

Choosing an Environmentally

Safe Site



OFFICE OF COMMUNITY PLANNING AND DEVELOPMENT
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Choosing an Environmentally Safe Site

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Choosing An Environmentally “Safe” Site

Purpose

This Guidance* is designed to assist all HUD program participants, grant recipients, and responsible entities considering sites and structures that could have environmental risks. In the case of nonprofit organizations applying for assistance under housing programs in which the applicant bears the costs of cleanup, the mere confirmation of contamination or the preliminary indication of contamination may be sufficient for many users to select an alternative site. This guidance is primarily designed to help applicants under these programs to avoid sites that would involve costly cleanup. Under some other HUD programs, site cleanup and redevelopment can be funded with HUD assistance. For those programs, this guidance will familiarize the applicant with some of the issues and requirements involved in cleaning up the site to return it to productive and appropriate use. This Guidance addresses the most common, but not all, environmental site contamination problems:

- *Toxic/Hazardous Waste*
- *Underground Storage Tanks*
- *Asbestos*
- *Lead*

This guide does not replace HUD required Environmental Assessments (EA); environmental review or analysis; or Phase I Environmental Site Assessments (ESA) or Phase II ESAs. It is a complementary/supplementary analysis that enables the user to understand more fully the possible risks and costs associated with acquiring a contaminated site before considering or entering into a contract for sale or option agreement of a site or structure.

Background

There has been an increase in the number of incidences where program participants optioned, leased, or acquired property that was later discovered to be contaminated. It is essential that potential grant applicants and other HUD program participants become familiar with the potential environmental issues involving property before leasing, optioning and/or acquiring the property. Unknowing individuals or parties that acquire property with good intentions could face inordinate costs, indefinite delays in using the property, termination of HUD’s funding commitment and/or defaults. In addition, there is the bureaucratic maze of local, state, and federal environmental agencies to confront, as each will become involved in overseeing the clean up.

Decisions about contaminated property are not made purely on a technical basis. There are several variables: – regulatory, commercial, financial, legal, and social factors, – which also affect how a particular site should be dealt with. This means that decisions about contaminated land can be complex, costly, and time consuming. Therefore, it is essential that potential contamination issues concerning a site/property under consideration are identified early, prior to entering into a contract for lease, sale or option agreement for purchase and before a site is acquired.

*This guidance will be applicable to many HUD-assisted projects, however “Choosing an Environmentally ‘Safe’ Site” was designed specifically for and remains directly applicable to sponsors/owners participating in the Section 202 and Section 811 programs.



How sites get contaminated?

For the purposes of this Guidance, contaminants are substances, generally non-natural, that, if present in sufficient quantities, can be harmful to the environment, to humans or other living organism. Contaminants enter soil in several ways and from different sources. The following examples will help explain how sites get contaminated:

- If industrial or commercial operations were not properly managed, accidental spills and careless waste disposal practices can result in contamination by fuels, chemicals, and other toxic substances. A chemical spill that happened years ago can linger in soil and still be a problem. As a result, contaminated land can often be found near past or present industrial sites such as refineries, steel plants, mines, scrap yards and chemical plants. Chemical discharge can also be associated with smaller-scale operations such as dry cleaning outlets, electrical contractors, print shops, waste processors and industrial waste disposal sites.
- Leakage of gasoline or other products from underground storage tanks is another common cause of soil contamination. Such contaminated sites are usually found near operating or former gas stations.
- Municipal waste disposal land can be a contaminated site. Garbage may contain solvents, paints, and heavy metals, which can be buried along with harmless waste, and could leach out if not well managed.
- Land formerly used for farming may be suspect because of a past use of pesticides, fertilizers or illegal dumping of hazardous waste.
- Sites where there have been intentional and illegal discharges and improper disposal practices.

There are two federal statutes designed to address hazardous substances and waste management. One is specifically targeted to abandoned and uncontrolled release of hazardous substances. The other is designed to track, monitor and control hazardous waste in a way to prevent them from becoming an uncontrolled release. They are the Comprehensive Environmental Response, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA) respectively.

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

The legislation that has the most consequential impact on persons involved in real estate and transactions undertaken in connection with the purchase and sale of real property is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended. CERCLA was enacted to establish a trust fund, referred to as the “Superfund”, to clean-up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other releases of pollutants and contaminants into the environment. Although Federal and State Governments may finance the cleanup actions from the Superfund, they may also attempt to reclaim the CERCLA expenditures from the parties deemed responsible for contaminating the site. Additionally there are comparable State laws, which should be considered. In general, CERCLA does not cover releases of petroleum products, its focus is on abandoned sites and uncontrolled release of hazardous substances.

Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act of 1976, as amended, gave EPA the authority to control hazardous waste from “cradle to grave”. This includes generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA not only distinguishes between non-hazardous solid waste and hazardous waste but also sets forth a framework for the management of non-hazardous wastes. The 1986 amendments enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. RCRA focuses only on active and future facilities and generally does not address abandoned or historical sites. There may be sites that are both RCRA and CERCLA Clean-ups.

Steps Toward Obtaining a “Clean” Site

In searching for the perfect site and location, before you invest in securing a site, there are certain things you can do or consider which will aid you in determining the possible presence of hazardous substances or contamination.

A. Take Care in Choosing the Site/Location for Your Proposed Project

For example, sites that were previously used as or are located near agricultural/farming operations could have environmental problems because of the storage of pesticides (or insecticides) on the site. Sites that were used as tanneries also could present a health hazard because of the potential for spreading contagious diseases. Properties once belonging to the military or in older industrial areas should be assessed for environmental problems.

POTENTIAL PROJECT SITES: Some times a “good deal” isn’t. Because of their initial lower cost, one type of real estate that may be considered attractive for potential projects are brownfield sites. As defined by EPA, Brownfield sites are real property, where the expansion, redevelopment, or reuse of which may be complicated by the potential or actual presence of a hazardous substance, pollutant, or contaminant. Many “Brownfield sites” exist in urban areas where heavy manufacturing and industrial activities have occurred. “Brownfield sites” may also include gas stations, dry cleaners, and auto repair shops, or be located in the vicinity of landfills.

B. Make a Visual Inspection of the Site for Signs of —

- **DISTRESSED VEGETATION**
This could be an indication of soil contamination.
- **VENT OR FILL PIPES**
This could be a sign of current or previous existence of underground storage tanks.
- **STORAGE/OIL TANKS OR QUESTIONABLE CONTAINERS**
These are most often used to store heating fuels, chemicals, and petroleum products.
- **PITS, PONDS OR LAGOONS**
These have the potential for holding liquids or sludge containing hazardous substances or petroleum products. The potential is increased if there also exist (1) water discoloration; (2) distressed vegetation; and (3) wastewater discharge.
- **STAINED SOIL OR PAVEMENT (other than water stains)**
This could mean that the soil is contaminated and could be a sign of current or previous leakage of piping and liquid storage containers.
- **PUNGENT, FOUL OR NOXIOUS ODORS**
This could indicate leaks of hazardous substances or petroleum products or contaminants.
- **DUMPED MATERIAL OR SOIL, MOUNDS OF DIRT, RUBBLE FILL, et cetera.**

C. Inquire About the Past Uses of the Site

If the land is currently vacant, ask the owner about previous site usage. Some states/localities require the transferor to disclose specific information about the 'environmental' condition of the site. If your state/ locality has no such requirement, negotiate such a disclosure with the owner. Certain uses (past and present) of the site should signal concerns about the possibility of contamination, in particular the following operations:

- Gasoline stations
- Vehicle repair shops
- Car dealerships
- Garages
- Depots
- Warehouses
- Commercial printing facilities
- Industrial or commercial warehouses
- Dry cleaners
- Photo developing laboratories
- Hospitals
- Junkyard or landfills
- Waste treatment, storage, disposal, processing or recycling facilities
- Agricultural/Farming Operations (including hog and poultry operations)
- Tanneries

NOTE: Many of the listed facilities involve the use of hazardous substances or chemicals, petroleum products in their production processes. If the site was used for these purposes, a more detailed review will be required to determine possible releases of hazardous substances that may pose a potential health hazard.

D. Identify Adjoining Properties/ Surrounding Area for Evidence of Any Facilities as Described Above

A site that may be considered free and clear of any hazardous substances may still be contaminated as a result of toxic and hazardous waste produced by neighboring facilities. Take notice of adjacent and surrounding property uses, especially those that may have spillover contamination affects.



E. Research Federal, State and Local Records About Possible Toxins and Hazards at the Site

Check Sanborn Maps, consult fire department records, and operations permits. Also check local historic land use and zoning records and maps.

The Environmental Site Assessments (ESAs)

Environmental audits are quite different from ESAs. The environmental audit refers to reviews of compliance of “existing” regulated facilities that are required to maintain ongoing, monitoring reporting of their operations and, as such, are not relevant to this Guidance.

The environmental site assessment is an inspection or examination technique designed to screen real estate for environmental problems. The assessment is performed in several stages and when completed it will provide a detailed description of the environmental condition of the property. However, its benefits can only be realized if the assessment is performed before your organization closes/settles on any offer to purchase a site or property.

A. Step 1: ASTM International Phase I Environmental Site Assessment (ESA)

The Phase I Environmental Site Assessment* is intended to help owners satisfy the requirements to qualify for the innocent landowner defense to CERCLA liability. Upon its completion, you should be able to meet the definition of an “appropriate” inquiry for purposes of the CERCLA’s innocent landowner defense.

Phase I ESA under AAI/ASTM International must be done by Environmental Professionals (EP). EP person who has

1. Sufficient specific education, training, and experience to exercise professional judgment to develop opinions and conclusions regarding the presence of releases or threatened releases of hazardous substances; AND
2. Holds professional engineer or professional geologist license, or other state, federal, or tribal certification or environmental professional license and has 3 years of relevant full-time experience; OR
3. Has a degree in science or engineering and 5 years of relevant full-time experience; OR
4. Has 10 years of relevant full-time experience.

A Phase I ESA covers the following areas:

- Conducting historical research into the previous ownership and uses of the property, such as -
 - Reviewing recorded title chain and other documents (i.e., deeds, easements, leases, restrictions, and covenants (ASTM International specifies that every search must go back to a properties first developed use, or back to 1940, whichever is earlier)
 - Reviewing aerial photographs reflecting prior uses; and
 - Determining the existence of recorded environmental liens.
- Making a comprehensive records search (See ASTM International E 1527 – 05, Phase I ESA Process, Item #8 reference for Records Review) at the Federal, State, and local levels.
- Making a critical visual site inspection of the subject property and of the immediate adjacent properties, including but not necessarily limited to a look for any chemical uses, storages, treatment and disposal operations on the property.
- Interviews – interviewing past and present owners, operators and occupants
- Identifying any Recognized Environmental Conditions (REC) associated with the site and its adjacent surroundings.

NOTE: In the Phase I ESA, no sampling or testing is required. In the Phase I ESA no tests are made of materials (i.e., no air, water, soil, or site substances are tested or analyzed).

*ASTM International, formerly known as ASTM (American Society for Testing and Materials) Standard E 1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process

All Appropriate Inquiries:

On November 1, 2005, EPA issued a final rule setting federal standards for the conduct of all appropriate inquiries (http://www.epa.gov/brownfields/aai/proposed_rule.htm). This final rule becomes mandatory on November 1, 2006, and clarifies some of the many “hoops” a purchaser of potentially contaminated land must go through to claim certain liability protections for certain landowners, including “innocent landowner” defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

An ASTM International Phase I Assessment may meet the standard for all appropriate inquiries. Some of the inquiries a potential land purchaser must conduct are the following:

- Obtain the results of an inquiry by an environmental professional.
- Interview past and present owners, operators, and occupants of the facility for the purpose of gathering information regarding the potential for contamination at the facility.
- Review historical sources, such as chain of title documents, aerial photographs, building department records, and land use records, to determine previous uses and occupancies of the real property since the property was first developed.
- Search recorded environmental cleanup liens against the facility that are filed under federal, state, or local law.
- Review federal, state, and local government records, waste disposal records, underground storage tank records, and hazardous waste handling, generation treatment, disposal, and spill records, concerning contamination at or near the facility.
- Inspect visually the facility and adjoining properties.

Additional considerations include:

- Specialized knowledge or experience on the part of prospective purchaser.
- The relationship of the purchase price to the value of the property, if the property was not contaminated.
- Commonly known or reasonably ascertainable information about the property.
- The degree of obviousness of the presence or likely presence of contamination at the property, and ability to detect the contamination by appropriate investigation.

Reference: Federal Register, 40 CFR Part 312 Standards and Practices for All Appropriate Inquiries; Final Rule November 1, 2005.

B. Step 2: The Phase II Environmental Site Assessment (ESA)

The Phase II assessment is best described as a quantitative assessment. It involves the actual testing for specific hazards that have been indicated from the Phase I assessment or by any additional Recognized Environmental Conditions (RECs) noticed during the Phase II EP, such as soil sampling (soil boring), water analysis (includes both ground and surface water), onsite substances, and direct testing of the property — (Recognized Environmental Conditions). RECs maybe identified during the Phase I ESA.

Sample collection and testing is generally done independent of a Phase I Assessment.

The primary objectives of conducting a Phase II ESA are: (a) to evaluate the recognized environmental conditions identified in the Phase I ESA process for the purpose of providing sufficient information regarding the nature and extent of contamination; (b) to assist in making informed business decisions about the property; and (c) where applicable, to provide the level of knowledge necessary to satisfy the innocent landowner defense under CERCLA. At the completion of a Phase II ESA, the program participant, grant recipient, responsible entities, and sponsors or owners should understand and know that either:

1. there is no reasonable basis to suspect the presence of hazardous substances or petroleum products at the property associated with the recognized environmental conditions under assessment, OR
2. the ESA has confirmed the presence of hazardous substances or petroleum products at the property under conditions that indicate disposal or release.

Depending upon the work scope, the professional conducting the ESA may be able to provide guidance on the nature and extent of the contamination. Knowledge and understanding of the extent of contamination should assist the potential user in making a decision about the property. If the information developed in the ESA is insufficient to reach either of these conclusions, additional iterations of an environmental site assessment may be warranted.

However, if unconfirmed hazardous substances or petroleum releases remain but further assessment is not warranted, such conclusions should be accompanied by a written explanation, by the professional conducting the assessment.

C. Step 3: Management

Step Three is a management action stage. It involves an assessment of the seriousness of the hazard(s) and extent of contamination, cost estimates for remediation or clean-up, and recommendations. Based on the findings of ESA reports, what further corrective action is determined? The action may include:

1. The removal, along with the appropriate transport and disposal, of any contaminants or hazardous materials; AND
2. Clean-up of any contaminated materials on the site; or
3. The development of a plan to manage and control the hazards.

Note: ASTM International (formerly ASTM, American Society for Testing and Materials) established a framework for employing good commercial and customary practices in conducting Phase I and Phase II environmental site assessments (ESA) of a parcel of property with respect to the potential presence of a range of contaminants that are within the scope of CERCLA as well as petroleum products. The ASTM ESA standard practices are intended to provide practical procedural guidance.

Lowering your risk / Vulnerability

A. Demand that the Seller/Donor Make Full Disclosures About the Environmental Conditions of the Property

1. Insist on having language included in the site contract documents that address liability for environmental problems. Consult with an attorney, if necessary. Include protective language that:
 - a. Addresses who has financial obligation and responsibilities for removal, transport, disposal, clean up or abatement action;
 - b. Allows for property ESAs before acquisition;
 - c. Allows cancellation of the contract if the Phase-I or disclosures reveal problems;
 - d. Addresses seller warranties of conditions; and
 - e. Addresses seller indemnification.
2. Use state or local "Property Transfer" statutes, if available. These statutes often contain provisions for disclosure of environmental problems.

B. Beware of the Overanxious Seller/Donor. Be Alert To —

1. Property being sold "as-is"
2. Seller/Donor's reluctance to allow an environmental inspection.
3. Seller/Donor's reluctance to accept contingency clauses.
4. Seller/Donor's unwillingness to disclose information about the property.
5. Any unexplained concessions in price to speed up the real estate transaction.

C. Consider An Alternate Site

If the findings of the Phase I Assessment or an environmental professional provide sufficient evidence that the property has recognized environmental concerns (REC), consider an alternate site. Always keep in mind the related and necessary clean-up actions, abatement, time and associated cost that would be your responsibility.



D. Become Familiar with Environmental Laws/Regulations

Seek Help from Professionals Who Can Interpret these Laws and Regulations for You.

1. Federal “Superfund” Statutes – CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by SARA (Superfund Amendments and Reauthorization Act).
 - m Define who is an Owner of hazardous waste sites.
 - m Assign strict, joint, and several liabilities. Parties involved in the real estate transaction may find themselves paying for clean up of hazardous waste.
- Establishes defenses -
 - m Acquisition of property by inheritance or bequest
 - m Landowners’ relief for innocent purchasers
 - m Third party provisions
2. Resource Conservation and Recovery Act, as amended (also known as RCRA). Contains special provisions concerning Underground Storage Tanks (UST’s):
 - a. Usually enforced by
 1. State or Municipal Environmental Protection Agency entity rather than Protection Agency - Leaking Underground Storage Tanks (LUST’s) Program
 2. State Fire Marshal - Registry and Financial Responsibility
 3. Fire Marshal - Inspection and Permitting
 4. State or Municipal Emergency Services and Disaster Agency
 - b. Defines and regulates Treatment, Storage or Disposal Facilities (TSD) of hazardous wastes - EPA maintains a TSD Facilities List.
3. Asbestos Regulations. Contact the U.S. Environmental Protection Agency (EPA) to obtain a copy of the Asbestos Facts: Demolition and Renovation Regulations (Publication A87)
4. The Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X): Contact Federal and/or Local HUD Office(s) to obtain a copy of this document.
5. Environmental Justice
(<http://www.hud.gov/offices/cpd/energyenviron/environment/subjects/justice/index.cfm>)
 - Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”.
 - m Directs select federal agencies (identified in the Executive Order) to incorporate environmental justice as part of their overall mission. HUD is included among those listed.
 - Its purpose is to assure fair environmental protection so that no segment of the population, regardless of race, ethnicity, culture, or income bears a disproportionate burden of the consequences of environmental pollution (e.g., to ensure that no one part of the population, primarily minority and low-income, receives inequitable treatment in the location of housing designed for their needs).

NOTE: Take care in choosing the site/location for your project. The site you choose should never raise an environmental justice concern.

Note: A list of the HUD, EPA, and other federal agencies, their program hotline telephone numbers and web addresses are found at the end of this guide for your reference.

Liability Protections

As a result of 2002 CERCLA Amendments, there are three different types of liability protections: (1) the innocent landowner defense, (2) the bona fide prospective purchaser, and (3) the contiguous owner exemption. An explanation of each follows.

All of these liability protections require that the landowner demonstrate by a preponderance of the evidence that the owner made “all appropriate inquiry” before acquiring the land and that the owner is not potentially liable or “affiliated” with any other person who is potentially liable for response costs at the property.

Furthermore, all of these defenses require that the landowner demonstrate by a preponderance of the evidence that the owner has met the five continuing obligations discussed below. These continuing obligations are identified in EPA’s “Common Elements” Guidance and can be found at

<http://www.epa.gov/compliance/resources/policies/cleanup/superfund/common-elem-guide.pdf>.

These continuing obligations are:

- Complying with land-use restrictions;
- Taking “reasonable steps” for hazardous substances affecting the property;
- Cooperating and providing assistance or access to parties implementing remedies;
- Complying with information requests; and
- Providing all required notices.

This is particularly important for the sponsor-applicant who may lease contaminated property from a pre-enactment landlord who does not qualify for the bona fide prospective purchaser (BFPP) defense, after the enactment of the 2002 CERCLA Amendments. In these instances, sponsor-applicants should exercise due diligence, conduct their ASTM Phase I ESA, and to the extent possible, avoid leasing property that may be contaminated altogether.

(1) Innocent Landowner Defense

The innocent landowner defense provides liability protection to persons who bought without knowing, or having reason to know, of contamination on the property.

(2) Bona Fide Prospective Purchasers (BFPPs)

Under the BFPP exemption, landowners or tenants who knowingly acquire or lease contaminated property after January 11, 2002, can avoid CERCLA liability if they can demonstrate that all disposal of hazardous substances occurred before the purchaser acquired the facility.

(3) Contiguous Property Owner

Landowners who own property that is or may be contaminated but is not the original source of the hazardous substance contamination are exempt from CERCLA liability. Such property is “contiguous” to, or otherwise similarly to, a facility that is the source of contamination found on their property.

Different Programs, Different Requirements

A. Section 202 and Section 811 Programs

To help Sponsors focus on this important issue, HUD requires applicants that are planning on submitting an Application for a Section 202 and/or Section 811 Fund Reservation to conduct an environmental review/assessment of their proposed sites by completing a Phase I Environmental Site Assessment and, if required based on findings of REC*, a Phase II Environmental Site Assessment. In the Section 811 program, this requirement applies only to applications with evidence of site control. Sponsors of Section 811 applications with identified sites must fulfill this requirement once they obtain control of their sites. The environmental assessments are to be done in accordance with the ASTM International, Standard E 1527-05. Your consultant, architect, attorney, or engineer should be able to provide you a copy of the ASTM International standards. Also, to obtain these materials (for a cost), you may write ASTM International directly at the following address: ASTM INTERNATIONAL, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959 Fax: (610) 832-9555, PH: (610) 832-9585, and/or purchase online at www.astm.org

- All Section 202 Sponsors and Section 811 Sponsors with site control must complete and submit a Phase I Environmental Site Assessment. This must be submitted with the Application for a Fund Reservation.
- If the Phase I Environmental Site Assessment indicates the possible presence of contamination and/or hazards, the Sponsor must decide whether to continue with the original site or choose another site.
- If the Sponsor chooses another site, another environmental site assessment (the Phase I Assessment) must be completed for the new site and submitted with the Application for a Fund Reservation.
- If the Sponsor chooses to continue with the original site, a detailed Phase II Environmental Site Assessment by an appropriate recognized professional (s) will have to be completed and submitted to the local HUD Office by the deadline date specified in the current Section 202 or Section 811 Notice of Fund Availability (NOFA)
 - m If the Phase II Environmental Site Assessment reveals site contamination, the extent of the contamination and a plan for clean up of the site also must be submitted to the local HUD Office by the deadline date identified in the NOFA.
 - m The plan for clean up must include a contract for remediation of the problem(s) and an approval letter from the applicable Federal, State, and/or local agency with jurisdiction over the site.

NOTE: The Phase II Environmental Site Assessment could be an expensive undertaking. All costs associated with the environmental assessments described in this section must be borne by the Sponsor if the application is not selected. Although remediation must be borne by the Sponsor/Owner.

B. Other HUD Program Participants and Grant Recipients

1. Phase I Environmental Site Assessments (ESA) are required for all HUD/FHA Multifamily housing* mortgage insurance programs.
2. Phase I Environmental Site Assessments (ESA) are required for Public and Indian Housing Hope VI programs.

* For additional requirements, consult chapter 9 of Multifamily Accelerated Processing (MAP) Guide "May 2000" available from the U.S. Department of Housing and Urban Development.



3. Phase I Environmental Site Assessments (ESA) may be required for the Community Planning and Development's Home program, Shelter Plus Care, Emergency Shelter Grants Program, Surplus Property for Use to Assist the Homeless, Supportive Housing Program, Section 8 Moderate Rehabilitation Single Room Occupancy Program, Youthbuild, and Housing Opportunities for Persons With AIDS.

Applicants that are required to comply with either 24 CFR Part 50 or 24 CFR Part 58 are encouraged to use "Choosing an Environmentally Safe Site" to augment their environmental analysis.

Be Suspicious of a "Good" Deal

Some recipients of HUD assistance, like Section 202 and Section 811 Sponsors, are nonprofits and organized for charitable purposes. Sponsors, nonprofits, as well as others are not only looking for the "right" site and location but also a good deal on the purchase price. It is not unusual for potential grant recipients to:

1. Accept or be offered donated property (including existing structures or land or both);
2. Target blighted neighborhood structures or land for housing or economic redevelopment; or
3. Obtain properties at bargain basement prices, with low-interest loans and grants, or through "special deals" with federal or local government housing or community development agencies or programs, or private sector offerings.

In spite of good intentions, donated property and property acquired, based on special deals, are no longer the clear-cut benefit they once were. If the property you acquired contains toxic (or hazardous) wastes, underground storage tanks, asbestos, or lead, mere ownership of a contaminated site can be enough to make your organization or you liable for all clean-up costs.

BEWARE!

Even if you can demonstrate and legally prove that you, the most recent one to acquire the property, "did not" contaminate or contribute (transfer, store, or dispose of) wastes to the property, and the previous owners/operators of the property can be found and are solvent, you, should be prepared to face a legal battle. Meanwhile, the development of the property may be suspended indefinitely, or at least until the issue is resolved.

Getting Acquainted with Certain Potential Environmental Problems

A. Toxic and Hazardous Substances

Toxic and hazardous substances can be described as the "spoils" and byproducts (or residuals) of industrial and some agricultural operations. This category of wastes includes solids, liquids, or gases that threaten the environment and human health. However it is important to note that hazardous and toxic materials are used also in the manufacture and production processes. As a result such substances are not always "wastes", byproducts or residuals. Toxic and hazardous substances may be ignitable, corrosive, or reactive, and contain high concentrations of metals, pesticides, chemicals, etc. that when released, contaminate soils, ground and surface water, and air. Toxic agents are classified as such, because of their carcinogenic, mutagenic (gene-changing), or teratogenic (causing fetal abnormalities/birth defects) characteristics.

REMEMBER: A site that appears to be free of toxic and/or hazardous waste could be contaminated as a result of current or previous operations of adjoining or neighboring facilities.

It is possible for a site to have multiple toxic and hazardous substances - in contaminated soils, sitting in tanks (above and below ground), impounded in buildings, and dumped into wells, adjacent to, or onto open space surrounding the building. In this case, the material might be buried improperly in pits where their leaking can contaminate surface and ground water and soils.

B. Underground Storage Tanks (USTs)

USTs, by themselves, are not dangerous. It is their contents and propensity to leak that presents the potential contamination. Until recently, most USTs were constructed of material that rusted, corroded, and had no leak detection or protection devices. Consequently, once rusted, the tank's contents easily contaminated surrounding soil and groundwater. Groundwater contamination can cause significant cleanup problems. According to the Environmental Protection Agency, a single gallon of gasoline can render as much as one million gallons of water undrinkable.

USTs were and are used most often by the petroleum industry, as well as other commercial facilities, where processing requires onsite application. For example, dry cleaning operations normally store chemicals onsite in USTs. This results in storage of large amounts of chemicals. To reduce the risk of fires and explosions, chemicals and petroleum products are stored underground in USTs.

Many residential properties also have USTs for heating oil and other uses. Because it is cheaper to place these tanks above ground, the tanks for some residential properties are located above ground.

- Gasoline stations
- Former research, military, commercial, or industrial use sites
- Former mill sites
- Lumber yards
Building/hardware supply
- Vehicle repair shops
- Car dealerships
- Garages
- Depot
- Warehouses, Slaughterhouses
- Commercial printing facilities
- Dry cleaners
- Photo developing laboratories
- Hospitals, medical or veterinary facilities
- Junkyards or landfills
- Waste treatment, storage, disposal, processing or recycling facilities
- Agricultural/farming operations
- Tanneries
- Paint manufacturers or suppliers

Underground Storage Tanks –

If you acquire a site with an UST, you may be responsible for the cost of removing it, as well as, cleaning up the site if it later is found to have been contaminated.

If you acquire a site that had USTs or the USTs were removed prior to you acquiring the site, but without any further testing for contamination, you still could be financially liable for cleanup costs and any costs of compensating other people for bodily injury and property damage.

REMEMBER – Exercise due diligence, caution, and be suspicious if the site either has or had, but not limited to, any of these listed operations:



Resources to Help You Identify Suspect Properties

Knowing what sites to avoid may be difficult if the land use for the site changed over time. The following aids can help you assess probable location of USTs by land use:

Sanborn Fire Insurance Map

- These are often contained in Phase I' s prepared by professionals.
- Aid fire insurance companies in evaluating risk
- Designate gasoline stations
- Identify other land uses on a block-by-block basis
- Date to the late 19th Century (for some parts of the U.S.) making it possible to trace uses of a land parcel from the 1880's to the present day

Registry of USTs

- EPA requires each state to develop a UST regulatory program
- Many states/localities maintain public records in the State Fire Marshal's Office or its equivalent, Ground-water Management Division, or State Emergency Planning and Management Agency
- Some states/localities developed their own UST regulatory programs and you will have to contact the responsible office that oversees the program

U.S. Environmental Protection Agency (EPA)

- If all else fails and you are still uncertain, contact the U.S. Environmental Protection Agency's Office of the Underground Storage Tank.
- The local HUD Office can provide you with the appropriate EPA Office or you can contact EPA directly at the appropriate hotline telephone number that is attached to this guide.



C. Asbestos

Asbestos refers to a family of mineral silicates - six naturally occurring fibrous minerals found in certain types of rock formations. Of the six minerals, three - chrysotile, amosite, crocidolite - have been used most commonly in building products.

Because of its unique characteristics - resilience, weightlessness, corrosion-resistance nature, low conductivity, and, more importantly, its inability to burn, asbestos was used in many buildings, pipe and boiler insulation, and spray on fireproofing and in commercial products such as floor tiles, roofing and sound roofing, ceilings, sealants, cement pipe, decoration, paper products, textiles, appliances. Most uses have been forbidden since early 1970's. Asbestos is not biodegradable or easily destroyed.

Asbestos or asbestos-containing-material (ACM) -i.e., any material or product that contains more than one percent asbestos - can be grouped into two broad categories –

Friable Asbestos:

Materials and products which, when dry, can be crumbled, pulverized, disturbed, punctured or otherwise easily reduced to powder by mere hand pressure.

Friable asbestos and ACM emit fibers easily into the air when disturbed and once emitted, asbestos fibers are easily inhaled. When inhaled in sufficient quantities, asbestos and ACM can cause serious health problems including lung cancer and Mesothelioma. Asbestos-caused symptoms and diseases can take as long as 20 or more years before being diagnosed.

Non-friable Asbestos:

NOTE!!! When asbestos fibers become airborne, they pose the greatest human health threat.

Asbestos fibers that are bound and contained within a hard or solid matrix, such as roofing, siding, or flooring and are not prone to escape or emit fibers under ordinary use.

However, once disturbed in renovation, demolition, or rehabilitation activities, these may release asbestos fibers into the air.

How to Determine the Existence of Asbestos in a Building that You Are Considering Acquiring

1. Hire a licensed or certified asbestos inspector to inspect (should be a comprehensive survey) the property.
2. Collect and submit (should only be done by licensed party) sample materials to the National Voluntary Laboratory Accreditation Program (NVLAP) Laboratory qualified to conduct asbestos testing.

Finding an approved Laboratory: To assure quality laboratory testing, EPA maintains a national listing of approved laboratories that test samples for their asbestos contents. Contact EPA to obtain this information. Refer to the EPA program hotline telephone numbers that are attached to this guide.

For additional information – Asbestos Publication –

“Guidance for controlling Asbestos Containing Material in Buildings (also known as the Purple Book)” can be obtained by calling (202) 554-1404.



Abating Asbestos

Federal/State Requirements

The removal of asbestos is expensive. At the State and local level, a wide variety of asbestos regulations and guidelines have been established. Many States have either adopted the Federal rules or created something comparable or more stringent. As with other hazards, there are both federal regulations, and in most instances, comparable state requirements that regulate:

- Licensing of contractors, inspectors, laboratories, project safety monitors and asbestos abatement actions.
- Worker exposure to asbestos.
- Procedures for abating asbestos when building undergoes renovation or demolition.
- Disposal (transport, storage and disposal) of asbestos-contained materials.

The Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) have been concerned with the potential health hazards associated with exposures to asbestos since the early 1970s. They have major responsibility for Federal regulatory control over exposure to asbestos. The EPA regulates asbestos procedures for renovation (modernization and other actions that require removal of ACM) or demolition (including partial demolition) actions under the NESHAPS (National Emission Standards for Hazardous Air Pollutants) Parts of the Clean Air Act and require notification and strict work practices for asbestos handling, removal, storage and transport under 40 CFR Part 61, Subpart M and 40 CFR Part 763.

Options for Minimizing the Risk of Asbestos Exposure

Removal -

- EPA requires the removal of all friable asbestos before demolition, renovation, or rehabilitation take place.
- This is the most expensive, complicated and strictly regulated option.

All demolition activities require EPA notification, including those that do not involve ACM. Also, EPA has developed special guidance on how to avoid the asbestos Clean Air Act requirements by taking specialized measures during ACM removal activities.

The EPA regulations address removal of friable asbestos material prior to the demolition or renovation of buildings. Removal should be considered for materials that may potentially become friable during demolition/rehabilitation activities. A significant quantity of asbestos-containing waste may be generated during removal of friable asbestos material from buildings.

Encapsulation, Enclosure, and an acceptable Operations and Maintenance Plan -

- Under these options, the asbestos and ACM remain in place.
- These options are not as costly as the removal option, but available guidelines still must be followed.

All ACM left in place is subject to an Operations and Maintenance Plan (O&M Plan) being prepared and instituted. However, encapsulation, enclosure, and an O&M plan are not available options for friable asbestos where demolition, renovation or rehabilitation is planned.

NOTE: Regardless of the option you choose, it is in your organization's and projects best interest to hire a qualified asbestos contractor.

D. Lead-Based Paint Hazards

Lead-based paint hazards include deteriorated lead-based paint; lead-based paint on friction surfaces, impact surfaces and chewable surfaces; and dust and soil that has become contaminated with lead above qualified standards. The most wide spread source of lead exposure in the environment is old lead-based paint that was applied to residential buildings before 1978. In 1978, the Consumer Project Safety Commission banned the use of leaded paint (lead-based paint). Lead poisoning is one of the most common health hazards to humans. Anyone can contract lead poisoning. Childhood lead poisoning is considered a major health problem because of its extremely damaging and irreversible adverse effects.

The primary source of lead exposure results from the inhalation or consumptions of lead from the chipping and peeling of lead-based paint and paint dust, exterior walls, baseboards, and interior wood trim such as door and window trimmings. There are, however, other sources of lead in the environment. These include lead in drinking water—usually from lead in old pipes and soldered joints, old toys or furniture painted with leaded paint, home hobbies that involve lead, clothing that has been contaminated at the work place, some ethnic home remedies, and other materials. Lead exposure (and poisoning) can occur from lead in the air, dust, soil, food, and certain commercial products, such as automotive and industrial batteries.

Health effects of lead of lead exposure poisoning from high levels of lead exposure can include severe retardation, coma, even death, although death from lead poisoning is now rare. More common effects are neurological and behavioral effects resulting from lower levels of exposure. Recent research indicates that lead exposure is linked to reduced intelligence and attention span, reading and learning disabilities and behavioral problems. While children (including pregnant women) are the most vulnerable and susceptible to adverse health effects, lead poisoning may affect individuals with compromised immune systems and the elderly.

In 1992 Congress mandated reduction of lead-based paint hazards in federally owned residential property, and in federally assisted housing. HUD is authorized to require lead-based paint hazard control measures in federally assisted housing, community development, and loan guarantee programs.

Determining the Presence of Lead

The risk of the presence of lead in older buildings that you plan on acquiring may result in an expensive lead mitigation. There may be health risks to the occupants and, the possibility of civil liability or criminal penalties if lead is present, but is neither abated nor removed. The cost of lead abatement or removal, by itself, may be significant.

Inspections determine whether or not lead-based paint is present, and if it is, where it is located, regardless of whether or not it is currently a hazard. Risk assessments determine whether or not lead-based hazards exist and, if they do, where they are located. If proper precautions are not taken, renovation remodeling and maintenance, including repainting, can generate large amounts of lead contaminated soil and dust.

NOTE: The risk of the presence of lead in older buildings that you plan on acquiring may result in an expensive acquisition. Consider the health risk to the occupants and the possible costs of civil liability and criminal penalties if lead is present, but neither detected or removed. Also, the cost of lead removal or abatement, by itself, may be significant.



Abating and Controlling Lead

There are several elements to successfully addressing lead-based paint hazards, including:

- an informed public, aware of lead hazards in housing and knowledgeable about how to protect themselves and their children;
- practical methods of hazard identification and control that are effective, safe, and affordable;
- trained and certified (licensed) inspectors, risk assessors, abatement contractors and workers, as well as certified laboratories;
- available financing and liability insurance for property owners and contractors; and
- organizations and processes at the State and local levels to administer lead-based paint programs.

Abatement means any set of measures designed to permanently eliminate lead-based paint or lead-based paint hazards.

Abatement includes: (1) the removal of lead-based paint and dust-lead hazards, the permanent enclosure or encapsulation of lead-based paint, the replacement of components or fixtures painted with lead-based paint, and the removal of permanent covering of soil-lead hazards; and (2) all preparation, clean-up, disposal, and post abatement clearance testing activities associated with such measures.

Interim controls include a set of measures designed to reduce temporarily human exposure or likely exposure to lead based paint hazards. Interim controls include, but are not limited to, repairs, painting, temporary containment, specialized cleaning, clearance, ongoing lead-based paint maintenance activities, and the establishment and operation of management and resident education programs. A person performing interim controls must be trained, or have successfully completed courses from either the list of HUD approved courses as of May 1, 2002, or more recent, or be supervised by an individual certified as a lead-based paint abatement supervisor.

Find out what state and local programs exist regarding lead blood screening for children that may affect your organization. You can obtain HUD's "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" from the National Lead Information Clearinghouse, at 1.800.424-LEAD, or by downloading from www.hud.gov/lead. You can also obtain EPA's "Reducing Lead Hazards When Remodeling Your Home" from the Clearinghouse or by downloading the document from www.epa.gov. Another source is HUD's comprehensive guidance, Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, by downloading from www.hud.gov/lead or by mail from HUD USER at 1.800.245.2691.

NOTE: Do not assign this task to a general contractor, volunteers or occupants. Hire only certified lead abatement contractors for complete removal and abatement of lead-based paint (LBP), as they will be familiar with applicable federal and state requirements for removal and disposal.

IMPORTANT FACTS: For specific requirements and information concerning lead abatement and control, you should consult 24 CFR Part 35—Lead-Based Paint Poisoning Prevention in Certain Residential Structures.

REMEMBER: Some states have mandatory lead blood screening for children, such as Illinois. The owner of a building occupied by a child with an elevated/heightened lead blood level at a minimum may face a court hearing or a court order to clean-up the property along with fines. Ignoring a potential lead problem, as with the other possible hazards, can be costly.

For additional information —

Get a copy of the EPA-HUD and CPSC (Consumer Product Safety Commission) brochure entitled **“Protect Your Family From Lead in Your Home”**; Contact your local Health Department; or you can call the National Lead Information Clearinghouse, at 1-800-424-LEAD for publications or answers to specific lead-related questions. The Clearinghouse provides information in English and Spanish. For technical information, you can call the HUD Office of Lead Hazard Control, at (202) 708-0614, ext. 7698; or you can e-mail HUD at lead_regulations@hud.gov. You can obtain the regulation, including its “preamble” (an explanation of issues and policies), by downloading from the Internet at www.hud.gov/lead, or by mail from the National Lead Information Center at 1-800-424-LEAD.

You can obtain copies of controlling Lead-Based Paint Hazards in Housing Receiving Federal Assistance and Federally Owned Housing by downloading from the Federal Register web site, www.gpoaccess.gov/nara/index.html or by mail, for a fee, from the Government Printing Office at 1-202-512-1800 (this is a toll call). There is no difference between the copies available from the HUD web site, the National Lead Information Center, the Federal Register web site, or the Government Printing Office.

It is important to note that an occurrence of heightened lead blood levels may result in your organization becoming liable for remediation activity. In all localities, a doctor who identifies the heightened lead blood levels may be required to report such a finding to the local health authorities that, in turn, may have the power to require lead abatement for the child’s living environment.





Organizations Web Page and Phone Number

OFFICE OF POLLUTION PREVENTION AND TOXICS

www.epa.gov/opptintr
(202) 544-1404

CHEMICAL EMERGENCY PREPAREDNESS AND PREVENTION OFFICE

www.epa.gov/ceppo
(800) 424-9346

RECYCLING HOTLINE

www.recycle.net/recycle
www.cleanup.org
(800) 253-2687

NATIONAL LEAD INFORMATION CLEARINGHOUSE

www.epa.gov/lead/
(800) 424-5323

NATIONAL RESPONSE CENTER FOR SUBSTANCE RELEASE REPORTING OIL SPILLS AND HAZARDOUS

www.nrc.uscg.mil
(800) 424-8802

DEPARTMENT OF ENERGY (DOE) NATIONAL ALTERNATIVE FUELS HOTLINE

www.afdc.nrel.gov
(877) 337-3463

DOT, TRANSPORTATION OF HAZARDOUS MATERIALS

<http://hazmat.dot.gov>
(800) 467-4922

U.S. EPA RCRA, SUPERFUND AND UNDERGROUND STORAGE TANKS HOTLINE

www.epa.gov/epaoswer/osw/comments.htm
(800) 424-9346

U.S. EPA UNDERGROUND STORAGE TANKS

www.epa.gov/oust
(703) 603-9900

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

www.osha.gov
(800) 321-6742

NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH

www.cdc.gov/niosh/homepage.html
(800) 356-4674

NATIONAL CENTER FOR ENVIRONMENTAL PUBLICATIONS

www.epa.gov/ncepihom/ordering.htm
(800) 490-9198

INDOOR AIR QUALITY INFORMATION CLEARINGHOUSE

www.epa.gov/iaq/
(800) 438-4318

HAZARDOUS WASTE CLEAN-UP

<http://clu-in.org/>

CLEAN AIR TECHNICAL CENTER

www.epa.gov/ttn/catc
(919) 541-0800

RADON

www.epa.gov/iaq/radon
(800) 767-7236

STRATOSPHERIC OZONE INFORMATION

www.epa.gov/ozone
(800) 296-1996

SAFE DRINKING WATER HOTLINE

www.epa.gov/safewater/index.html
(800) 426-4791

POLLUTION PREVENTION INFORMATION CLEARINGHOUSE

www.epa.gov/opptintr
(202) 566-0799

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW TITLE III (EPCRA)

(800) 424-9346

TOXIC SUBSTANCE CONTROL ACT (TSCA) AND ASBESTOS INFORMATION SERVICE

(202) 554-1404
www.epa.gov/asbestos

NATIONAL PESTICIDE TELECOMMUNICATIONS NETWORK

<http://ace.orst.edu/info/nptn>
(800) 858-7378

EPA WASTE WISE/WASTE REDUCTION

www.epa.gov/wastewise
(800) 372-9473

U.S. Department of Housing and Urban Development



I. Environmental Compliance Rules and Regulations

These are the HUD-issued environmental rules which determine the scope and content requirements of environmental assessments for actions receiving HUD assistance. <http://www.hud.gov/cpd/cpdenvir.html>

A. 24 CFR Part 50: Protection and Enhancement of Environmental Quality

Used By: HUD Staff. This is the Department's basic regulation that implements the National Environmental Policy Act (NEPA), the regulations of the Council on environmental Quality (CEQ), and other related Federal environmental laws and authorities. HUD Form 4128 (including the Sample Field Notes Checklist) is also used by HUD staff to document compliance with this regulation.

B. 24 CFR Part 58: Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities

Used By: State, local and Native American governments. The procedures outlined in this regulation are used by entities that assume responsibility for the implementation of the National Environmental Policy Act (NEPA) and other related statutes. Applicable HUD programs under this regulation include only those in which a specific statute allows governing entities to assume the Federal responsibility.

C. 24 CFR Part 51: Environmental Criteria and Standards

Used By: HUD Staff and State, local and Native American governments. This regulation provides environmental standards for development in the living environment. The environmental criteria include noise abatement and control, the siting of HUD-assisted projects near hazardous operations, and potential zones at military airfields.

Subpart B – Noise Abatement and Control

Subpart C – Siting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature

Subpart D – Siting of HUD Assisted Projects in Runway Clear Zones at Civil Airports and Clear Zones and Accident Potential Zones at Military Airfields

D. 24 CFR Part 55: Floodplain Management

Used by: State, local and Native American governments. This regulation implements the Executive Order on development in floodplains.

E. 36 CFR Part 800: Protection of Historic Properties

Used by: HUD Staff, State, local and Native American governments. The Advisory Commission on Historic Preservation Rules, used by HUD for all HUD projects.

II. Healthy Homes and Lead Hazard Control

This office provides technical assistance to the general public and housing programs that receive federal assistance under the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as Title X. The Act requires notification, evaluation, and remediation of lead-based paint and lead-based paint hazards in pre-1978 housing. www.hud.gov/offices/lead/

III. Healthy Communities Environmental Mapping

HUD E-MAPS <http://egis.hud.gov/egis/> is a free Internet tool created in partnership with EPA that provides location, type and performance of HUD-funded activities in every neighborhood across the country, and select EPA information on brown fields, hazardous wastes, air pollution and waste water discharges.