



UAR NUMBER:

TITLE:

ORIGINATOR(S):

INITIAL ADOPTION:

REVISION DATE(S):

AUDIENCE: (SELECT ALL THAT APPLY)

FACULTY

STAFF

STUDENTS

VENDORS

OTHER (SPECIFY):

PURPOSE:

SCOPE:

DESCRIPTION (INCLUDE DEFINITIONS):

PROCEDURES FOR ENVIRONMENTAL REVIEW OF REAL ESTATE PROPERTY

The following phased process is to be used for the assessment of toxic and hazardous substances when purchasing or receiving gifts/bequests of any University real estate transaction. The "due diligence" process serves as a risk assessment and management tool for environmental liabilities associated with all real estate transactions. It is a flexible process - the level of investigation is not the same for every property, and will vary depending upon: nature/type of property; historical use; type of transaction; proposed use of the property; and information obtained during the course of investigation. Similar procedures should be followed for sales and leasing of University property.

A. Two Phase Investigation

Phase I - Preliminary Site Assessment (PSA)

Phase II - Site Characterization: sampling of soils, groundwater, building components

Risk assessments must be made at the conclusion of each phase of this process. A general path to this process is as follows:

Phase I: Preliminary Site Assessment

Property appears free of contamination. Evaluate need for further investigation. Proceed with Phase II or acquisition as appropriate. Potential for contamination is identified. Known or confirmed contamination on site. Re-evaluation benefits of acquisition. Terminate acquisition if risks out-weigh advantages.

Phase II: Site Characterization

Property appears free of contamination. Proceed with acquisition. Contamination confirmed. Proceed with additional site sampling to determine full nature and extent of problem(s).

Negotiate terms for remediation. Nature and extent of contamination poses significant liabilities. Terminate acquisition.

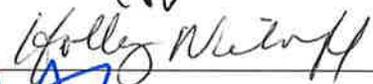
There is some degree of potential risk involved with every property transaction. Environmental due diligence will always be a condition of purchase contract unless performed by the University prior to executing the purchase contract. The Phase I Preliminary Site Assessment (PSA) may be performed by campus-qualified Environmental Health & Safety personnel, if available. If potential for contamination is identified during the campus Phase I assessment, a qualified professional environmental consulting firm should be contracted to review the results of the Phase I report and conduct Phase II site sampling if necessary. It is strongly recommended that if the property is commercial or industrial or otherwise poses a high risk for contamination, an environmental consultant be exclusively contracted to perform the work because of the inherent liabilities.

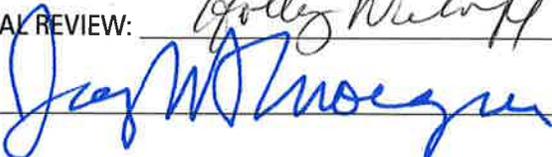
B. Phase I - Preliminary Site Assessment (PSA) The PSA has three (3) major objectives:

1. Technical: determine the likelihood of contamination and the need for further investigation (Phase II).
2. Financial: determine if the subject property value is impaired and the level of financial liability associated with any environmental problems

APPROVED BY:

VICE PRESIDENT: _____  _____ DATE: 7/09/18

APPROPRIATE INSTITUTIONAL REVIEW: _____  _____ DATE: 7/09/18

PRESIDENT: _____  _____ DATE: 7/9/18

328.02 Continuation

B. Phase I - Preliminary Site Assessment (PSA) The PSA has three (3) major objectives:

1. Technical: determine the likelihood of contamination and the need for further investigation (Phase II).
2. Financial: determine if the subject property value is impaired and the level of financial liability associated with any environmental problems.
3. Legal: establish a basis for the "innocent landowner defense" and enable the allocation of risk/responsibility amongst parties in the transaction.

Current PSA components:

1. Identify past and present site ownership and uses.
2. Determine and document site environmental characteristics and settings.
3. Assess hazardous materials and hazardous waste generation, storage, handling and disposal practices.
4. Inspect structures for asbestos, lead paint, PCB electrical equipment, or any other hazardous building components.
5. Assess off-site hazards posed by past and present uses of surrounding properties.
6. Develop conclusions about risks of potential problems and make recommendations for the need for further investigation (Phase II).

The PSA investigation must consist of a records review, site inspection, and historical research. This should be included in a written report with recommendations and cost estimates for Phase II, if necessary.

1. Records Review

Review available records and files of both public agencies and any accessible privately held records for the following information: site history and hazardous materials, hazardous waste storage, and disposal permits; underground storage tank records; discharge or emissions permits; business hazardous materials plans; reported releases of hazardous materials or known site contamination problems. For commercial and industrial sites, a questionnaire can be presented to the current owner or operator that requests specific information on current and past operations. Commercial record search services are available that cover state and federal site lists. Local (city or county) records must also be searched. No regulatory agency site listings are all-inclusive and the absence of a site from lists does not mean there is no problem.

2. Site Inspection

The site inspection is performed to identify land uses, evaluate owner and tenant activities, and identify environmental characteristics that could impair the condition or value of the real property. Authorization for access to the site (preferably written) must be obtained from the owner prior to entering the property. If permitted, the existing conditions should be documented using photos or videotape. If possible, interviews of knowledgeable on-site personnel should be conducted to gather information about site operations and layout. Aerial photos and USGS topographic maps may assist in this process. The following "red flags" or possible signs of contamination or presence of hazardous substances must be noted:

1. Underground storage tanks (USTs): Some states require permits for USTs containing petroleum or hazardous substances. Leaking tanks are required by law to be reported to regulatory agencies. However, some USTs may not have permits and/or may be abandoned, especially on agricultural and residential properties. Look for vent pipes, fill connections, and metal caps or plates.
2. Wastewater systems (septic tanks; leaching fields; sumps; dry wells; or any other subsurface systems on-site which are not connected to a sanitary sewer system).
3. Drums or any other chemical storage or handling areas.
4. Discoloration of pavement or soils, especially near storm drains.
5. Dead, dying, or unhealthy vegetation.
6. Piles of waste, trash, or unidentified mounds.
7. Surface impoundments (pits; ponds; lagoons; unidentified depressions.)
8. Any obvious signs of spillage or residues on property or in buildings.
9. Odors (especially solvents).
10. Wells (may be capped or covered).
11. Maintenance, repair, or shop areas.
12. Building components which may contain asbestos (generally prior to 1980).
 - a. Sprayed-on fireproofing and plaster
 - b. Acoustical insulation
 - c. Thermal insulation: pipes or lagging; ducts; plenums; boiler and furnaces
 - d. Electrical insulation: electrical panels and duct openings
 - e. Floor and ceiling tiles and transite panels
 - f. Asphalt roofing materials

3. Historical Research

It is essential to find out as much as possible regarding previous site ownership and uses in order to assess the potential for contamination due to past activities. There are a number of resources available to assist in this process.

1. Title History: this type of title report can be prepared by a title company at a slightly higher cost than an ordinary title report. The title search should go back to the time the property was first developed. A title history report will indicate whether the property was owned by government agencies or companies that likely handled hazardous materials, and will also reveal recorded leases by such entities. State and federal environmental liens may also be included in these records.

2. Aerial photos: historical aerial photos can provide invaluable documentation of site use and activity for both the subject site and surrounding properties. Many commercial aerial photography companies provide coverage of urban areas as far back as 50 years.

3. Maps: historical maps, especially Sanborn fire insurance maps, are often available for urban areas through local libraries or historical societies. Old business directories and other similar historical records may be available from libraries, societies and public agencies.

4. Interviews with people knowledgeable about the property can provide valuable insight into site history and activities for which no written records exist. Neighbors, former employees and long-time public officials can often provide this information.

C. Phase II - Site Characterization (Sampling)

This phase involves actual sampling and analysis of soils, groundwater, and building components suspected of containing hazardous substances or wastes. This phase may also entail testing of underground storage tanks. Sampling will reveal whether the property is "contaminated" or if hazardous substances are really present. Phase II investigations require written authorization from the current property owner because there can be significant consequences if contamination is found. Federal and state hazardous waste laws require that the owner promptly report site contamination to the proper regulatory authorities. (University employees may also have an independent legal obligation to report the discovery of contamination if the owner does not). This will subject the current owner to regulatory scrutiny and the burden of further site investigations and remediation (cleanup). Phase II investigations may also diminish property value and will delay the property transaction.

The consultant will prepare a technical Phase II report consisting of:

1. Nature and probable source(s) of the contamination.
2. Likely extent of contamination in soils and groundwater.
3. Need for further characterization (sampling and analysis).

4. Regulatory standards pertaining to cleanup levels and remedial technology options.
5. A preliminary estimate of costs for additional sampling and remediation (cleanup).

Environmental consultants generally require about 4-10 weeks on the average to design and implement a Phase II investigation. In general, costs usually range from less than \$10,000 to about \$30,000 for this work. Costs and turnaround time will depend on the size of the property and types of contaminants and sampling required. For example, soil borings typically cost \$1,500 each, whereas groundwater monitoring wells cost \$3,000 to \$6,000 each, depending upon the location and site conditions. Laboratory costs vary according to specific analysis.

Once contamination is confirmed by a quantitative technical investigation, the acquisition as negotiated will probably have to be restructured if the University still wants to acquire the property. The campus must perform a written analysis of risks, costs, and reason for continuing toward acquisition of the property. A health risk assessment study may be performed at this time to determine the effects of contaminants on persons using the property and the effect on the property itself. Health risk assessments are also essential in determining acceptable contaminant cleanup levels.

D. Phase III - Remediation

The last phase of this process (if necessary) consists of the cleanup (remediation) of any contamination found during the Phase II site investigation. Generally, site cleanups are performed according to the methodology set forth by a Risk-Based Corrective Action process administered by the appropriate environmental regulatory agency.

Conclusion

The liability for on-site contamination can be transferred with owners whether purchased, gift/bequest, or merger occurs, an environmental site assessment in the due diligence process has become standard practice.