to-grave" system of regulations of the generation, transportation, storage and disposal of hazardous wastes, which can be a source of liability for property owners through cleanup orders and penalties.

2) Federal Water Pollution Control Act ("FWPCA") which creates liability for discharges into navigable waters of the United States. To avoid liability a purchaser should conduct an investigation to reveal potential hazards as soon as possible, and take actions to prevent discharges as soon as possible after discovery of the potential hazards and assuming control of the property.

3) Hazardous Materials Transportation Act, the Safe Drinking Water Act, the Coastal Zone Management act, the Occupational Safety and Health Act, the Emergency Planning and Community Right-to-Know Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Toxic Substances Control Act, the Marine Protection, Research and Sanctuaries Act, the National Environmental Policy Act, the Noise Control Act, the Endangered Species Act, and the Clean Air Act.

State and local laws are an increasingly important source of liability.

Forty-one states and one territory have some type of law creating a funding mechanism to clean up waste sites. Several states have statutes that give state environmental authorities a lien on contaminated property (Tex. Rev. Civ. Stat. Ann. Art. 4477-7, S 13 (g)). This allows the state to impose a lien on property that is cleaned up by the State for the cost of cleaning up contaminated property.

The implications of these laws (and court decisions holding that lenders are not excepted from environmental liability) for those involved with commercial real estate are that screening procedures have become necessary to identify problems associated with a property before becoming involved with and potentially liable for it.

Environmental site assessments are designed to perform that screening and to detect the presence of environmental problems before the property changes hands. Most lenders now require a site assessment in connection with loans secured by commercial or industrial real estate. Many real estate firms are not aware of the potential liability they may be introducing to transactions they are performing for clients.

### SITE ASSESSMENTS

Site assessments should be conducted by experienced, certified hydrogeologists. They will begin the procedure by asking a series of questions designed to provide history and background information on the property and determine the necessity and extent of further investigations. Based on the answers to these questions and a survey of the public record the property will be placed in one of two categories:

- 1) a walkover assessment with little or no sub-surface investigation required; or
- 2) a walkover assessment with extensive sub-surface investigations and environmental sampling.

### COST OF ASSESSMENT

The cost of the site assessment will be determined by the extent of investigative effort required. The second category of assessment may cost much more than a conventional walkover assessment, two-thirds of which cost is represented by soil analyses and by monitor well construction and ground-water sample analyses by an independent, certified hydro-

geological consulting firm and laboratory. Costs start at approximately \$4,000 and go up as the extent of contamination found increases.

### POTENTIAL PROBLEM SITES

Obvious potential problem areas are properties that once contained or presently contain or abut: service stations, auto garages, fleet operators, pest control companies, hardware or garden supply companies, farms, landfills (garbage dumps), roofing companies, junk yards, dry cleaners, schools, painters, machine shops, industry, or septic systems.

The identification of the contaminating characters in the soil and underlying sediment, rock or ground water of these potential problem properties may not be obvious to the untrained observer, especially after the surface has been reworked by earth-moving equipment. The soil and the ground water below or adjacent to the property may contain telltale traces of hazardous materials.

### THE HAZARDOUS WASTES

A broad range of volatile organic chemicals (VOCs) are usually tested during preliminary investigations because of their toxic effects on humans and critters. EPA has established maximum limit guidelines. The most common VOCs tested, however, are:

<u>VOC</u>	<u>EPA Maximum(ppb)</u>
Benzene	40
Toluene	5,000
Xylene	440
Ethylbenzene	430

The metal elements of particular interest in drinking water in excessive quantities are presented below. Their maximum limits have been established by EPA and are usually tested during preliminary investigations:

<u>Metal Element:</u>	<u>EPA Maximum(ppb)</u>
Arsenic	50
Selenium	45
Chromium	120
Cadmium	5
Zinc	NS
Lead	20
Barium	1,500
Copper	1,300
Silver	NS
Mercury	3

NS= Limits not yet established by EPA.

## FIELD OPERATIONS

Combined with the above analyses, water samples are also analyzed while in the field for temperature, pH and specific conductance. VOCs are screened in the field by subjecting surface soil samples and/or shallow auger samples to a portable photo-ionization meter or organic vapor analyzer. This procedure guides subsequent sampling.

## THE NEED FOR A SECOND OPINION

In most large real estate transactions, a hydrogeological/geological consulting firm is engaged to conduct the site assessment work. A second opinion is usually sought from another consulting firm to independently assess the conclusions and recommendations for future work recommended by the primary consultant.

## THE PROFESSIONAL FOR THE JOB

It is extremely important that site assessments are undertaken by firms having Certified Professional Hydrogeologists and Geologists. Civil engineers, for example, are not qualified to undertake such investigations just as hydrogeologists and geologists are not qualified to build bridges and highways.

There is a critical shortage of qualified senior hydrogeologists in the U.S. today, while engineers, especially petroleum and civil, are available in abundant numbers. This creates problems for some engineering firms.

## C,F&B ENVIRONMENTAL ASSESSMENTS

- C,F&B has expertise in a wide variety of sub-surface contaminants and their detection.

- C,F&B also has selected experienced laboratories to conduct the necessary analyses on soil and underground water, including asbestos and storage tank tightness testing.

- C,F&B investigations are performed by senior, independent, Certified Professional Hydrogeologists and Geologists familiar with the local conditions and history.

- C,F&B provides all the required services including: soil sampling, augering and boring, monitor wells, aquifer analysis, borehole geophysics, computer modeling, and reports of investigations containing clearly stated conclusions and recommendations concerning remedial activities, if any.

- Michael D. Campbell, one of the Senior Partners of C,F&B was a pioneer in the early industrial/academic efforts to handle hazardous waste disposal and to develop detection practices in the early 1970's. He was involved in the development of the initial EPA regulations and related implementation. He is recognized today world wide for his work published by McGraw Hill on well technology and on hydrogeology and geology in general.

**Call us  
for more information  
on how we can help  
with  
the new environmental requirements  
of your  
real estate projects.**

**(713)583-7173**