

## CHANGES TO THE PHASE I - ENVIRONMENTAL SITE ASSESSMENT Environmental Due Diligence for Commercial Property Transactions

### ABSTRACT

Environmental due diligence is usually performed during the transaction of a commercial property or business. The environmental due diligence is performed on behalf of a party or parties to the transaction to better understand the potential for environmental liabilities and costs associated with the property or business. ASTM Standard E 1527-00 has been the standard of practice used for environmental due diligence and was acceptable to most agencies and lenders. However, after the recent 2002 Brownfields Amendments (the Small Business Liability Relief and Brownfields Revitalization Act), Congress required the United States Environmental Protection Agency (EPA) to develop a rule for "All Appropriate Inquiry" to assess if conditions could exist on a property for releases of hazardous substances and/or petroleum products. *All Appropriate Inquiry* is an investigation, prior to purchase, of the previous uses, ownership, and environmental conditions of a property, and is required for a purchaser to be eligible for liability defenses under CERCLA, including the innocent landowner, contiguous property owner, or prospective purchaser defenses.

The Final Rule for *All Appropriate Inquiry* takes effect on November 1, 2006. To address the requirements of the Final Rule (40 CFR Part 312), ASTM has issued an update to the standard practice for Phase I environmental site assessments; the update is E 1527-05 Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The EPA has determined that the new ASTM standard E 1527-05 is in *full compliance* with the requirements of the new rule.

There are some important differences between the previous and the updated version of the ASTM standard resulting from new requirements of the Final Rule for *All Appropriate Inquiry*. The key differences in the requirements are discussed below. Additionally, some current issues driving legislation in some states, including California, dealing with potential future liability concerns are also discussed.

### KEY DIFFERENCES – BEFORE AND AFTER *ALL APPROPRIATE INQUIRY*

#### Qualifications of Persons Performing a Phase I ESA

Prior to the EPA All Appropriate Inquiry (EPA AAI) regulation, there was a broad definition for the person (environmental professional) performing a Phase I Environmental Site Assessment (ESA). An environmental professional could simply be a person possessing sufficient training and experience necessary to conduct a site reconnaissance, interviews, and other activities...etc.

The EPA AAI and updated ASTM E 1527-05 require an environmental professional to have specific education, licensure, and/or relevant experience (see EPA AAI or ASTM E 1527-05 for specific details) as listed below:

- Hold a current Professional Engineer or Profession Geologist license and have the equivalent of three years relevant experience,

- Hold a current registration, license, or certification from the Federal government, a state, tribe, or U.S. territory and have three years relevant experience,
- A person without a registration, license, or certification may qualify with a Bachelors or higher degree from an accredited school in science or engineering and five years relevant experience, or additional experience is required (10 years) without a degree or license.

### **Interviews with the Current Owner and Occupants**

Before the EPA AAI, only a reasonable attempt to interview key people that may have knowledge of the property including the site manager, occupants, or the current owner was suggested.

The EPA AAI and updated ASTM E 1527-05 now require an interview with one or more of the current and past managers, owners, occupants, employees, and operators of the property that may have knowledge. This mandatory interview requirement may raise confidential issues concerning the transaction for the buyer or the seller. Additionally, if the property involved in the transaction is abandoned, interviews are required with neighboring property owners or occupants that may have knowledge of the property in question.

### **Identification of Data Gaps**

Data gaps and the associated importance of such missing data did not have to be evaluated under ASTM E 1527-00.

The EPA AAI and updated ASTM E 1527-05 require the identification of data gaps by the environmental professional performing the Phase I

– ESA. Further, the environmental professional must provide an opinion as to whether the data gaps affect the ability to identify a condition of a release or potential release on the property. The updated ASTM standard also requires the environmental professional to identify any sources of information consulted to address the data gaps.

### **Purchase Price Relative to Market Price Without Contamination**

The purchaser of the property, prior to EPA AAI, was encouraged to explain a reduced purchase price relative to comparable properties.

According to EPA AAI and ASTM E 1527-05, the purchaser is required to evaluate whether the purchase price is below fair market value and why (which may be due to contamination). If an evaluation regarding the purchase price and market price are not provided by the purchaser or if discrepancies between the purchase price and fair market value are not explained by the purchaser, the environmental professional should identify and determine its significance as a data gap.

### **Shelf Life of the Phase I ESA**

The EPA AAI limits the shelf life of a Phase I ESA report to one year with information such as regulatory records review, site visit, interviews, and environmental liens, limited to less than 6 months.

## **VAPOR INTRUSION TO INDOOR AIR - POTENTIAL FUTURE LIABILITY**

In January 2002, the Denver Post ran a series of articles on vapor intrusion and ques

tions of possible health risks to residents living over a hazardous groundwater plume. The threat and potential health risks due to vapor intrusion into homes and buildings have become a considerable issue in numerous states, including California. Vapor intrusion is usually considered as the migration of toxic concentrations of volatile vapors from soil and/or groundwater into overlying homes and buildings. Over the last couple of years, mostly due to increased awareness, regulators, consultants, scientists, attorneys, and stakeholders have become more aware of the problem and of the potential threat.

Current efforts to assess the intrusion of vapors into indoor air, usually involve soil vapor testing and modeling the potential intrusion of any detected volatile compounds into indoor air. Alternatively, in existing buildings or homes, the indoor air can be sampled over a period of time and analyzed for chemicals of concern. There are difficulties and negatives recognized by the EPA and others, with both techniques. The science is evolving.

Legal and potential liability issues are also evolving. The California legislature has just passed AB2092, which is awaiting the Governor's signature. In short, the legislation requires "...the California Environmental Protection Agency, in coordination with the ombudsperson established pursuant to Section 25395.119, the department, the board, the regional boards, the California Integrated Waste Management Board, and appropriate local agencies, including redevelopment agencies, shall compile, using existing data sources, a summary of sites with known or potential vapor intrusion from a hazardous substance release on the site or migrating onto the site."

The implications with respect to commercial property transactions and environmental due diligence could be significant. Groundwater

contaminant plumes may migrate for miles downgradient of their source. Vapors from these groundwater plumes may 'off gas' and migrate into overlying homes or buildings miles from their site of origin. On Brownfield and

redevelopment properties, knowledgeable persons typically investigate and perform risk assessment of vapor intrusion into indoor air, particularly where contaminants either on-site or on a neighboring site pose a potential threat. However, for commercial property transactions other than Brownfields, vapor intrusion into indoor air is not typically addressed and currently no specific requirements are given in EPA AAI or ASTM E 1527-05. To limit future liability to a purchaser of a property, the consideration and possible assessment of vapor intrusion may be warranted before finalizing the property transaction.

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Dr. Kulla is a geochemist and hydrogeologist with over 23 years experience. As one of our Principal Consultants, she has conducted environmental site investigations, feasibility studies, and remediation of impacted properties. Dr. Kulla also provides litigation support and expert witness testimony.

Dr. Kulla has specialized expertise in the geochemical fate of contaminants and forensic geochemistry. She applies the science of stable isotope geochemistry, dating of transporting water masses, chemical tracer interpretation, organic fingerprinting compounds, and the interpretation of chemical reaction signatures to decipher the source and transport history of chemical contaminants. She uses forensic geochemistry to delineate responsibility for contamination in soil and groundwater with multiple contaminants and sources. She also uses geochemistry to evaluate the timing of contaminants release and distribution, cost-effective remediation technologies, to defend and minimize client liabilities, and to document and justify natural attenuation as a remediation solution.



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Dr. Koelsch is a geologist and geophysicist with over 20 years experience. He applies his expertise and experience in conducting environmental investigations, risk assessments, data analysis and interpretation, project management, litigation support and expert witness testimony.

Dr. Koelsch utilizes analytical and numerical computer modeling to interpret data and determine the transport and fate of chemicals in soil, groundwater, and vapor intrusion into indoor air. His interpretations support remediation system designs, risk assessments, potential responsible party liability, risk-based clean-up levels, and evaluation of risk for property development.

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