



# All Appropriate Inquiry Criteria Analysis/Comparison to State, Federal, and Commercial Assessment Approaches

EPA's Brownfields Program is designed to empower states, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields. A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. EPA's Brownfields Program provides financial and technical assistance for brownfields revitalization, including grants for environmental assessment, cleanup, and job training.

## Background

As requested by the FACA Negotiated Rulemaking Committee for All Appropriate Inquiry, the following analysis was done comparing the Brownfield Law's ten "all appropriate inquiry" criteria to alternative environmental assessment approaches, including commercial (ASTM), Federal (Brownfields Assessment Guidelines), and states. In addition, other provisions of these approaches that do not apply to any of the law's criterion but may be of interest are included.

## State, ASTM, and Federal Information Sources

State laws and guidance documents for the following states were used to conduct this research and, where necessary, state officials were contacted to verify or gather information:

1. Florida
2. Illinois
3. Massachusetts
4. Michigan
5. New Jersey
6. Pennsylvania

The following ASTM documents were used in this analysis:

7. ASTM 1527-97 (Phase I Assessment Standard, redline version)
8. ASTM 1527-00 (Phase I Assessment Standard)
9. ASTM 1528-00 (Transaction Screen Process)
10. ASTM 2247-02 (Phase I for Forestland or Rural Property)
11. ASTM E1984 (Standard Guide for Brownfield Redevelopment)

The following EPA documents were analyzed:

12. Guidance for Performing Preliminary Assessments under CERCLA
13. Generic Brownfields Quality Assurance Project Plan (EPA Region 2)
14. Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup

Highlights from this research and analysis were presented to the FACA on June 10, 2003.

**Criterion I. The results of an inquiry by an environmental professional.**

**Small Business Liability Relief and Brownfields Revitalization Act (SBLRBRA) §223(B)(ii),(iii)(I):**

“(ii) STANDARDS AND PRACTICES—Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA— In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(I) The results of an inquiry by an environmental professional.”

**Florida**

Not applicable.

**Illinois**

**Illinois Environmental Protection Act  
415 ILCS 5/**

**415 ILCS 5/22.2(j)(6)(E)(v)**

For purposes of this subparagraph (E), the term “Phase I Environmental Audit” means an investigation of real property, conducted by environmental professionals, to discover the presence or likely presence of a release or a substantial threat of a release of a hazardous substance or pesticide at, on, to, or from real property, and whether a release or a substantial threat of a release of a hazardous substance or pesticide has occurred or may occur at, on, to, or from the real property.

**415 ILCS 5/22.2(j)(6)(E)(iii)**

(iii) For purposes of this subparagraph (E), the term “environmental professional” means an individual (other than a practicing attorney) who, through academic training, occupational experience, and reputation (such as engineers, industrial hygienists, or geologists) can objectively conduct one or more aspects of an Environmental Audit and who either:

- (I) maintains at the time of the Environmental Audit and for at least one year thereafter at least \$500,000 of environmental consultants' professional liability insurance coverage issued by an insurance company licensed to do business in Illinois; or
- (II) is an Illinois licensed professional engineer or an Illinois licensed industrial hygienist.

An environmental professional may employ persons who are not environmental professionals to assist in the preparation of an Environmental Audit if such persons are under the direct supervision and control of the environmental professional.

## **Massachusetts**

### **General Laws of Massachusetts**

Chapter 21A, Section 19: “‘Waste site cleanup activity opinion,’ a professional opinion, excluding legal advice or a legal opinion, that is related to one or more response actions as set forth in this definition. A waste site cleanup activity opinion shall not be relied upon as sufficient to protect public health, safety, welfare, or the environment unless such opinion is rendered by a *hazardous waste site cleanup professional licensed pursuant to sections 19 to 19J, inclusive, who (a) is qualified by appropriate education, training, and experience, and (b)(1) in the case of an opinion related to an assessment, has either (I) managed, supervised or actually performed such action, or (ii) periodically observed the performance by others of such action, to determine whether the completed work has complied with the provisions of chapter 21E and the Massachusetts Contingency Plan promulgated pursuant to said chapter.*” (Italics added.)

Chapter 21A, Section 19: “‘Hazardous waste site cleanup professional,’ an individual who, by reason of appropriate education, training, and experience, is qualified, as attested by being licenced by the board, to render waste site cleanup activity opinions that can be relied on as sufficient to protect public health, safety, welfare, and the environment.”

Chapter 21E, Section 5h: “Any person who owns a one- to four-family residence that is a site at which the department has incurred costs for response actions shall not be liable to the department

for those costs if he can establish by a preponderance of the evidence that. . . etc. . . . The defense established by this subsection shall not apply if. . . etc. . . . unless . . . he did not know or have reason to know of the release at the time he acquired ownership or possession of the site. In no event shall said owner be deemed to have had reason to know of the release of oil or hazardous material on the site unless a reasonable inquiry would have disclosed such presence at the time when the site was acquired by said owner, so long as the purchase price paid by said owner bore a reasonable relationship to the value of the site in the absence of oil or hazardous material. . . . *Should such visual inspection indicate that oil or hazardous material had been released at the site, a reasonable inquiry shall also include a further assessment to be performed by or under the supervision of a registered professional engineer, hydrogeologist or other qualified scientist with expertise in such matters.*” (Italics added.)

## Michigan

### Natural Resources and Environmental Protection Act

Act 451, Section 324.20126: “(1) Notwithstanding any other provision or rule of law and except as provided in subsections (2), (3), (4), and (5) and section 20128, the following persons are liable under this part:

- (a) The owner or operator of a facility if the owner or operator is responsible for an activity causing a release or threat of release.
- (b) The owner or operator of a facility at the time of disposal of a hazardous substance if the owner or operator is responsible for an activity causing a release or threat of release.
- ©) An owner or operator of a facility who becomes an owner or operator on or after June 5, 1995, *unless the owner or operator complies with both of the following:*
  - (i) *A baseline environmental assessment is conducted prior to or within 45 days after the earlier of the date of purchase, occupancy, or foreclosure. For purposes of this section, assessing property to conduct a baseline environmental assessment does not constitute occupancy.*
  - (ii) *The owner or operator discloses the results of a baseline environmental assessment to the department and subsequent purchaser or transferee if the baseline environmental assessment confirms that the property is a facility.*” (Italics added.)

### **Instructions for Preparing and Disclosing Baseline Environmental Assessments and Section 7A Compliance Analysis to the Michigan Department of Environmental Quality and for Requesting Optional Determinations, Michigan**

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**Department of Environmental Quality, March 11, 1999**

Page 6: Under Section 1(1)(d), Baseline Environmental Assessment is defined as “an evaluation of environmental conditions which exist at a facility at the time of purchase, occupancy, or foreclosure that reasonably defines the existing conditions and circumstances at the facility so that in the event of a subsequent release, there is a means of distinguishing the new release from existing contamination.”

Page 11: “Information delineating the extent of known contamination within the property boundaries, if those contaminants are hazardous substances intended to be used or otherwise present as a result of operations at the property or not excluded from future use, and general projections as to their fate (relative to transport, decomposition, etc.).”

Page 11: “Investigation to confirm the presence of and to quantify and delineate the extent of any contaminants shown by the N.IV. assessment to potentially be on the property which are not excluded from future use.”

**New Jersey**

**NJSA §§58:10-23.11b, .11f & .11g; NJAC 7:26E (“Technical Rule”)**

N.J.A.C. 7:26E-1.12 Requirement for Department oversight of remediation

(a) The person responsible for conducting the remediation shall investigate and remediate contaminated sites with Department oversight as specified in N.J.A.C. 7:26C and, in addition, in the following circumstances:

1. Sites suspected or known to be contaminated with anthropogenic radionuclide contamination of any media; and
2. Sites with immediate environmental concern conditions.

**Pennsylvania**

Not applicable.

## **ASTM E1527-97 (Phase I Environmental Site Assessment Process)**

4.3.2 Who May Conduct—The transaction screen process may be conducted either by the user (including an agent or employee of the user) or wholly or partially by an environmental professional. The transaction screen process does not require the judgment of an environmental professional. Whenever a Phase I Environmental Site Assessment is conducted, it must be performed by an environmental professional to the extent specified in 6.5.1. Further, at the Phase I Environmental Site Assessment level, no practical standard can be designed to eliminate the role of judgment and the value and need for experience in the party performing the inquiry. The professional judgment of an environmental professional is, consequently, vital to the performance of appropriate inquiry at the Phase I Environmental Site Assessment level.

Appendix X3: Guidance to Assist Users in the Preparation for and Selection of an Environmental Professional to Conduct a Phase I Environmental Site Assessment

### *Environmental Professional Selection*

Investigating past uses of a property and the surrounding area, which may result in identifying recognized environmental conditions, requires expertise that can only come with training and experience. Selecting an unqualified or inexperienced environmental professional to perform the work may present unnecessary risk. In the selection of a qualified environmental professional to perform the work consideration should be given to both the individual(s) conducting the Phase I and the firm (assuming the individual(s) works for a firm).

Before retaining an environmental professional to conduct a Phase I, the technical competence of the individual(s) retained to perform the required scope of services should be evaluated.

Consideration should be given to the following:

1. the formal education of the individual
2. any environmental site assessment training the individual received in the classroom or in the field
3. how long the individual has been conducting Phase I environmental site assessments
4. experience of the individual in performing the scope of services required for the type of property
5. familiarity of the individual with the current ASTM E1527 standard practice

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6. sample reports prepared by the individual
7. check of references who used the individual's services.

### *Firm*

Assuming the individual works for a firm, consideration should be given to the following in the evaluation process:

1. quality assurance/quality control used by the firm in the review of Phase Is conducted by individuals employed by the firm
2. the firm's internal risk management program to manage the risk associated with the conduct of Phase Is.
3. the firm's standard terms and conditions (including any limitations to liability)
4. the firm's errors and omissions (E&O) professional liability insurance policy (including the amount of coverage, limits, deductibles, and exclusions)
5. the firm's policy to ensure consistency when multiple Phase Is are performed.

## **ASTM E1527-00 (Phase I Environmental Site Assessment Process)**

6.5.1 Environmental Professional's Duties—The interviews and site reconnaissance, as well as review and implementation of information upon which the report is based and overseeing the writing of the report, are all portions of a Phase I Environmental Site Assessment that shall be performed by an environmental professional or environmental professionals. If more than one environmental professional is involved in these tasks, they shall coordinate their efforts.

[Note: additional duties of an environmental professional are described in Section 6 Phase I Environmental Site Assessment – User Obligations (6.3.2), Environmental Professional Supervision (6.5.2); Section 7 Records Review – Significance (7.1.9); Section 8 Site Reconnaissance – Observation (8.2), Uses and Conditions (8.4), Past Uses of Adjoining Properties (8.4.1.4), Current or Past Uses in the Surrounding Area (8.4.1.5); Who Should be Interviewed: Key Site Manager (9.5.1).]



## **ASTM E1528-00 (Transaction Screen Process)**

4.3.2 *Who May Conduct*— The *transaction screen process* may be conducted either by the *user* (including an agent, independent contractor or employee of the *user*) or wholly or partially by an *environmental professional*. The *transaction screen process* does not require the judgment of an *environmental professional*. Whenever a *Phase I Environmental Site Assessment* is conducted, it must be performed by an *environmental professional* to the extent specified in 6.5.1 through 6.5.2.1 of Practice E 1527. Further, at the *Phase I Environmental Site Assessment* level, no practical standard should be designed to eliminate the role of judgment and the value and need for experience in the party performing the inquiry. The professional judgment of an *environmental professional* is, consequently, vital to the performance of appropriate inquiry at the *Phase I Environmental Site Assessment* level.

5.8 Further Inquiry Under Practice E 1527—Upon completing the transaction screen questionnaire, if the user concludes that a Phase I Environmental Site Assessment is needed, the user should proceed with such inquiry with the advice and guidance of an environmental professional. Such further inquiry should be undertaken in accordance with Practice E 1527.

## **ASTM 2247-02 (Phase I Site Assessment for Forestland or Rural Property)**

6.5.1 Environmental Professional's Duties—The interviews and site reconnaissance, as well as review implementation of information upon which the report is based and overseeing the writing of the report, are all portions of a Phase I Environmental Site Assessment that shall be performed by an environmental professional or environmental professionals. If more than one environmental professional is involved in these tasks, they shall coordinate their efforts.

[Note: additional duties of environmental professional are described in Section 6 Phase I Environmental Site Assessment – User Obligations (6.3.2), Environmental Professional Supervision (6.5.2); Section 7 Records Review – Significance (7.1.9); Section 8 Site Reconnaissance – Observation (8.2), Uses and Conditions (8.4), Past Uses of Adjoining Properties (8.4.1.4), Current or Past Uses in the Surrounding Area (8.4.1.5); Who Should be Interviewed: Key Site Manager (9.5.1).]

## **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

Not applicable.

## **Guidance for Performing Preliminary Assessments Under CERCLA EPA/540/G-91/013 September 1991**

### 2.2 Determining CERCLA Eligibility

Regional EPA site assessment personnel are responsible for deciding a site's CERCLA eligibility. The PA evaluator is responsible for investigating CERCLA eligibility concerns and must inform EPA site assessment personnel of any findings indicating the site may be ineligible. CERCLA eligibility concerns should be investigated early during the PA process to avoid unnecessary expenditure of resources on sites that should be evaluated under a different program. Note that, should a site be determined ineligible for CERCLA response, the PA may be terminated by your Regional EPA site assessment contact. In such a case, abbreviated PA reporting requirements may apply (see Section 4.4).

## **Generic Brownfields Quality Assurance Project Plan U.S. EPA Region 2 Revision No. 2 Revision Date: May 2000 Final**

Form B: Project Organization and Responsibility

### B.2 Personnel Information

The environmental professional leading (Task Leader) a proposed site-specific Brownfields investigation is responsible for providing technical direction to their staff concerning project objectives, sampling needs, and schedule. In this capacity, the Task Leader is required to act as the primary point of contact for the municipality with the subject environmental regulatory authorities. Hence, the Task Leader is responsible for the development and completion of the

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Site-Specific Brownfields SAMP, project team organization, and supervision of all project tasks. Alternately, the QC Coordinator working independent of the Task Leader on a proposed site-specific Brownfields investigation is likewise responsible for ensuring all field personnel adhere to the SAMP. In this capacity, the QC Coordinator shall likewise oversee and record any necessary deviations from the SAMP that may be required. In addition, the QC Coordinator shall monitor the collection of all in-situ environmental measurement data and also act as the primary contact with the analytical laboratory retained to perform all confirmatory analyses.

## **Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup (p. 9-10)**

### **Seeking and Procuring External Professional Support**

Most decision makers at brownfields sites will require technical and legal assistance to fully understand the complexities of investigating and cleaning up a contaminated site. Depending upon the complexity of a particular site, decision makers may request the assistance of environmental consultants, cleanup contractors, technology vendors, or staff of analytical laboratories in performing the many activities required to investigate and clean up sites. The inclusion of these professionals and other experts as members of the brownfields team is recommended. Some states may require the participation of certified or licensed professionals to help guide the site investigation and cleanup process. To obtain the services of such professionals (individuals or a firm), a request for proposals (RFP) is often used as the procurement mechanism. The RFP addresses approach, qualifications, and cost estimate for the services requested and includes specifications that encourage prospective bidders to think “outside the box” and consider nontraditional approaches. Selection criteria outlined in the RFP should include credentials and demonstrated experience of the individuals or firm in developing valid options for using streamlined strategies and innovative technologies at brownfields sites and successfully implementing the selected option.



**Criterion II. Interviews with past and present owners, operators, and occupants of the facility for the purpose of gathering information regarding the potential for contamination at the facility.**

**SBLRBRA §223(B)(ii),(iii)(II)**

(ii) STANDARDS AND PRACTICES- Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA- In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(II) Interviews with past and present owners, operators, and occupants of the facility for the purpose of gathering information regarding the potential for contamination at the facility.

**Florida**

Not applicable.

**Illinois**

**Illinois Environmental Protection Act  
415 ILCS 5/**

Not applicable.

**Massachusetts**

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## General Laws of Massachusetts

Chapter 21, Section 2: “‘Owner’, or ‘Operator’, (a) (1) in the case of a vessel, any person owning, operating or chartering by demise such vessel, (2) in the case of a site, any person owning or operating such site, (3) in the case of an abandoned site, any person who owned, operated, or otherwise controlled activities at such site, vessel, onshore oil facility, offshore oil facility, deepwater port, or pipeline, any person who owned, operated, or otherwise controlled activities at such site immediately prior to such abandonment, except that, in the case of an onshore oil facility or offshore oil facility, this definition shall not include an agency or political subdivision of the federal government or the commonwealth, or any interstate body, that owned an onshore oil facility or offshore oil facility and that, as the owner, transferred possession and right to operate the onshore oil facility or offshore oil facility to another person by lease, assignment, or permit, immediately prior to such abandonment, (4) in the case of an onshore oil facility, other than a pipeline, any person owning or operating the onshore oil facility, except that this definition shall not include an agency or political subdivision of the federal government or the commonwealth, or any interstate body, that owns an onshore oil facility and that, as the owner, transfers possession and right to operate the onshore oil facility to another person by lease, assignment, or permit, (5) in the case of an offshore oil facility, other than a pipeline or a deepwater port licensed under the U.S. Deepwater Port Act of 1974, the lessee or permittee of the area in which the offshore oil facility is located or the holder of a right of use and easement granted under an applicable law of the commonwealth or the U.S. Outer Continental Shelf Lands Act, for the area in which the offshore oil facility is located if such holder is a different person from the lessee or permittee; provided, however, that this definition shall not include an agency or political subdivision of the federal government or the commonwealth, or any interstate body, that owns an offshore oil facility and that, as the owner, transfers possession and right to operate the offshore oil facility to another person by lease, assignment, or permit, (6) in the case of a deepwater port licensed under the U.S. Deepwater Port Act of 1974, the licensee, (7) in the case of a pipeline, any person owning or operating the pipeline, (8) when a fiduciary who is not an owner or operator pursuant to this definition has title or control or management of a site or vessel, the grantor or settlor of the estate or trust in question, to the extent the assets of the estate or trust are insufficient to pay for liability pursuant to this chapter, (9) when a secured lender who is not an owner or operator pursuant to this definition has ownership or possession of a site or vessel, any person who owned or operated such site or vessel immediately prior to such secured lender obtaining ownership or possession of such site or vessel, (10) when a city or town which is not the owner or operator pursuant to this definition, has ownership or possession of a site or vessel, any person who owned or operated such site or vessel immediately prior to such

city or town obtaining ownership or possession of such site or vessel, and (11) after a redevelopment authority, redevelopment agency, community development corporation or economic development and industrial corporation which is not an owner or operator pursuant to this definition takes ownership or possession of a site or a portion thereof, any person who owned or operated such site or portion thereof immediately prior to such redevelopment authority, redevelopment agency, community development corporation or economic development and industrial corporation acquiring ownership or possession of the site or portion thereof, except where such immediate previous owner or operator meets the criteria as an eligible person who has achieved a liability endpoint pursuant to section 5C. The term shall include any estate or trust of which the site or vessel is a part. The term shall not include the commonwealth to the extent the commonwealth holds or held any right, title, or interest in a site or vessel solely for the purpose of implementing or enforcing the commonwealth's rights or responsibilities pursuant to this chapter, unless the commonwealth caused or contributed to the release or threat of release; provided, that nothing in this definition or in this chapter shall be construed to waive any immunity that public employers or public employees may have pursuant to chapter two hundred fifty-eight. The term shall not include a fiduciary or secured lender who meets the requirements set forth in this definition. The term 'operator' shall not include a hazardous waste site cleanup professional solely because he is acting in his professional capacity as a hazardous waste site cleanup professional with regard to the site or vessel."

## Michigan

### Natural Resources and Environmental Protection Act

Act 451, Section 324.20116: "(1) *A person who has knowledge or information or is on notice through a recorded instrument that a parcel of his or her real property is a facility shall not transfer an interest in that real property unless he or she provides written notice to the purchaser or other person to which the property is transferred that the real property is a facility and discloses the general nature and extent of the release.*

(2) The owner of real property for which a notice required in subsection (1) has been recorded may, upon completion of all response activities for the facility as approved by the department, record with the register of deeds for the appropriate county a certification that all response activity required in an approved remedial action plan has been completed.

(3) *A person shall not transfer an interest in real property unless the person fully discloses any land or resource use restrictions that apply to that real property as a part of remedial action that*

*has been or is being implemented in compliance with section 20120a.” (Italics added.)*

## **Part 201 Rules**

Rule 919: “(1) A person who wishes to effectuate and maintain liability protection afforded by section 20126(1)(c) of the act is required by section 20126(1)(c)(ii) of the act to disclose the results of a BEA to the department and subsequent purchasers or transferees. . . .

(7) For the purposes of subrules (5) and (6) of this rule, the requirement to disclose the results of the BEA to a subsequent purchaser or transferee may be satisfied by providing a summary of the BEA and, if requested by the person to whom the interest is being transferred, the full BEA report and related materials submitted to the department under subrules (3) and (4) of this rule.”

## **New Jersey**

### **NJSA §§58:10-23.11b, .11f & .11g; NJAC 7:26E (“Technical Rule”)**

Not applicable.

## **Pennsylvania**

Not applicable.

### **ASTM E1527-97 (Phase I Environmental Site Assessment Process)**

4.7.3 Current Investigation-Except as provided in 4.7.2 and 4.7.2 of Practice E 1528 prior environmental site assessments should not be used without current investigation of conditions likely to affect recognized environmental conditions in connection with the property that may have changed materially since the prior environmental site assessment was conducted. At a minimum, for a Phase I Environmental Site Assessment consistent with this practice, a new site reconnaissance, interviews, and an update of the records review should be performed.

#### **6. Phase I Environmental Site Assessment**

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6.1 Objective—The purpose of this Phase I Environmental Site Assessment is to identify, to the extent feasible pursuant to the processes prescribed herein, recognized environmental conditions in connection with the property. (See 1.1.1.)

6.2 Four Components----A Phase I Environmental Site Assessment shall have four components, as described as follows:

6.2.3 Interviews:

6.2.3.1 Interviews with current owners and occupants of the property; see Section 9.

## 9. Interviews With Owners and Occupants

9.1 Objective—The objective of interviews is to obtain information indicating recognized environmental conditions in connection with the property.

9.2 Content—Interviews with owners and occupants consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall attempt to obtain information about uses and conditions as described in Section 8, as well as information described in 9.8 and 9.9.

9.3 Medium—Questions to be asked pursuant to this section may be asked in person, by telephone, or in writing, in the discretion of the environmental professional.

9.4 Timing—Except as specified in 9.8 and 9.9, it is in the discretion of the environmental professional whether to ask questions before, during, or after the site visit described in Section 8, or in some combination thereof.

9.5 Who Should be Interviewed:

9.5.1 Key Site Manager—Prior to the site visit, the owner should be asked to identify a person with good knowledge of the uses and physical characteristics of the property (the key site manager). Often the key site manager will be the property manager, the chief physical plant supervisor, or head maintenance person. (If the user is the current property owner, the user has an obligation to identify a key site manager, even if it is the user himself or herself.) If a key site manager is identified, the person conducting the site visit shall make at least one reasonable attempt (in writing or by telephone) to arrange a mutually convenient appointment for the site visit when the key site manager agrees to be there. If the attempt is successful, the key site manager shall be interviewed in conjunction with the site visit. If such an attempt is

unsuccessful, when conducting the site visit, the environmental professional shall inquire whether an identified key site manager (if any) or if a person with good knowledge of the uses and physical characteristics of the property is available to be interviewed at that time; if so, that person shall be interviewed. In any case, it is within the discretion of the environmental professional to decide which questions to ask before, during, or after the site visit or in some combination thereof.

9.5.2 Occupants—A reasonable attempt shall be made to interview a reasonable number of occupants of the property.

9.5.2.1 Multi-Family Properties—For multi-family residential properties, residential occupants do not need to be interviewed, but if the property has nonresidential uses, interviews should be held with the nonresidential occupants based on criteria specified in 9.5.2.2.

9.5.2.2 Major Occupants—Except as specified in 9.5.2.1, if the property has five or fewer current occupants, a reasonable attempt shall be made to interview a representative of each one of them. If there are more than five current occupants, a reasonable attempt shall be made to interview the major occupant(s) and those other occupants whose operations are likely to indicate recognized environmental conditions in connection with the property.

9.5.2.3 Reasonable Attempts to Interview—Examples of reasonable attempts to interview those occupants specified in 9.5.2.2 include (but are not limited to) an attempt to interview such occupants when making the site visit or calling such occupants by telephone. In any case, when there are several occupants to interview, it is not expected that the site visit must be scheduled at a time when they will all be available to be interviewed.

9.5.2.4 Occupant Identification—The report shall identify the occupants interviewed and the duration of their occupancy.

9.5.3 Prior Assessment Usage—Persons interviewed as part of a prior Phase I Environmental Site Assessment consistent with this practice do not need to be questioned again about the content of answers they provided at that time. However, they should be questioned about any new information learned since that time, or others should be questioned about conditions since the prior Phase I Environmental Site Assessment consistent with this practice.

9.6 Quality of Answers—The person(s) interviewed should be asked to be as specific as

reasonably feasible in answering questions. The person(s) interviewed should be asked to answer in good faith and to the extent of their knowledge.

9.7 Incomplete Answers—While the person conducting the interview(s) has an obligation to ask questions, in many instances the persons to whom the questions are addressed will have no obligation to answer them.

9.7.1 User—If the person to be interviewed is the user (the person on whose behalf the Phase I Environmental Site Assessment is being conducted), the user has an obligation to answer all questions posed by the person conducting the interview, in good faith, to the extent of his or her actual knowledge or to designate a key site manager to do so. If answers to questions are unknown or partially unknown to the user or such key site manager, this interview section of the Phase I Environmental Site Assessment shall not thereby be deemed incomplete.

9.7.2 Non-user—If the person conducting the interview(s) asks questions of a person other than a user but does not receive answers or receives partial answers, this section of the Phase I Environmental Site Assessment shall not thereby be deemed incomplete, provided that (1) the questions have been asked (or attempted to be asked) in person or by telephone and written records have been kept of the person to whom the questions were addressed and the responses, or (2) the questions have been asked in writing sent by first class mail or by private, commercial carrier and no answer or incomplete answers have been obtained and at least one reasonable follow up (telephone call or written request) was made again asking for responses.

9.8 Questions about Helpful Documents—Prior to the site visit, the property owner, key site manager (if any is identified), and user (if different from the property owner) shall be asked if they know whether any of the documents listed in 9.8.1 exists and, if so, whether copies can and will be provided to the environmental professional within reasonable time and cost constraints. Even partial information provided may be useful. If so, the environmental professional conducting the site visit shall review the available documents prior to or at the beginning of the site visit.

9.8.1 Helpful Documents:

9.8.1.1 Environment site assessment reports,

9.8.1.2 Environment audit reports,

9.8.1.3 Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits),

9.8.1.4 Registrations for underground and above-ground storage tanks,

9.8.1.5 Material safety data sheets,

- 9.8.1.6 Community right-to-know plan,
- 9.8.1.7 Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc.,
- 9.8.1.8 Reports regarding hydrogeologic conditions on the property or surrounding area,
- 9.8.1.9 Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property,
- 9.8.1.10 Hazardous waste generator notices or reports, and
- 9.8.1.11 Geotechnical studies.

9.9 Proceedings Involving the Property—Prior to the site visit, the property owner, key site manager (if any is identified), and user (if different from the property owner) shall be asked whether they know of: ( 1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property; and ( 3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

## **ASTM E1527-00 (Phase I Environmental Site Assessment Process)**

### 6.2.3.1. Phase I Environmental Site Assessment—Four Components:

A Phase I Environmental Site Assessment shall have four components, as described as follows: Interviews with current owners and occupants of the property; see Section 9.

#### 9.1 Interviews with Owners and Occupants:

Objective—The objective of interviews is to obtain information indicating recognized environmental conditions in connection with the property.

#### 9.2 Content

Interviews with owners and occupants consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall attempt to obtain information about uses and conditions as described in Section 8 [Site Reconnaissance], as well as information described in 9.8 [Questions About Helpful Documents] and 9.9 [Proceedings Involving the Property].

[Note: This section provides more detail regarding: Medium (9.3), Timing (9.4), Who Should Be Interviewed (9.5), Quality of Answers (9.6), Incomplete Answers (9.7), Questions About Helpful Documents (9.8), and Proceedings Involving the Property (9.9)].

## **ASTM E1528-00 (Transaction Screen Process)**

5.1 *Process*—The *transaction screen process* consists of asking questions contained within the *transaction screen questionnaire* of *owners* and *occupants* of the *property*, observing site conditions at the *property* with direction provided by the *transaction screen questionnaire*, and, to the extent *reasonably ascertainable*, conducting limited research regarding certain *government records* and certain *standard historical sources*. The questions asked of *owners* are the same questions as those asked of *occupants*.

## **ASTM 2247-02 (Phase I for Forestland or Rural Property)**

### 6.2.3.1 Phase I Environmental Site Assessment - Four Components:

A Phase I Environmental Site Assessment shall have four components, as described as follows: Interviews with current owners and occupants of the property; see Section 9.

### 9.1 Interviews with Owners and Occupants:

Objective—The objective of interviews is to obtain information indicating recognized environmental conditions in connection with the property.

### 9.2 Content

Interviews with owners and occupants consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall attempt to obtain information about uses and conditions as described in Section 8 [Site Reconnaissance], as well as information described in 9.8 [Questions About Helpful Documents] and 9.9 [Proceedings Involving the Property].

[Note: This section provides more detail regarding: Medium (9.3), Timing (9.4), Who Should Be Interviewed (9.5), Quality of Answers (9.6), Incomplete Answers (9.7), Questions About Helpful Documents (9.9), and Proceedings Involving the Property (9.10)].

## **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

Not applicable.

## **Guidance for Performing Preliminary Assessments Under CERCLA EPA/540/G-91/013 September 1991**

### **Additional Data Collection**

During the onsite reconnaissance you may have the opportunity to review available facility records and interview site operators or workers. Look for documents that provide information on the types and quantities of waste produced and/or deposited. These may include waste hauling manifests, permits, and internal waste management records. When interviewing site representatives, attempt to gather information concerning past and present disposal practices as well as any past environmental problems. For example, ask if there have ever been any spills at the site, problems with contamination of onsite wells, health problems encountered by workers, or complaints from neighboring residents about odors or other types of environmental impacts. (Page 30)

## **Generic Brownfields Quality Assurance Project Plan U.S. EPA Region 2 Revision No. 2 Revision Date: May 2000 Final**

Not applicable.

## **Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup**

### **Site Assessment**

*All Appropriate Inquiry Criteria Analysis  
Comparison to State, Federal  
and Commercial Assessment Approaches*

*Solid Waste  
and Emergency  
Response (5105T)*

*EPA 500-F-03-229  
June 2003  
[www.epa.gov/brownfields/](http://www.epa.gov/brownfields/)*

## ***Collect and Assess Information About the Brownfield Site***

### **How Do We Find the Answers? (p. 19)**

Activities to be conducted during the initial survey of a site include:

- Determine whether contamination is likely through the conduct of an ASTM Phase I environmental site assessment or its equivalent. A records search is performed and the site is visited, but no sampling of soil or groundwater occurs. The effort includes the following activities:
- Interview property owners, occupants, and others associated with the site, such as previous employees, residents, and local planners.

**Criterion III.      Reviews of 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.**

**SBLRBRA §223(B)(ii),(iii)(III):**

(ii) STANDARDS AND PRACTICE— Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA— In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(III) Reviews of 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.

**Florida**

Not applicable.

**Illinois**

**415 ILCS 5/**

**415 ILCS 5/5/22.2(j)(6)(v)(I)**

**415 ILCS 5/5/22.2(j)(6)(v)(II)**

**415 ILCS 5/5/22.2(j)(6)(v)(VI)**



(v) For purposes of this subparagraph (E), the term “Phase I Environmental Audit” means an investigation of real property, conducted by environmental professionals, to discover the presence or likely presence of a release or a substantial threat of a release of a hazardous substance or pesticide at, on, to, or from real property, and whether a release or a substantial threat of a release of a hazardous substance or pesticide has occurred or may occur at, on, to, or from the real property. The investigation shall include a review of at least each of the following sources of information concerning the current and previous ownership and use of the real property:

(I) Recorded chain of title documents regarding the real property, including all deeds, easements, leases, restrictions, and covenants for a period of 50 years.

(II) Aerial photographs that may reflect prior uses of the real property and that are reasonably obtainable through State, federal, or local government agencies or bodies.

(VI) A review of business records for activities at or on the real property for a period of 50 years.

## Massachusetts

### General Laws of Massachusetts

Chapter 21A, Section 19: “A successor hazardous waste cleanup professional may render a waste site cleanup activity opinion regarding response actions performed under a previous hazardous waste site cleanup professional, and that opinion may be relied upon as sufficient to protect public health, safety, welfare, or the environment, only when the successor hazardous waste site cleanup professional has: (a) *reviewed all reasonably available documentation known to the successor hazardous waste site cleanup professional that describes previous releases, site assessment activities and results, and work performed in connection with the assessment, containment or removal action that is the subject of the opinion*; (b) conducted a site visit to observe current conditions and to verify the completion of as much work as is reasonably observable; and (c) concluded, in the exercise of his independent professional judgment, that he has sufficient information upon which to render the waste site cleanup activity opinion.” (Italics added.)

Chapter 21, Section 3A(b): “By January fifteenth, nineteen hundred and eighty-seven, the department shall publish a list of all disposal sites confirmed by the department to that date, and a list of locations to be investigated as possible disposal sites. . . . Effective after January

fifteenth, nineteen hundred and ninety-three, the department shall maintain, and shall publish on at least an annual basis, a list of all sites confirmed by the department to the date of publication, and a list of other sites as provided in this section. Such lists shall state the response action status of each location confirmed as a disposal site or as a site. . . . *Except as otherwise allowed by this section, the department shall include on the list of locations to be investigated as possible disposal sites each location which, based upon the uses of the property, the conditions reported, or other information the department has, is reasonably likely to be a disposal site.*” (Italics added.)

## Michigan

### Natural Resources and Environmental Protection Act

Act 451, Section 324.20116: “(1) A person who has knowledge or information or is on notice through a recorded instrument that a parcel of his or her real property is a facility shall not transfer an interest in that real property unless he or she provides written notice to the purchaser or other person to which the property is transferred that the real property is a facility and discloses the general nature and extent of the release.

*(2) The owner of real property for which a notice required in subsection (1) has been recorded may, upon completion of all response activities for the facility as approved by the department, record with the register of deeds for the appropriate county a certification that all response activity required in an approved remedial action plan has been completed.*

(3) A person shall not transfer an interest in real property unless the person fully discloses any land or resource use restrictions that apply to that real property as a part of remedial action that has been or is being implemented in compliance with section 20120a.” (Italics added.)

Act 451, Section 324.20120b: Sec. 20120b. “(1) If a remedial action plan is selected or approved by the department based on criteria for the residential category provided for in section 20120a(1)(a), land use restrictions or monitoring are not required once those standards have been achieved by the remedial action.

*(2) If a remedial action plan is selected or approved by the department based on criteria in categories provided for in section 20120a(1)(b) to (e), a notice of approved environmental remediation shall be recorded with the register of deeds for the county in which the facility is*

*located within 21 days after selection or approval by the department of the remedial action, or within 21 days after completion of construction of the remedial action as appropriate to the circumstances.* A notice shall be filed pursuant to this section only by the property owner or by another person who has the express written permission of the property owner. The form and content of the notice are subject to approval by the state. Any restrictions contained in the notice shall be binding on the owner's successors, assigns, and lessees, and shall run with the land. A notice of environmental remediation recorded pursuant to this subsection shall state which of the categories of land use specified in section 20120a(1)(b) to (d) are consistent with the environmental conditions at the property to which the notice applies, and that a change from that land use or uses may necessitate further evaluation of potential risks to the public health, safety, or welfare, or the environment. *The notice of approved environmental remediation shall include a survey and property description that define the areas addressed by the remedial action plan if land use or resource use restrictions apply to less than the entire parcel or if different restrictions apply to different areas of a parcel, and the scope of any land use or resource use limitations.* Additional requirements for financial assurance, monitoring, or operation, and maintenance do not apply if a remedial action complies with criteria provided for in section 20120a(1)(b) to (e), unless monitoring or operation and maintenance are required to assure the compliance with criteria that apply outside the boundary of the property that is the source of the release.

(3) If a remedial action plan is selected or approved by the department based on criteria provided for in section 20120a(1)(f) to (j) or (2), provisions concerning subdivisions (a) through (e) shall be stipulated in a legally enforceable agreement with the department. If the department concurs with an analysis provided in a remedial action plan that 1 or more of the requirements specified in subdivisions (b) to (e) is not necessary to protect the public health, safety, or welfare, or the environment and to assure the effectiveness and integrity of the remedial action, that element may be omitted from the agreement. If provisions for any of the following, determined by the department to be applicable for a facility, lapse or are not complied with as provided in the agreement or remedial action plan, the department's approval of the remedial action plan is void from the time of the lapse or violation, unless the lapse or violation is corrected to the satisfaction of the department:

- (a) Land use or resource use restrictions.
- (b) Monitoring.
- (c) Operation and maintenance.
- (d) Permanent markers to describe restricted areas of the site and the nature of any restrictions.
- (e) Financial assurance, in a mechanism acceptable to the department to pay for monitoring,

operation and maintenance, oversight, and other costs determined by the department to be necessary to assure the effectiveness and integrity of the remedial action.

(4) If a remedial action plan relies in whole or in part on cleanup criteria approved pursuant to section 20120a(1)(f) to (j) or (2), land use or resource use restrictions to assure the effectiveness and integrity of any containment, exposure barrier, or other land use or resource use restrictions necessary to assure the effectiveness and integrity of the remedy shall be described in a restrictive covenant. *The restrictive covenant shall be recorded with the register of deeds for the county in which the property is located within 21 days of the department's selection or approval of the remedial action plan, or within 21 days of the completion of construction of the containment or barrier, as appropriate to the circumstances. The restrictive covenant shall be filed by the property owner or with the express written permission of the property owner. The restrictions shall run with the land and be binding on the owner's successors, assigns, and lessees.* Such restrictions shall apply until the department determines that hazardous substances that are controlled by the barrier or contained no longer present an unacceptable risk to the public health, safety, or welfare, or the environment as defined by the cleanup criteria and exposure control requirements set forth in the remedial action plan. The restrictive covenant shall include a survey and property description that define the areas addressed by the remedial action plan and the scope of any land use or resource use limitations. The form and content of the restrictive covenant are subject to approval by the department and shall include provisions to accomplish all of the following:

- (a) Restrict activities at the facility that may interfere with a remedial action, operation and maintenance, monitoring, or other measures necessary to assure the effectiveness and integrity of the remedial action.
- (b) Restrict activities that may result in exposures above levels established in the remedial action plan.
- (c) Require notice to the department of the owner's intent to convey any interest in the facility 14 days prior to consummating the conveyance. A conveyance of title, an easement, or other interest in the property shall not be consummated by the property owner without adequate and complete provision for compliance with the terms and conditions of the agreement described in subsection (3) and the prevention of releases and exposures described in subdivision (b).
- (d) Grant to the department the right to enter the property at reasonable times for the purpose of determining and monitoring compliance with the remedial action plan, including the right to take samples, inspect the operation of the remedial action measures, and inspect records.
- (e) Allow the state to enforce the restriction set forth in the covenant by legal action in a court of appropriate jurisdiction.

(f) Describe generally the uses of the property that are consistent with the categorical criteria and limitations approved as part of a remedial action plan.

(5) If the department determines that exposure to hazardous substances may be reliably restricted by an institutional control in lieu of a restrictive covenant, and that imposition of land use or resource use restrictions through restrictive covenants is impractical, the department may approve of a remedial action plan under section 20120a(1)(f) to (j) or (2) that relies on such institutional control. Mechanisms that may be considered under this subsection include, but are not limited to, an ordinance that prohibits the use of groundwater or an aquifer in a manner and to a degree that protects against unacceptable exposures as defined by the cleanup criteria approved as part of the remedial action plan. *An ordinance that serves as an exposure control pursuant to this subsection shall be published and maintained in the same manner as zoning ordinances and shall include a requirement that the local unit of government notify the department at least 30 days prior to adopting a modification to the ordinance, or to the lapsing or revocation of the ordinance.*

(6) Selection or approval by the department of a remedial action does not relieve a person who is liable under section 20126 of that person's responsibility to report and provide for response activity to address a subsequent release or threat of release at the facility.

(7) A remedial action shall not be considered approved by the department unless a remedial action plan is submitted to the department and the department approves the plan. Implementation by any person of response activity without department approval does not relieve that person of an obligation to undertake response activity or limit the ability of the department to take action to require response activity necessary to comply with this act by a person who is liable under section 20126.

(8) A person shall not file a notice of approved environmental remediation indicating approval or a determination of the department unless the department has approved of the filing of the notice.

(9) *A person who implements a remedial action plan approved by the department pursuant to subsections (2) to (5) shall provide notice of the land use restrictions that are part of the remedial action plan to the zoning authority for the local unit of government in which the facility is located within 30 days of approval of the plan.*

(10) *The state, with the approval of the state administrative board, may place restrictive*

*covenants related to land or resource use on deeds of state owned property.” (Italics added.)*

Act 451, Section 324.20120d: “(1) *At a facility where state funds will be spent to develop or implement a remedial action plan or where the department determines there is a significant public interest, within 30 days after the completion of a remedial investigation for the facility, the department shall provide the county and the township, city, or village in which the facility is located a notice of the completion of the remedial investigation, a summary of the remedial investigation, and notice of an opportunity for the people in the local unit of government to meet with the department regarding the remedial investigation and any proposed feasibility study for the facility. . . .*

*(2) The department shall maintain, and periodically publish, a list of remedial action plans submitted for approval that comply with the requirements of R 299.5515 of the Michigan administrative code.*

(3) Before approval of a proposed remedial action plan which is to be implemented with money from the fund, or is based on categorical criteria provided for in section 20120a(1)(f) to (j) or (2), or if section 20118(5) or (6) applies, or the department determines that there is significant public interest, the department shall do all of the following:

(a) *Publish a notice and brief summary of the proposed remedial action plan.*

(b) Provide for public review and comment pertinent to documents relating to the proposed remedial action plan, including, if applicable, the feasibility study that outlines alternative remedial action measures considered.

(c) Provide an opportunity for a public meeting at or near the facility when any of the following occur:

(I) The department determines that there is a significant public interest or that for any other reason a public meeting is appropriate.

(ii) A city, township, or village in which the facility is located, by a majority vote of its governing body, requests a public meeting.

(iii) A local health department with jurisdiction in the area in which the facility is located requests a public meeting.

(d) *Provide a document that summarizes the major issues raised by the public and how they are to be addressed by the final approved remedial action plan.*

(4) For purposes of this section, publication shall include, at a minimum, publication in a local newspaper or newspaper of general circulation in this state. In addition, the administrative record

shall be made available by the department for inspection by members of the public at or near the facility and in Lansing.

*(5) The department shall prepare a summary document that explains the reasons for the selection or approval of a remedial action plan. In addition, the department shall compile an administrative record of the decision process that results in the selection of a remedial action plan. The administrative record shall contain all of the following:*

- (a) Remedial investigation data regarding the facility.
- (b) If applicable, a feasibility study and potential remedial actions.
- (c) If applicable, a summary document that explains the reasons why a remedial investigation or feasibility study was not conducted.
- (d) Applicable comments and information received from the public, if any.
- (e) If applicable, a document that summarizes the significant concerns raised by the members of the public and how they are to be addressed.
- (f) Other information appropriate to the facility.” (Italics added.)

## **Part 201 Rules**

Rule 524: “(a) All land or resource use restriction documents, other than local ordinances, shall be filed with the register of deeds for the county in which the facility is located, and a copy of the land or resource restrictions, with proof of filing, provided to the department and the clerk of the local unit of government in which the facility is located, as a condition of establishing that the response activity is complete. A restrictive covenant, notice of approved environmental remediation, notice of aesthetic impact, or other property-specific institutional control other than a local ordinance is valid as a part of response activity only when filed by the property owner or with the written permission of the property owner.”

Rule 607: “(1) The department shall compile an administrative record of the decision process leading to the selection or approval of any remedial action.”

## **Instructions for Preparing and Disclosing Baseline Environmental Assessments and Section 7A Compliance Analysis to the Michigan Department of Environmental Quality and for Requesting Optional Determinations, Michigan Department of Environmental Quality, March 11,**

*All Appropriate Inquiry Criteria Analysis  
Comparison to State, Federal  
and Commercial Assessment Approaches*

*Solid Waste  
and Emergency  
Response (5105T)*

*EPA 500-F-03-229  
June 2003  
[www.epa.gov/brownfields/](http://www.epa.gov/brownfields/)*



## 1999

Page 10: “An assessment and conclusions as to the likelihood that other hazardous substances are also present on the subject property. This assessment should be based on a thorough evaluation of all previous uses of the facility with special emphasis on hazardous substance use in commercial and industrial applications. An ASTM #E1527 Phase I Environmental Site Assessment or equivalent alternative assessment method is acceptable. Provide the results of the Phase I and Phase II Environmental Site Assessment or equivalent assessment that relates to the likelihood that other hazardous substances are also present on the subject property.”

Page 10: “A demonstration that the hazardous substances specified in D.I. have not already been released at the facility. Explain why it is reasonable to believe that the hazardous substances identified in D.I. have never been present at the property if that is the reason a past release has been ruled out.”

## New Jersey

### NJSA §§58:10-23.11b.

“Preliminary assessment” means the first phase in the process of identifying areas of concern and determining whether contaminants are or were present at a site or have migrated or are migrating from a site, and shall include the initial search for and evaluation of, existing site specific operational and environmental information, both current and historic, to determine if further investigation concerning the documented, alleged, suspected or latent discharge of any contaminant is required. The evaluation of historic information shall be conducted from 1932 to the present, except that the department may require the search for and evaluation of additional information relating to ownership and use of the site prior to 1932 if such information is available through diligent inquiry of the public records; . . . .

### NJAC 7:26E (“Technical Rule”)

#### 7:26E-3.1 Preliminary assessments

(c) A preliminary assessment shall be based on diligent inquiry and include an evaluation of the following:

*All Appropriate Inquiry Criteria Analysis  
Comparison to State, Federal  
and Commercial Assessment Approaches*

*Solid Waste  
and Emergency  
Response (5105T)*

*EPA 500-F-03-229  
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1. Historical information concerning the site history shall be part of the preliminary assessment unless the remediation is directed at either a specific discharge event (rather than a particular area of concern) or any underground tank or underground tank system. The site history shall include an evaluation of the following to the extent available from diligent inquiry:

i. Site history information from sources including, but not limited to, the following:

- (1) Sanborn Fire Insurance Maps;
- (2) MacRae's Industrial Directory;
- (3) Title and Deed;
- (4) Site plans and facility as-built drawings;
- (5) Federal, State, county and local government files; and
- (6) The Department Geographic Information System;

ii. The site history from the time the site was naturally vegetated, including without limitation:

- (1) Names of all owners and operators;
- (2) Dates of ownership of each owner;
- (3) Dates of operation of each operator; and
- (4) Brief descriptions of the past industrial/commercial usage of the site by each owner and operator;

iii. All raw materials, finished products, formulations and hazardous substances, hazardous wastes, and pollutants which are or were present on the site, including intermediates and by-products;

iv. Present and past production processes, including dates, and their respective water use and shall be identified and evaluated, including ultimate and potential discharge and disposal points and how and where materials are or were received onsite (for example, rail, truck);

v. All former and current containers, container or bulk storage areas, above and below ground tanks, above and below ground waste and product delivery lines, surface impoundments, landfills, septic systems and other structures, vessels, conveyances or units that contain or previously contained hazardous substances, hazardous waste, and pollutants, including:

- (1) Type;
- (2) Age;
- (3) Dimension of each container;

- (4) Location;
- (5) Chemical content;
  
- (6) Integrity (for example, tank test reports);
- (7) Volume;
- (8) Construction materials; and
- (9) Inventory control records unless a Department-approved leak detection system pursuant to N.J.A.C. 7:1E or 7:14B has always been in place and there is no discharge history;
  
- vi. If the site area exceeds two acres, an interpretation of the aerial photographic history of the site, based on available current and historical color, black and white and infrared aerial photographs (scale 1:18,000 or less) of the site and surrounding area at a frequency which provides the evaluator with a historical perspective of site activities. The photographic history shall date back to 1932 or to the earliest photograph available. Aerial photographic coverage is available for review at the New Jersey Department of Environmental Protection and Energy, Tidelands Management Program, Aerial Photo Library, 9 Ewing Street, Trenton, New Jersey;
  
- vii. Any data or information concerning known discharges that have occurred on the site;
  
- viii. Remediation activities previously conducted or currently underway at the site including dates of previous discharges, remedial actions, and all existing sampling data concerning contaminants at the site. If a government agency was involved, the name of the lead government agency, case identification number, and current case status;
  
- ix. All remedies previously approved by the Department in a remedial action workplan or equivalent document to determine if the remedy remains protective of public health, safety and the environment;
  
- x. All existing environmental sampling data concerning contaminants at the site;
  
- xi. Any known changes in site conditions or new information developed since completion of previous sampling or remediation;
  
- xii. All Federal, State and local environmental permits including permits for all previous and current owners or operators, applied for or received, or both, for the site including:

- (1) The name and address of permitting agency;
- (2) The reason for the permit;
- (3) The permit identification number;
- (4) The application date;
- (5) The date of approval, denial, or status of application;
- (6) The name and current address of all permittees;
- (7) The reason for denial, revocation or suspension if applicable; and
- (8) The permit expiration date;

xiii. All administrative, civil and criminal enforcement actions for alleged violations of environmental laws concerning the site, including:

- (1) The name and address of agency that initiated the enforcement action;
- (2) Date of the enforcement action;
- (3) The section of statute, rule or permit allegedly violated;
- (4) The type of enforcement action;
- (5) A description of alleged violations;
- (6) The resolution or status of violation and enforcement action; and
- (7) A description of any potential environmental impact which may have resulted from the alleged violation; and

xiv. All areas where non-indigenous fill materials were used to replace soil or raise the topographic elevation of the site, including the dates of emplacement.

2. The person conducting the preliminary assessment shall conduct a site visit to verify the findings in (c)1 above.

## **Pennsylvania**

Not applicable.

## **ASTM E1527-97 (Phase I Environmental Site Assessment Process)**

7.3 Historical Use Information:

*All Appropriate Inquiry Criteria Analysis  
Comparison to State, Federal  
and Commercial Assessment Approaches*

*Solid Waste  
and Emergency  
Response (5105T)*

*EPA 500-F-03-229  
June 2003  
[www.epa.gov/brownfields/](http://www.epa.gov/brownfields/)*

7.3.1 Objective—The objective of consulting historical sources is to develop a history of the previous uses of the property and surrounding area, in order to help identify the likelihood of past uses having led to recognized environmental conditions in connection with the property.

7.3.2 Uses of the Property—All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources in 7.3.4.1-7.3.4.8 as are necessary and both reasonably ascertainable and likely to be useful (as defined under Data Failure in 7.3.2.3). For example, if the property was developed in the 1700's, it might be feasible to identify uses back to the early 1900's, using sources such as fire insurance maps or USGS 7.5 minute topographic maps (or equivalent). Although other sources such as recorded land title records might go back to the 1700's, it would not be required to review them unless they were both reasonably ascertainable and likely to be useful. As another example, if the property was reportedly not developed until 1960, it would still be necessary to confirm that it was undeveloped back to 1940. Such confirmation may come from one or more of the standard historical sources specified in 7.3.4.1-7.3.4.8, or it may come from other historical sources (such as someone with personal knowledge of the property; see 7.3.4.9). However, checking other historical sources (see 7.3.4.9) would not be required. For purposes of 7.3.2, the term “developed use” includes agricultural uses and placement of fill. The report shall describe all identified uses, justify the earliest date identified (for example, records showed no development of the property prior to the specific date), and explain the reason for any gaps in the history of use (for example, data failure).

7.3.2.1 Intervals—Review of standard historical sources at less than approximately five year intervals is not required by this practice (for example, if the property had one use in 1950 and another use in 1955, it is not required to check for a third use in the intervening period). If the specific use of the property appears unchanged over a period longer than five years, then it is not required by this practice to research the use during that period (for example, if fire insurance maps show the same apartment building in 1940 and 1960, then the period in between need not be researched).

7.3.2.2 General Type of Use—In identifying previous uses, more specific information about uses is more helpful than less specific information, but it is sufficient, for purposes of 7.3.2, to identify the general type of use (for example: office, retail, and residential) unless it is obvious from the source(s) consulted that the use may be more specifically identified. However, if the general type of use is industrial or manufacturing (for example, zoning/land use records show

industrial zoning), then additional standard historical sources should be reviewed if they are likely to identify a more specific use and are reasonably ascertainable, subject to the constraints of data failure (see 7.3.2.3).

7.3.2.3 Data Failure—A standard historical source may be excluded (1) if the source is not reasonably ascertainable, or (2) if past experience indicates that the source is not likely to be sufficiently useful, accurate, or complete in terms of satisfying 7.3.2. Other historical sources specified in 7.3.4.9 may be used to satisfy 7.3.2, 7.3.2.1, and 7.3.2.2, but are not required to comply with this practice. Whatever history of previous uses is derived from checking the standard historical sources specified in 7.3.4.1-7.3.4.8 (except those excluded by (1) and (2) of 7.3.2.3) shall be deemed sufficient historical use information to comply with this practice.

## **ASTM 1527-00 (Phase I Environmental Site Assessment Process)**

7.3.1. *Historical Use Information: Objective*—The objective of consulting historical sources is to develop a history of the previous uses of the *property* and surrounding area, in order to help identify the likelihood of past uses having led to *recognized environmental conditions* in connection with the *property*.

[Note: This section provides more detail regarding: Uses of the Property (7.3.2), Uses of Properties in Surrounding Area (7.3.3), Standard Historical Sources (7.3.4) Aerial Photographs (7.3.4.1), Fire Insurance Maps (7.3.4.2), Property Tax Files (7.3.4.3), Recorded Land Title Records (7.3.4.4), USGS 7.5 Minute Topographic Maps (7.3.4.5), Local Street Directories (7.3.4.6), Building Department Records (7.3.4.7), Zoning/Land Use Records (7.3.4.8), Other Historical Records (7.3.4.9), and Prior Assessment Usage (7.4)]

## **ASTM E1528-00 (Transaction Screen Process)**

5.1 *Process*—The *transaction screen process* consists of asking questions contained within the *transaction screen questionnaire* of owners and occupants of the *property*, observing site conditions at the *property* with direction provided by the *transaction screen questionnaire*, and, to the extent *reasonably ascertainable*, conducting limited research regarding certain *government records* and certain *standard historical sources*. The questions asked of owners are the same questions as those asked of occupants.

## 10. Guide to Government Records/Historical Sources Inquiry

10.1 Do any of the following federal government record systems list the property or any property within the search distance noted below:

National Priorities List—within 1.0 mile (1.6 Km)?  Yes  No

CERCLIS List—within 0.5 mile (0.8 Km)?  Yes  No

RCRA CORRACTS Facilities—within 1.0 mile (1.6 Km)?  Yes  No

RCRA non-CORRACTS TSD Facilities—within 0.5 mile (0.8 Km)?  Yes  No

### 10.1.1 Guide:

10.1.1.1 The NPL or National Priorities List is a list compiled by EPA pursuant to CERCLA 42 USC § 9605(a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA's Hazard Ranking System. See 40 CFR Part 300.

10.1.1.2 The Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) is the list of sites compiled by EPA that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the national Priorities List.

10.1.1.3 RCRA CORRACTS Facilities are those facilities which treat, store and/or dispose of hazardous wastes on-site and at which corrective remedial action is underway, as defined and regulated by RCRA. The RCRA non-CORRACTS TSD Facilities List are those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place and at which corrective remedial action has not been required by EPA, as defined and regulated by RCRA.

10.1.1.4 If the preparer elects to obtain the records directly from government agencies, those records typically must be obtained through a formal written request to the office within each agency that is responsible for maintaining the records or for responding to public requests for records. At the federal level, these requests are governed by the Freedom of Information Act (FOIA). FOIA requires a written request and the request should identify the records the preparer requires and should identify the site and geographic area for which the preparer needs the records (for example, the address of the site and the appropriate city, county, or zip code to be

searched).

The request should be directed to the FOIA officer for the regional EPA office responsible for the region in which the site is located. A list of the FOIA offices for each of the EPA regions may be obtained from the federal government or local library. From the federal EPA offices, the preparer should anticipate a response no sooner than four to eight weeks.

10.1.1.5 If government information is obtained from a commercial service, the firm should provide assurances that its records stay current with the government agency record sources. Government information obtained from commercial sources may be considered current if the source updates the information at least every 90 days, or for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the updated information available to the public.

10.1.1.6 The information supplied in response to this question in a prior environmental site assessment may be used provided it is updated to the present time.

10.2 Do any of the following state record systems list the property or any property within the search distance noted below:

List maintained by state environmental agency of hazardous waste sites identified for investigation or remediation that is the state agency equivalent to NPL—within 1.0 mile (1.6 Km)?  Yes  No

List maintained by state environmental agency of sites identified for investigation or remediation that is the state equivalent to CERCLIS—within 0.5 mile (0.8 Km)?  Yes  No

Leaking Underground Storage Tank (LUST) List—within 0.5 mile (0.8 Km)?  Yes  No

Solid Waste/Landfill Facilities—within 0.5 mile (0.8 Km)?  Yes  No

10.2.1 Guide:

10.2.1.1 The LUST list is a list of sites containing one or more underground storage tanks that have been identified as having leaked or are potentially leaking their contents into the ground or ground water; these sites may be involved in a state cleanup program.

10.2.1.2 The solid waste/landfill facilities list is a list of sites that currently accept, or have accepted in the past, waste of any kind for disposal on site. Solid waste/landfill facilities lists typically are obtained through a state office of solid waste management that is often a division of the primary state environmental agency.

10.2.1.3 Although many states do not have specific Freedom of Information laws, if the preparer elects to obtain the records directly from government agencies, a similar written request for state records should be made to the primary state agency responsible for environmental regulation in that state. Typically, the office responsible for maintaining the records and for responding to requests for records are the same. Once again, the written request should identify the specific records requested and identify the site and geographic area for which the preparer needs the records. The state agency response will vary from state to state and agency to agency, but the preparer should anticipate a minimum of four weeks for a response.

10.2.1.4 In some cases, the request should be directed to a specific state office. For example, leaking underground storage tank requests should be made through either the state agency's ground water management division, the state Fire Marshall's office, or the state Emergency Planning and Management Agency.

10.2.1.5 The identity of the state office to which the request should be made can be obtained by contacting the primary state environmental agency. Also, there are publications listing agency sources for each state. The local public library may contain these publications.

10.3 Based upon a review of fire insurance maps or consultation with the local fire department serving the property all as specified in the guide, are any buildings or other improvements on the property or on an adjoining property identified as having been used for an industrial use or uses likely to lead to contamination of the property? \_\_\_Yes \_\_\_No \_\_\_Not Applicable

#### 10.3.1 Guide:

10.3.1.1 The focus of this research is to determine whether any past use of the property would suggest the presence of contamination associated with the property. If reasonably ascertainable, one of two sources of data should be examined in the following order of preference: fire insurance maps showing the property or the local fire department serving the property. However, if the user has first-hand knowledge of the use of the property from the present back to 1940 or if the preparer interviewed disinterested people with such knowledge, then the preparer may eliminate this research and answer "not applicable" to the questions above. In addition, the



preparer may eliminate this research and answer “not applicable” to the question if the preparer is unable to find appropriate sources of fire insurance maps or individuals at the local fire department for the property with knowledge of the property’s past use, after making a reasonable effort in good faith to locate such information or if the information is otherwise not reasonably ascertainable.

10.3.1.2 Subject to the previous paragraph, the preparer should obtain fire insurance maps from the period(s) not covered by the first-hand knowledge of the user or of those interviewed, beginning with when the maps are first available for the area or when the area was first thought to be developed. At least two maps should be ordered at points in time separated by at least ten years.

10.3.1.3 Fire insurance maps are defined in 3.2.14 and may be available for review from public libraries, colleges, and local historical societies, or from commercial services.

10.3.1.4 In examining a fire insurance map, the user is only required to review those areas shown in the given source. For example, if the property is at the edge of a map sheet, the user need not order the adjoining sheet. If a source covers a large area, the user need only review the area within approximately 1/8 mile (200 m) of the property.

10.3.1.5 Fire insurance maps reviewed as part of a prior environmental site assessment do not need to be searched for or reviewed again, but the preparer should make a reasonable effort to determine the uses of the property since the last use identified in a prior environmental site assessment.

## **ASTM 2247-02 (Phase I for Forestland or Rural Property)**

*Recorded Land Title Records*—The term *recorded land title records* means records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the *property* recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the property is located. (Often such records are kept by a municipal or county recorder or clerk.) The *user* should provide these records when they are in its possession and are *reasonably ascertainable*. s. 5.2.2.

*Tract Maps*—The *user* shall provide individual tract maps for the subject *property*, at the

*environmental professional's* request, if these maps are *reasonably ascertainable*. These maps can provide vegetation stock and stand type information, internal woods roads designation, SMZs, huntcamps, and other additional information which, when used in combination with other sources, should be of use to the *environmental professional*". s. 5.5

*“Historical Use Information: Objective—* The objective of consulting historical sources is to develop a history of the previous uses of the *property* and surrounding area, in order to help identify the likelihood of past uses having led to *recognized environmental conditions* in connection with the *property*”. S. 7.3.1.[ Note: This section provides more detail regarding : Uses of the Property (7.3.2), Uses of Properties in Surrounding Area (7.3.3), Standard Historical Sources (7.3.4), and Prior Assessment Usage (7.4)]

## **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

7.3.1 Property Assessment—The primary objective of the property assessment is to collect information necessary to identify and determine the completeness of both human and ecological exposure pathways and to determine the likely distribution of a chemical(s) of concern. The collection of these data is necessary to make a determination of the potential environmental condition of the property. Normally, the property assessment is composed of two activities, a nonintrusive evaluation and an intrusive evaluation. The community may be an important resource and should be consulted for information for determining historical use and potential exposure pathways. Information available from the community include archives at local historical societies and long-term residents in the project area. Community groups may also be the designated enforcement entity for any activity and use limitations filed on the subject property. Changes in current land use may require modifications to existing AULs.

7.3.2 Nonintrusive Evaluation—A nonintrusive evaluation of the historical and current uses of the property and area surrounding the property is conducted to identify source areas (that is, areas where chemical(s) of concern is likely to be present) and potential receptors that may come in contact with a release from the property. Practices E 1527 and E 1528 are examples of non-intrusive evaluations. Investigating past health concerns on or near the property might be considered a part of the nonintrusive evaluation. The evaluation may include:

7.3.2.1 Defining the area that will be investigated,

7.3.2.2 Identifying current and reasonable potential future receptors, fate and transport

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mechanisms, exposure routes, and point(s) of exposure,

7.3.2.3 Identifying potential sources, including a review of the property or property history to determine areas that may require investigation,

7.3.2.4 Identifying chemical(s) of concern,

7.3.2.5 Identifying potential source area(s),

7.3.2.6 Identifying the media to be sampled,

7.3.2.7 Determining current and reasonable potential future land use, and/or

7.3.2.8 Determining current and reasonable potential future ground water use., and/or

7.3.2.9 Examining the potential for infiltration of soil gas into structures. When releases of volatile organic compounds occur near buildings, volatilization of chemicals of concern from the dissolved or pure phases in the subsurface can result in the intrusion of vapor-phase chemicals of concern into indoor air. Modeling may be used to estimate the risk associated with this exposure pathway.

## **Guidance for Performing Preliminary Assessments Under CERCLA EPA/540/G-91/013 September 1991**

### **2.2.4 Sites with No Hazardous Substances**

Occasionally your review of available file information will yield no evidence or indication that hazardous substances, pollutants, or contaminants were ever handled or disposed at the site. These types of sites pose no CERCLA threat to human health or the environment because they have not released, nor can they release, hazardous substances to the environment.

You must be certain that CERCLA hazardous substances are not now, or have never been, at the site before “no further action” could be recommended on this basis. Many sites have extremely limited information concerning waste sources. Simple lack of information cannot be interpreted to indicate that no hazardous waste is present or has ever been deposited at the site. Such a determination must be supported by convincing evidence, like documentation of a complete removal of all hazardous substances. In addition, you should perform a reconnaissance of the site (Section 2.5) to visually verify the lack of hazardous waste sources.

### **2.3 File Searches**

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For many sites, a great deal of information may be available from records of State and/or local investigations, Federal and State permit applications, and Federal hazardous waste notification. These can yield information concerning site operations, waste types and quantities, regulatory history, past environmental violations, and citizen complaints. A good deal of this type of information can be obtained by reviewing Regional EPA files and State environmental agency files. Additional information concerning the site area may be obtained by reviewing in-house files for nearby sites that your office has previously investigated.

Before initiating a file search, you should be familiar with the checklist of PA information needs (Figure 2-1), particularly the general site information and source description sections. Also be familiar with the criteria lists in the PA scoresheets (Appendix A) and be aware of the types of questions you need to answer to evaluate the threat of a release from the site and potential impacts on human and environmental targets (Section 3).

### **2.3.1 Types of Information**

Information gathered through file searches can be useful in developing professional judgement hypotheses concerning the release of hazardous substances from the site and the exposure of targets to released substances. Collect as much information concerning waste handling practices as possible. This includes information on waste containment and general housekeeping practices.

Documents of particular interest during the file search include site sketches, inspection reports, aerial photographs, permit applications, hazardous waste handling notification forms (RCRA notification forms and CERCLA 103(c) notification forms, filed by facilities to notify EPA of hazardous substances they handled), waste hauling manifests, analytical sampling results, records of citizen complaints, records of violations, and court orders.

Site sketches, maps, and aerial photographs can help identify source types and locations. Permit applications, waste hauling manifests, and Federal hazardous waste notification forms can supply data on the specific types and quantities of waste generated and/or disposed. Previous inspections can provide information on source types, past environmental impacts, and targets. Analytical results of monitoring or inspection activities can provide valuable data concerning the types of hazardous substances found at the site and possible releases. Additionally, citizen complaint reports and court orders may also provide information indicating hazardous substances have been released from the site.

While conducting file searches, always try to obtain copies of source documents. For example, an analytical sampling report prepared by the local board of health after an inspection is better than a letter report prepared at a later date that references the inspection but does not include the actual analytical data. Remember that the PA is the initial step in the site assessment process. Should the site move beyond the PA, data sources used during the PA may carry on to the SI and could eventually be used to support placement on the NPL.

### **2.3.2 EPA Regional Files**

Generally, the first files you will access are at Regional EPA offices. In some Regions, the EPA site assessment contact will give you the files when you receive the PA assignment, in other Regions, you may need to coordinate with the contact to gain access to all the necessary files. The PA is the first step in the Superfund site assessment process and, for most sites, you will be initiating the Superfund file for the site. However, you may be assigned a PA on a site that may have been the subject of some Federal action such as a removal, regulatory inspection, or permit application. In these instances, Regional files may contain information that will be useful for completing the PA.

First access Regional site assessment files. These may contain useful documents such as CERCLA 103(c) notification forms, PA petitions, or reports on previous site assessment activities at the site. These documents will likely have information concerning the types of wastes disposed, general site operations, and alleged environmental impacts, possibly including information from State activities.

Next access other Regional Superfund files. For example, the site may have had a Superfund removal action (fencing the site, physical removal of hazardous wastes, closing of wells, supplying alternative drinking water, or other emergency measures). Removal program files may provide useful information concerning waste sources, types and quantities of wastes, and past environmental impacts. Coordinate with your Regional EPA site assessment contact to determine if other Superfund offices have information concerning the site being evaluated and to access those files.

You also need to research EPA offices outside the Superfund program, such as RCRA and the National Pollutant Discharge Elimination System (NPDES) program. They may have permit applications and monitoring results with information on specific waste types and quantities, sources, type of site operations, and operating status. Coordinate with your EPA site assessment contact to access and review files from other Regional programs.

### 2.3.3 State Environmental Agency Files

Historical files of State environmental agencies may provide information about the site, as many sites investigated under Superfund were originally discovered by or identified to a State agency. For State environmental agency personnel conducting PAs, files should be readily available. For others, the process of gaining access to State agency files varies. In some States, you can request file information over the phone and have it sent to your office. Most States, however, require prior arrangements to visit the appropriate State agency offices to review and make copies of the desired file information.

The “Site Assessment Information Directory” (available from EPA) contains the names, locations, and telephone numbers of State agencies that can provide data and information necessary for the PA investigation. For file search purposes, the principal environmental agency for the State is the best candidate. However, a single division or department within that agency is unlikely to have all of the available information for a site. For example, the State Department of Environmental Protection, as the principal environmental agency, may have a Superfund or solid waste division that has information about the site, and may also have separate RCRA and water resources divisions that have additional information.

As with Federal files, State files may contain information derived from permit applications, previous investigations of the site, or from reported environmental impacts. While reviewing State files, gather information concerning the site’s operating history, specifically regarding waste types, quantities, and sources; type of site operations; ownership history; and historical waste handling and disposal practices.

### 2.3.4 In-House Files

Although in-house files generally will not provide information specific to the site, they too can be useful sources of information. Research the possibility that other sites in the vicinity have been investigated by your office. In-house files for such sites can provide data on local geology, hydrology, and other site environs information. In addition, valuable targets information can be obtained, such as the locations of public drinking water supply wells or surface water intakes and the extent of municipal supply systems.

Individuals in your office who have performed investigations on sites in the general vicinity of

your site are also good resources. These individuals may be able to provide recommendations for sources of information for specific data elements (e.g., the name and telephone number of an individual at the State Fish and Wildlife Department helpful in identifying fisheries and endangered species habitats).

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**U.S. EPA Region 2**  
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C.0 Site Background

The Site-Specific Brownfields SAMP shall contain Historical Data Review and Site Reconnaissance Reports. The Historical Data Review and Site Reconnaissance Reports are to be generated by undertaking a Phase I Brownfields Site Assessment.

C.1 Historical Data Review Report

To identify potentially contaminated areas of a Brownfields site, it is customary to prepare a Historical Data Review Report to examine previous site operations and disposal practices. This initial “environmental assessment” is commonly referred to as a Phase I Brownfields Site Assessment. Undertaking a Phase I Brownfields Site Assessment is useful in its ability to form the basis of a Historical Data Review Report summary for project planning purposes. Sources of information include federal, state and local officials and files (site inspection reports and legal actions), deed or title records, former facility employees, local residents, and facility records. Historical sampling data should include all available information such as sample locations (on maps when available), matrices, methods of collection and analysis, and relevant contaminant concentrations.

*In accordance with the aforementioned requirements, the Site-Specific Brownfields SAMP must provide a summary of the history/background of the particular property under investigation. When available, historical monitoring results from previous investigations may also be relied upon to provide an understanding of the environmental condition of the site. However, it is essential to assess the reliability and usefulness of existing analytical data. Existing analytical data without documentation or QA/QC controls may still be useful, and should be included in the Historical Data Review Report summary. The Historical Data Review Report summary shall*

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*describe site-specific chemical processes, raw materials, final products, wastes, and waste storage/disposal practices to the greatest possible extent. In addition, it is customary to include site maps along with facility blueprints and aerial photographs when available in the Historical Data Review Report summary. In conjunction, a local Agricultural Extension Agent should be contacted to provide insights into soil types and drainage patterns. County property and tax records, and United States Geological Survey (USGS) topographic maps are additional sources of site and regional information.*

## **Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup**

### **Site Assessment**

#### ***Collect and Assess Information about the Brownfield Site***

#### **What Do We Need to Know? (p. 18)**

Factors that should be considered during this phase include:

- What is known about the site?
- What records exist that indicate potential contamination and past use of the property?
- Have other environmental actions occurred (such as notices of violation)?
- Has an environmental audit been conducted?
- What information is needed to identify the types and extent or the absence of contamination?

#### **How Do We Find the Answers?**

Activities to be conducted during the initial survey of a site include:

Determine whether contamination is likely through the conduct of an ASTM Phase I environmental site assessment or its equivalent. A records search is performed and the site is visited, but no sampling of soil or groundwater occurs. The effort includes the following activities:

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- Identify past owners and the uses they made of the property by conducting a title search and reviewing tax documents, sewer maps, aerial photographs, and fire, police, and health department documentation related to the property.
- Review and analyze city government and other historical records to identify past use or disposal of hazardous or other waste materials at the site.

**Criterion IV. Searches for recorded environmental cleanup liens against the facility that are filed under federal, state, or local law.**

**SBLRBRA §223(B)(ii),(iii)(IV)**

(ii) STANDARDS AND PRACTICES—Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA—In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(IV) Searches for recorded environmental cleanup liens against the facility that are filed under Federal, State, or local law.

**Florida**

Not applicable.

**Illinois**

**415 ILCS 5/  
415 ILCS 5/22.2(j)(6)(E)(v)(III)**

(v) For purposes of this subparagraph (E), the term “Phase I Environmental Audit” means an investigation of real property, conducted by environmental professionals, to discover the presence or likely presence of a release or a substantial threat of a release of a hazardous substance or pesticide at, on, to, or from real property, and whether a release or a substantial threat of a release of a hazardous substance or pesticide has occurred or may occur at, on, to, or

from the real property. The investigation shall include a review of at least each of the following sources of information concerning the current and previous ownership and use of the real property:

(III) Recorded environmental cleanup liens, if any, against the real property that have arisen pursuant to this Act or federal statutes.

## **Massachusetts**

### **Massachusetts General Laws**

Chapter 21E, Section 13: “Any liability to the commonwealth under this chapter shall constitute a debt to the commonwealth. Any such debt, together with interest thereon at the rate of twelve percent per annum from the date such debt becomes due, shall constitute a lien on all property owned by persons liable under this chapter when a statement of claim naming such persons is recorded, registered or filed. If a fiduciary, city or town, redevelopment authority, redevelopment agency, community development corporation, economic development and industrial corporation or a secured lender has title to or possession of the property, and if the fiduciary, city or town, redevelopment authority, redevelopment agency, community development corporation, economic development and industrial corporation or secured lender is not a person liable under this chapter when a statement of claim is recorded, registered or filed, such debt, together with interest thereon at the rate of twelve percent per annum from the date such debt becomes due, shall constitute a lien on the property in question when a statement of claim describing such property is duly recorded, registered or filed. If the site described in such statement comprises real property, such lien shall be effective when duly recorded and indexed in the grantor index in the registry of deeds or registered in the registry district of the land court for the county or district wherein the land lies so as to affect its title, and describes the land by metes and bounds or by reference to a recorded or registered plan showing its boundaries. In addition, such lien shall be effective with respect to such other real property owned by such person when notice thereof is duly recorded and indexed in the registry of deeds or registered in the registry district of the land court for the county or district wherein any such other land lies. If the site described in such statement is personal property, whether tangible or intangible, the statement shall be filed in accordance with the provisions of article 9 of chapter 106 as if the debtor were located in the commonwealth under said section 9-307 of said chapter 106. Any such statement shall be sufficient if executed or approved by the commissioner of the department. Any lien recorded,

registered or filed pursuant to this section shall have priority over any encumbrance theretofore recorded, registered or filed with respect to any site, other than real property the greater part of which is devoted to single or multi-family housing, described in such statement of claim, but as to other real property shall be subject to encumbrances or other interests recorded, registered or filed prior to the recording, registration or filing of such statement, and as to all other personal property shall be subject to the priority rules of said chapter one hundred and six. Such lien shall continue in force with respect to any particular real or personal property until a release of the lien signed by the commissioner is recorded, registered or filed in the place where the statement of claim as to such property affected by the lien was recorded, registered or filed. In addition to discretionary releases of liens, the commissioner shall forthwith issue such a release in any case where the debt for which such lien attached, together with interest and costs thereon, has been paid or legally abated. If no action to enforce or foreclose the lien is brought by the deadline prescribed in subsection (1) of section eleven A, the lien shall be dissolved after said deadline. This section shall not apply to any property, real or personal, tangible or intangible, any money, fees, charges, revenues or otherwise, owned payable to or by, held in trust by or for, or otherwise owned, operated or managed by the Massachusetts Municipal Wholesale Electric Company established pursuant to chapter seven hundred and seventy-five of the acts of nineteen hundred and seventy-five, Massachusetts municipal light departments organized under chapter one hundred and sixty-four or any other special law, or with respect to any property real or personal whatsoever of municipal light departments administered pursuant to chapters forty-four and one hundred and sixty-four A. Notwithstanding the foregoing, the aforesaid Massachusetts Municipal Wholesale Electric Company and municipal light departments shall use their authority as provided by applicable statutes to assess, contain or remove any such oil or hazardous material release for which they are responsible under this chapter.

“The provisions of this section shall apply to any site or vessel which has been the subject of a response action and which is owned or possessed by a fiduciary, city or town, redevelopment authority, redevelopment agency, community development corporation, economic development and industrial corporation or secured lender, except that nothing in this section shall be deemed to allow the commonwealth to take any action otherwise authorized by this section with respect to any property while it is owned or possessed by a secured lender except to (1) record, register or file a lien or release of a lien as provided in this section, (2) in the case of real property, foreclose upon a lien and subsequently sell the property in question in accordance with the procedures set forth in chapter two hundred and forty-four, and (3) in the case of personal property, take possession and sell, lease or otherwise dispose of the secured property in accordance with the procedures for the disposition of collateral set forth in part 6 of article 9 of

chapter 106. If the property is sold for less than the amount of the lien, a secured lender who meets the requirements of clause (b) of the definition of owner or operator in section two shall not be deemed an owner or operator of the site or vessel in question and shall not be liable to the commonwealth for the deficiency.”

## Michigan

### Natural Resources and Environmental Protection Act

Act 451, Section 324.20120b: Sec. 20120b. “(1) If a remedial action plan is selected or approved by the department based on criteria for the residential category provided for in section 20120a(1)(a), land use restrictions or monitoring are not required once those standards have been achieved by the remedial action.

(2) If a remedial action plan is selected or approved by the department based on criteria in categories provided for in section 20120a(1)(b) to (e), *a notice of approved environmental remediation shall be recorded with the register of deeds for the county in which the facility is located within 21 days after selection or approval by the department of the remedial action, or within 21 days after completion of construction of the remedial action as appropriate to the circumstances.* A notice shall be filed pursuant to this section only by the property owner or by another person who has the express written permission of the property owner. The form and content of the notice are subject to approval by the state. Any restrictions contained in the notice shall be binding on the owner's successors, assigns, and lessees, and shall run with the land. A notice of environmental remediation recorded pursuant to this subsection shall state which of the categories of land use specified in section 20120a(1)(b) to (d) are consistent with the environmental conditions at the property to which the notice applies, and that a change from that land use or uses may necessitate further evaluation of potential risks to the public health, safety, or welfare, or the environment. *The notice of approved environmental remediation shall include a survey and property description that define the areas addressed by the remedial action plan if land use or resource use restrictions apply to less than the entire parcel or if different restrictions apply to different areas of a parcel, and the scope of any land use or resource use limitations.* Additional requirements for financial assurance, monitoring, or operation, and maintenance do not apply if a remedial action complies with criteria provided for in section 20120a(1)(b) to (e), unless monitoring or operation and maintenance are required to assure the compliance with criteria that apply outside the boundary of the property that is the source of the

release.

(3) If a remedial action plan is selected or approved by the department based on criteria provided for in section 20120a(1)(f) to (j) or (2), provisions concerning subdivisions (a) through (e) shall be stipulated in a legally enforceable agreement with the department. If the department concurs with an analysis provided in a remedial action plan that 1 or more of the requirements specified in subdivisions (b) to (e) is not necessary to protect the public health, safety, or welfare, or the environment and to assure the effectiveness and integrity of the remedial action, that element may be omitted from the agreement. If provisions for any of the following, determined by the department to be applicable for a facility, lapse or are not complied with as provided in the agreement or remedial action plan, the department's approval of the remedial action plan is void from the time of the lapse or violation, unless the lapse or violation is corrected to the satisfaction of the department:

- (a) Land use or resource use restrictions.
- (b) Monitoring.
- (c) Operation and maintenance.
- (d) Permanent markers to describe restricted areas of the site and the nature of any restrictions.
- (e) Financial assurance, in a mechanism acceptable to the department to pay for monitoring, operation and maintenance, oversight, and other costs determined by the department to be necessary to assure the effectiveness and integrity of the remedial action.

(4) If a remedial action plan relies in whole or in part on cleanup criteria approved pursuant to section 20120a(1)(f) to (j) or (2), land use or resource use restrictions to assure the effectiveness and integrity of any containment, exposure barrier, or other land use or resource use restrictions necessary to assure the effectiveness and integrity of the remedy shall be described in a restrictive covenant. *The restrictive covenant shall be recorded with the register of deeds for the county in which the property is located within 21 days of the department's selection or approval of the remedial action plan, or within 21 days of the completion of construction of the containment or barrier, as appropriate to the circumstances. The restrictive covenant shall be filed by the property owner or with the express written permission of the property owner. The restrictions shall run with the land and be binding on the owner's successors, assigns, and lessees.* Such restrictions shall apply until the department determines that hazardous substances that are controlled by the barrier or contained no longer present an unacceptable risk to the public health, safety, or welfare, or the environment as defined by the cleanup criteria and exposure control requirements set forth in the remedial action plan. The restrictive covenant shall

include a survey and property description that define the areas addressed by the remedial action plan and the scope of any land use or resource use limitations. The form and content of the restrictive covenant are subject to approval by the department and shall include provisions to accomplish all of the following:

- (a) Restrict activities at the facility that may interfere with a remedial action, operation and maintenance, monitoring, or other measures necessary to assure the effectiveness and integrity of the remedial action.
- (b) Restrict activities that may result in exposures above levels established in the remedial action plan.
- (c) Require notice to the department of the owner's intent to convey any interest in the facility 14 days prior to consummating the conveyance. A conveyance of title, an easement, or other interest in the property shall not be consummated by the property owner without adequate and complete provision for compliance with the terms and conditions of the agreement described in subsection (3) and the prevention of releases and exposures described in subdivision (b).
- (d) Grant to the department the right to enter the property at reasonable times for the purpose of determining and monitoring compliance with the remedial action plan, including the right to take samples, inspect the operation of the remedial action measures, and inspect records.
- (e) Allow the state to enforce the restriction set forth in the covenant by legal action in a court of appropriate jurisdiction.
- (f) Describe generally the uses of the property that are consistent with the categorical criteria and limitations approved as part of a remedial action plan.

(5) If the department determines that exposure to hazardous substances may be reliably restricted by an institutional control in lieu of a restrictive covenant, and that imposition of land use or resource use restrictions through restrictive covenants is impractical, the department may approve of a remedial action plan under section 20120a(1)(f) to (j) or (2) that relies on such institutional control. Mechanisms that may be considered under this subsection include, but are not limited to, an ordinance that prohibits the use of groundwater or an aquifer in a manner and to a degree that protects against unacceptable exposures as defined by the cleanup criteria approved as part of the remedial action plan. *An ordinance that serves as an exposure control pursuant to this subsection shall be published and maintained in the same manner as zoning ordinances and shall include a requirement that the local unit of government notify the department at least 30 days prior to adopting a modification to the ordinance, or to the lapsing or revocation of the ordinance.*

(6) Selection or approval by the department of a remedial action does not relieve a person who is liable under section 20126 of that person's responsibility to report and provide for response activity to address a subsequent release or threat of release at the facility.

(7) A remedial action shall not be considered approved by the department unless a remedial action plan is submitted to the department and the department approves the plan. Implementation by any person of response activity without department approval does not relieve that person of an obligation to undertake response activity or limit the ability of the department to take action to require response activity necessary to comply with this act by a person who is liable under section 20126.

(8) A person shall not file a notice of approved environmental remediation indicating approval or a determination of the department unless the department has approved of the filing of the notice.

*(9) A person who implements a remedial action plan approved by the department pursuant to subsections (2) to (5) shall provide notice of the land use restrictions that are part of the remedial action plan to the zoning authority for the local unit of government in which the facility is located within 30 days of approval of the plan.*

*(10) The state, with the approval of the state administrative board, may place restrictive covenants related to land or resource use on deeds of state owned property.” (Italics added.)*

Act 451, Section 324.20138: “( ) All unpaid costs and damages for which a person is liable under section 20126 constitute a lien in favor of the state upon a facility that has been the subject of response activity by the state and is owned by that person. A lien under this subsection has priority over all other liens and encumbrances except liens and encumbrances recorded before the date the lien under this subsection is recorded. A lien under this subsection arises when the state first incurs costs for response activity at the facility for which the person is responsible.

(2) If the attorney general determines that the lien provided in subsection (1) is insufficient to protect the interest of the state in recovering response costs at a facility, the attorney general may file a petition in the circuit court of the county in which the facility is located seeking either or both of the following:

(a) A lien upon the facility subject to response activity that takes priority over all other liens and encumbrances that are or have been recorded on the facility.



(b) A lien upon real or personal property or rights to real or personal property, other than the facility, owned by the person described in subsection (1), having priority over all other liens and encumbrances except liens and encumbrances recorded prior to the date the lien under this subsection is recorded. However, the following are not subject to the lien provided for in this subdivision:

(I) Assets of a qualified pension plan or individual retirement account under the internal revenue code.

(ii) Assets held expressly for the purpose of financing a dependent's college education.

(iii) Up to \$500,000.00 in nonbusiness real or personal property or rights to nonbusiness real or personal property, except that not more than \$25,000.00 of this amount may be cash or securities.

(3) A petition submitted pursuant to subsection (2) shall set forth with as much specificity as possible the type of lien sought, the property that would be affected, and the reasons the attorney general believes the lien is necessary. Upon receipt of a petition under subsection (2), the court shall promptly schedule a hearing to determine whether the petition should be granted. Notice of the hearing shall be provided to the attorney general, the property owner, and any persons holding liens or perfected security interests in the real property subject to response activity. A lien shall not be granted under subsection (2) against the owner of the facility if the owner is not liable under section 20126.

(4) In addition to the lien provided in subsections (1) and (2), if the state incurs costs for response activity that increases the market value of real property that is the location of a release or threatened release, the increase in value caused by the state funded response activity, to the extent the state incurred unpaid costs and damages, constitutes a lien in favor of the state upon the real property. This lien has priority over all other liens or encumbrances that are or have been recorded upon the property.

*(5) A lien provided in subsection (1), (2), or (4) is perfected against real property when a notice of lien is filed by the department with the register of deeds in the county in which the real property is located. A lien upon personal property provided in subsection (2) is perfected when a notice of lien is filed by the department in accordance with applicable law and regulation for the perfection of a lien on that type of personal property. In addition, the department shall, at the time of the filing of the notice of lien, provide a copy of the notice of lien to the owner of that property by certified mail.*

(6) A lien under this section continues until the liability for the costs and damages is satisfied or resolved or becomes unenforceable through the operation of the statute of limitations provided in section 20140.

*(7) Upon satisfaction of the liability secured by the lien, the department shall file a notice of release of lien in the same manner as provided in subsection (5).*

*(8) If the department, at the time or prior to the time of filing the notice of release of lien pursuant to subsection (7), has made a determination that the person liable under section 20126 has completed all of the response activity at the real property pursuant to the approved remedial action plan, the department shall execute and file with the notice of release of lien a document stating that all response activities required in the approved remedial action plan have been completed.” (Italics added.)*

## **New Jersey**

### **NJSA §§58:10-23.11b, .11f & .11g; NJAC 7:26E (“Technical Rule”)**

Not applicable.

## **Pennsylvania**

Not applicable.

### **ASTM E1527-97 (Phase I Environmental Site Assessment)**

5.2 Checking Title Records for Environmental Liens-Reasonably ascertainable recorded land title records (see 7.3.4.4) should be checked to identify environmental liens or activity and use limitations (including institutional and engineering controls), if any, that are currently recorded against the property. Any environmental lien or activity and use limitations (including institutional and engineering controls) so identified shall be reported to the environmental professional conducting a Phase I Environmental Site Assessment. This practice does not impose

on the environmental professional the responsibility to check for recorded environmental liens or activity and use limitations (including institutional and engineering controls). Rather the user should check or engage a title company or title professional to check reasonably ascertainable recorded land title records for environmental liens or activity and use limitations (including institutional and engineering controls) currently recorded against the property.

5.2.1 Reasonably Ascertainable-Environmental liens that are unrecorded or are recorded any place other than recorded land title records are not considered to be in recorded land title records that are reasonably ascertainable. Recorded land title records need not be checked if they otherwise do not meet the definition of the term reasonably ascertainable.

6.3.2 User Obligations- The environmental professional shall note in the report whether or not the user has reported to the environmental professional any environmental liens encumbering the property or any specialized knowledge or experience of the user that would provide important information about previous ownership or uses of the property that may be material to identifying recognized environmental conditions.

9.8 Questions About Helpful Documents—Prior to the site visit, the property owner, key site manager (if any is identified), and user (if different from the property owner) shall be asked if they know whether any of the documents listed in 9.8.1 exists and, if so, whether copies can and will be provided to the environmental professional within reasonable time and cost constraints. Even partial information provided may be useful. If so, the environmental professional conducting the site visit shall review the available documents prior to or at the beginning of the site visit.

9.8.1 Helpful Documents:

9.8.1.9 Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property.

11.3 Contents of Report-The report shall include those matters required to be included in the report pursuant to various provisions of this practice. In addition, the report shall state whether the user reported to the environmental professional any information pursuant to the user's responsibilities described in Section 5 of this practice (for example, an environmental lien encumbering the property or any relevant specialized knowledge or experience of the user).

## Appendix X3: Guidance to Assist Users in the Preparation for and Selection of an Environmental Professional to Conduct a Phase I Environmental Site Assessment

### User Preparation

Once a property is identified for which obtaining a Phase I Environmental Site Assessment is being considered, certain information should be collected, if available, prior to the selection of an environmental professional. This information should be provided to the environmental professional selected to conduct the Phase I. The information includes:

4. whether or not there are any environmental liens on the property, or activity and use limitations (such as a deed restriction).

### **ASTM 1527-00 (Phase I Environmental Site Assessment)**

*5.2 Checking Title Records for Environmental Liens or Activity and Land Use Limitations- Reasonably ascertainable recorded land title records (see 7.3.4.4) should be checked to identify environmental liens or activity and use limitations, if any, that are currently recorded against the property. Any environmental liens or activity and use limitations so identified shall be reported to the environmental professional conducting a Phase I Environmental Site Assessment. This practice does not impose on the environmental professional the responsibility to check for recorded environmental liens or activity and use limitations. Rather the user should check or engage a title company or title professional to check reasonably ascertainable recorded land title records for environmental liens or activity and use limitations currently recorded against the property.*

[Note: see also *6.3.2 User Obligations-* The *environmental professional* shall note in the report whether or not the user has reported to the *environmental professional* any environmental liens encumbering the *property* or any specialized knowledge or experience of the *user* that would provide important information about previous ownership or uses of the *property* that may be material to identifying *recognized environmental conditions*.]

### **ASTM E1528-00 (Transaction Screen Process)**

#### 8. Guide for Owner/Occupant Inquiry

*All Appropriate Inquiry Criteria Analysis  
Comparison to State, Federal  
and Commercial Assessment Approaches*

*Solid Waste  
and Emergency  
Response (5105T)*

*EPA 500-F-03-229  
June 2003  
[www.epa.gov/brownfields/](http://www.epa.gov/brownfields/)*

8.14 Does the *owner* or *occupant* of the property have any knowledge of *environmental liens* or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the property? \_\_\_ Yes \_\_\_ No \_\_\_ Unknown

### **ASTM 2247-02 (Phase I for Forestland and Rural Property)**

5.2 “*Checking Title Records for Environmental Liens -Reasonably ascertainable recorded land title records* (see 7.3.4.4) should be checked to identify *environmental liens* or *activity and use limitations*, if any, that are currently recorded against the *property*. Any environmental liens or activity and use limitations so identified shall be reported to the environmental professional conducting a Phase I Environmental Site Assessment. This practice does not impose on the environmental professional the responsibility to check for recorded environmental liens or activity and use limitations. Rather the user should check or engage a title company or title professional to check reasonably ascertainable recorded land title records for environmental liens or activity and use limitations currently recorded against the property. “

### **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

Not applicable.

### **Guidance for Performing Preliminary Assessments Under CERCLA EPA/540/G-91/013 September 1991**

Not applicable.

### **Generic Brownfields Quality Assurance Project Plan U.S. EPA Region 2 Revision No. 2**

*All Appropriate Inquiry Criteria Analysis  
Comparison to State, Federal  
and Commercial Assessment Approaches*

*Solid Waste  
and Emergency  
Response (5105T)*

*EPA 500-F-03-229  
June 2003  
[www.epa.gov/brownfields/](http://www.epa.gov/brownfields/)*

**Revision Date: May 2000 Final**

Not applicable.

**Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup**

Not applicable.

**Criterion V.       Reviews of 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.**

**SBLRBRA §223(B)(ii),(iii)(V)**

(ii) STANDARDS AND PRACTICES—Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA- In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(V) Reviews of 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.

**Florida**

Not applicable.

**Illinois**

**415 ILCS 5/  
415 ILCS 5/22.2(j)(6)(E)(v)(IV)**

(IV) Reasonably obtainable State, federal, and local government records of sites or facilities at, on, or near the real property to discover the presence or likely presence of a hazardous substance

or pesticide, and whether a release or a substantial threat of a release of a hazardous substance or pesticide has occurred or may occur at, on, to, or from the real property. Such government records shall include, but not be limited to: reasonably obtainable State, federal, and local government investigation reports for those sites or facilities; reasonably obtainable State, federal, and local government records of activities likely to cause or contribute to a release or a threatened release of a hazardous substance or pesticide at, on, to, or from the real property, including landfill and other treatment, storage, and disposal location records, underground storage tank records, hazardous waste transporter and generator records, and spill reporting records; and other reasonably obtainable State, federal, and local government environmental records that report incidents or activities that are likely to cause or contribute to a release or a threatened release of a hazardous substance or pesticide at, on, to, or from the real property. In order to be deemed “reasonably obtainable” as required herein, a copy or reasonable facsimile of the record must be obtainable from the government agency by request and upon payment of a processing fee, if any, established by the government agency. The Agency is authorized to establish a reasonable fee for processing requests received under this subparagraph (E) for records. All fees collected by the Agency under this clause (v)(IV) shall be deposited into the Environmental Protection Permit and Inspection Fund in accordance with Section 22.8. Notwithstanding any other law, if the fee is paid, the Agency shall process a request received under this subparagraph (E) for records within 30 days of the receipt of such request.

## **Massachusetts**

### **Massachusetts General Laws**

Chapter 21A, Section 19: “A successor hazardous waste cleanup professional may render a waste site cleanup activity opinion regarding response actions performed under a previous hazardous waste site cleanup professional, and that opinion may be relied upon as sufficient to protect public health, safety, welfare, or the environment, only when the successor hazardous waste site cleanup professional has: (a) *reviewed all reasonably available documentation known to the successor hazardous waste site cleanup professional that describes previous releases, site assessment activities and results, and work performed in connection with the assessment, containment or removal action that is the subject of the opinion*; (b) conducted a site visit to observe current conditions and to verify the completion of as much work as is reasonably observable; and (c) concluded, in the exercise of his independent professional judgment, that he has sufficient information upon which to render the waste site cleanup activity opinion.” (Italics

*All Appropriate Inquiry Criteria Analysis  
Comparison to State, Federal  
and Commercial Assessment Approaches*

*Solid Waste  
and Emergency  
Response (5105T)*

*EPA 500-F-03-229  
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added.)

Chapter 21, Section 3A(g): “For each site, either a report shall be submitted demonstrating that a level of no significant risk exists or has already been achieved at the site, or else a plan shall be established that shall include a timetable of definitive and enterprising steps to be taken to identify, develop and implement a permanent feasible solution at the site, and that, for each step included in the plan, shall specify who shall take that step.”

Chapter 21, Section 6: “The department may itself record, or may cause, allow or require the owner of the property to record, notice of the restrictions of the use of such property or of the modification or release of such restrictions. If the property to be restricted is real property, such notice of restriction shall be effective when duly recorded and indexed in the grantor index in the registry of deeds or registered in the registry district of the land court for the county or district wherein the land lies so as to affect its title, and describes the land by metes and bounds or by reference to a recorded or registered plan showing its boundaries. If the property is personal property, whether tangible or intangible, such notice shall be recorded in accordance with article 9 of chapter 106 as if the debtor were located in the commonwealth under said section 9-307 of said chapter 106. Any such restriction, modification or release shall be sufficient if executed or approved by the commissioner of the department.”

## Michigan

### Natural Resources and Environmental Protection Act

Act 451, Section 324.21308a: “1) *Within 90 days after a release has been discovered, a consultant retained by the owner or operator shall complete an initial assessment report and submit the report to the department on a form created pursuant to section 21316.* The report shall include, but is not limited to, the following information:

- (a) Results of initial response actions taken under section 21307(2).
- (b) Site information and site characterization results. The following items shall be included as appropriate given the site conditions:
  - (I) The facility address.
  - (ii) The name of the facility.
  - (iii) The name, address, and telephone number of facility compliance contact person.
  - (iv) The time and date of release discovery.

- (v) The time and date the release was reported to the department.
- (vi) A site map that includes all of the following:
  - (A) The location of each underground storage tank in the leaking underground storage tank system.
  - (B) The location of any other underground storage tank system on the site.
  - (C) The location of fill ports, dispensers, and other pertinent system components.
  - (D) Soil and groundwater sample locations, if applicable.
  - (E) The locations of nearby buildings, roadways, paved areas, or other structures.
- (vii) A description of how the release was discovered.
- (viii) A list of regulated substances the underground storage tank system contained when the release occurred.
- (ix) A list of the regulated substances the underground storage tank system contained in the past other than those listed in subparagraph (viii).
- (x) The location of nearby surface waters and wetlands.
- (xi) The location of nearby underground sewers and utility lines.
- (xii) The component of the underground storage tank system from which the release occurred (e.g., piping, underground storage tank, overfill).
- (xiii) Whether the underground storage tank system was emptied to prevent further release.
- (xiv) A description of what other steps were taken to prevent further migration of the regulated substance into the soil or groundwater.
- (xv) Whether vapors or free product was found and what steps were taken to abate those conditions and the current levels of vapors or free product in nearby structures.
- (xvi) The extent to which all or part of the underground storage tank system or soil, or both, was removed.
- (xvii) Data from analytical testing of soil and groundwater samples.
- (xviii) A description of the free product investigation and removal if free product was present, including all of the following:
  - (A) A description of the actions taken to remove any free product.
  - (B) The name of the person or persons responsible for implementing the free product removal measures.
  - (C) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations.
  - (D) The type of free product recovery system used.
  - (E) Whether any discharge will take place on site or off site during the recovery operation and where this discharge will be located.
  - (F) The type of treatment applied to, and the effluent quality expected from, any discharge.

- (G) The steps that have been or are being taken to obtain necessary permits for any discharge.
- (H) The quantity and disposition of the recovered free product.
- (xix) Identification of any other contamination on the site not resulting from the release and the source, if known.
- (xx) An estimate of the horizontal and vertical extent of on-site and off-site soil contamination.
- (xxi) The depth to groundwater.
- (xxii) An identification of potential migration and exposure pathways and receptors.
- (xxiii) An estimate of the amount of soil in the vadose zone that is contaminated.
- (xxiv) If the on-site assessment indicates that off-site soil or groundwater may be affected, report the steps that have been taken or will be taken including an implementation schedule to expeditiously secure access to off-site properties to complete the delineation of the extent of the release.
- (xxv) Groundwater flow rate and direction.
- (xxvi) Laboratory analytical data collected.
- (xxvii) The vertical distribution of contaminants.
- (c) Site classification under section 21314a.
- (d) Tier I or tier II evaluation according to the RBCA process.
- (e) A work plan, including an implementation schedule for conducting a final assessment report under section 21311a, to determine the vertical and horizontal extent of the contamination as necessary for preparation of the corrective action plan.
- (2) If free product is discovered at a site after the submittal of an initial assessment report pursuant to subsection (1), the owner or operator, or consultant retained by the owner or operator, shall do both of the following:
  - (a) Perform initial response actions identified in section 21307(2)(c)(i) to (iv).
  - (b) Submit to the department an amendment to the initial assessment report within 30 days of discovery of the free product that describes response actions taken as a result of the free product discovery.” (Italics added.)

Act 451, Section 324.21310a: “1) If the corrective action activities at a site result in a final remedy that relies on tier I commercial or industrial criteria, institutional controls shall be implemented as provided in this subsection. *A notice of corrective action shall be recorded with the register of deeds for the county in which the site is located prior to submittal of a closure report under section 21312a.* A notice shall be filed under this subsection only by the property owner or with the express written permission of the property owner. The form and content of the notice shall be subject to approval by the department. A notice of corrective action recorded under this subsection shall state the land use that was the basis of the corrective action selected

by a consultant retained by the owner or operator. The notice shall state that if there is a proposed change in the land use at any time in the future, that change may necessitate further evaluation of potential risks to the public health, safety, and welfare and to the environment and that the department shall be contacted regarding any proposed change in the land use. Additional requirements for financial assurance, monitoring, or operation and maintenance shall not apply if contamination levels do not exceed the levels established in the tier I evaluation.

(2) If corrective action activities at a site rely on institutional controls other than as provided in subsection (1), the institutional controls shall be implemented as provided in this subsection. *The restrictive covenant shall be recorded with the register of deeds for the county in which the property is located within 30 days from submittal of the final assessment report pursuant to section 21311a, unless otherwise agreed to by the department. The restrictive covenant shall be filed only by the property owner or with the express written permission of the property owner. The restrictions shall run with the land and be binding on the owner's successors, assigns, and lessees. The restrictions shall apply until the department determines that regulated substances no longer present an unacceptable risk to the public health, safety, or welfare or to the environment. The restrictive covenant shall include a survey and property description which define the areas addressed by the corrective action plan and the scope of any land use or resource use limitations. . . .* (Italics added.)

## **New Jersey**

**NJSA §§58:10-23.11b, .11f & .11g;**

**NJSA §§58:10-23.11b.**

“Preliminary assessment” means the first phase in the process of identifying areas of concern and determining whether contaminants are or were present at a site or have migrated or are migrating from a site, and shall include the initial search for and evaluation of, existing site specific operational and environmental information, both current and historic, to determine if further investigation concerning the documented, alleged, suspected or latent discharge of any contaminant is required. The evaluation of historic information shall be conducted from 1932 to the present, except that the department may require the search for and evaluation of additional information relating to ownership and use of the site prior to 1932 if such information is available through diligent inquiry of the public records; . . . .

## **NJAC 7:26E (“Technical Rule”)**

### 7:26E-3.1 Preliminary assessments

(a) The purpose of a preliminary assessment is to identify the presence of any potentially contaminated areas of concern. If any potentially contaminated areas of concern are identified, then there is a need for a site investigation pursuant to N.J.A.C. 7:26E-3.3. If no potentially contaminated areas of concern are identified, then no further remediation is required at the site.

(b) A preliminary assessment is the first step in the process to determine whether or not a site is contaminated.

(c) A preliminary assessment shall be based on diligent inquiry and include an evaluation of the following:

1. Historical information concerning the site history shall be part of the preliminary assessment unless the remediation is directed at either a specific discharge event (rather than a particular area of concern) or any underground tank or underground tank system. The site history shall include an evaluation of the following to the extent available from diligent inquiry:

i. Site history information from sources including, but not limited to, the following:

...

(5) Federal, State, county and local government files; and

(6) The Department Geographic Information System;

iii. All raw materials, finished products, formulations and hazardous substances, hazardous wastes, and pollutants which are or were present on the site, including intermediates and by-products;

iv. Present and past production processes, including dates, and their respective water use and shall be identified and evaluated, including ultimate and potential discharge and disposal points and how and where materials are or were received onsite (for example, rail, truck);

v. All former and current containers, container or bulk storage areas, above and below ground tanks, above and below ground waste and product delivery lines, surface impoundments,

landfills, septic systems and other structures, vessels, conveyances or units that contain or previously contained hazardous substances, hazardous waste, and pollutants, including:

- (1) Type;
- (2) Age;
- (3) Dimension of each container;
- (4) Location;
- (5) Chemical content;
- (6) Integrity (for example, tank test reports);
- (7) Volume;
- (8) Construction materials; and
- (9) Inventory control records unless a Department-approved leak detection system pursuant to N.J.A.C. 7:1E or 7:14B has always been in place and there is no discharge history;

vii. Any data or information concerning known discharges that have occurred on the site;

viii. Remediation activities previously conducted or currently underway at the site including dates of previous discharges, remedial actions, and all existing sampling data concerning contaminants at the site. If a government agency was involved, the name of the lead government agency, case identification number, and current case status;

ix. All remedies previously approved by the Department in a remedial action workplan or equivalent document to determine if the remedy remains protective of public health, safety and the environment;

x. All existing environmental sampling data concerning contaminants at the site;

xi. Any known changes in site conditions or new information developed since completion of previous sampling or remediation;

xii. All Federal, State and local environmental permits including permits for all previous and current owners or operators, applied for or received, or both, for the site including:

- (1) The name of the permitting agency;
- (2) The reason for the permit;
- (3) The permit identification number;

- (4) The application date;
- (5) The date of approval, denial, or status of application;
- (6) The name and current address of all permittees;
- (7) The reason for denial, revocation or suspension if applicable; and
- (8) The permit expiration date;

xiii. All administrative, civil and criminal enforcement actions for alleged violations of environmental laws concerning the site, including:

- (1) The name and address of agency that initiated the enforcement action;
- (2) Date of the enforcement action;
- (3) The section of statute, rule or permit allegedly violated;
- (4) The type of enforcement action;
- (5) A description of alleged violations;
- (6) The resolution or status of violation and enforcement action; and
- (7) A description of any potential environmental impact which may have resulted from the alleged violation.

## **Pennsylvania**

### **Hazardous Sites Cleanup Act**

Section 512: “(a) General rule. A site at which hazardous substances remain after completion of a response action shall not be put to a use which would disturb or be inconsistent with the response action implemented. The department shall have the authority to issue an order precluding or requiring cessation of activity at a facility which the department finds would disturb or be inconsistent with the response action implemented. A person adversely affected by the order may file an appeal with the board. *The department shall require the recorder of deeds to record an order under this subsection in a manner which will assure its disclosure in the ordinary course of a title search of the subject property.* An order under this subsection, when recorded, shall be binding upon subsequent purchasers.” (Italics added.)

### **ASTM E1527-97 (Phase I Environmental Site Assessment)**

*All Appropriate Inquiry Criteria Analysis  
Comparison to State, Federal  
and Commercial Assessment Approaches*

*Solid Waste  
and Emergency  
Response (5105T)*

*EPA 500-F-03-229  
June 2003  
[www.epa.gov/brownfields/](http://www.epa.gov/brownfields/)*

7.1.7 Sources of Standard Source Information—Standard source information or other record information from government agencies may be obtained directly from appropriate government agencies or from commercial services. Government information obtained from nongovernmental sources may be considered current if the source updates the information at least every 90 days or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public.

7.2.1.1 Standard Environmental Record Sources: Federal and State—The approximate minimum search distance may be reduced, pursuant to 7.1.2.1, for any of these standard environmental record sources except the Federal NPL site list and Federal RCRA TSD list.

Approximate Minimum Search Distance, miles (kilometers):

- Federal NPL site list: 1.0 (1.6)
- Federal CERCLIS list
- Federal CERCLIS NFRAP site list: 0.5 (0.8) property and adjoining properties
- Federal RCRA CORRACTS facilities list: 1.0 (1.6)
- Federal RCRA non-CORRACTS TSD facilities list: 0.5 (0.8)
- Federal RCRA generators list property and adjoining properties
- Federal ERNS list property only
- State lists of hazardous waste sites identified for investigation or remediation:
- State-equivalent NPL 1.0 (1.6)
- State-equivalent CERCLIS 0.5 (0.8)
- State landfill and/or solid waste disposal site lists: 0.5 (0.8)
- State leaking UST lists: 0.5 (0.8)
- State registered UST lists property and adjoining properties

7.2.2 Additional Environmental Record Sources: State or Local—One or more additional state sources or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources identified above. Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are generally obtained, pursuant to local good commercial or customary practice, in initial environmental site assessments in the type of commercial real estate transaction involved. To the extent additional state sources or local sources are used to supplement the same record types listed above, approximate minimum search distances should



not be less than those specified above (adjusted as provided in 7.2.1.1 and 7.1.2.1). Some types of records and sources that may be useful include:

#### Types of Local Records

- Brownfield Sites
- Lists of Landfill/Solid Waste Disposal Sites
- Lists of Hazardous Waste/Contaminated Sites
- Lists of Registered Underground Storage Tanks
- Local Land Records (for activity and use limitations)
- Records of Emergency Release Reports (SARA § 304)
- Records of Contaminated Public Wells

#### Local Sources

- Department of Health/Environmental Division
- Fire Department
- Planning Department
- Building Permit/Inspection Department
- Local/Regional Pollution Control Agency
- Local/Regional Water Quality Agency
- Local Electric Utility Companies (for records relating to PCBs)

7.2.3 Physical Setting Sources—A current USGS 7.5 Minute Topographic Map (or equivalent) showing the area on which the property is located shall be reviewed, provided it is reasonably ascertainable. It is the only standard physical setting source and the only physical setting source that is required to be obtained (and only if it is reasonably ascertainable). One or more additional physical setting sources may be obtained in the discretion of the environmental professional.. Because such sources provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a site, discretionary physical setting sources shall be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to the property or from or within the property into the groundwater or soil and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice in initial environmental site assessments in the type of commercial real estate transaction involved, in order to assess the impact of such migration on recognized environmental conditions in connection with the property.

8.4.1.1 Current Use(s) of the Property—The current use(s) of the property shall be identified in the report. Any current uses likely to involve the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products shall be identified in the report. Unoccupied occupant spaces should be noted. In identifying current uses of the property, more specific information is more helpful than less specific information. (For example, it is more useful to identify uses such as a hardware store, a grocery store, or a bakery rather than simply retail use.)

8.4.1.2 Past Use(s) of the Property—To the extent that indications of past uses of the property are visually or physically observed on the site visit, or are identified in the interviews or record review, they shall be identified in the report, and past uses so identified shall be described in the report if they are likely to have involved the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products. (For example, there may be signs indicating a past use or a structure indicating a past use.)

## **ASTM 1527-00 (Phase I Environmental Site Assessment Process)**

6.2.1 Phase I Environmental Site Assessment-Four Components— - A *Phase I Environmental Site Assessment* shall have four components, as described as follows: *Records Review*- Review of records; See Section 7.

7.1.1 *Introduction: Objective*—The purpose of the *records review* is to obtain and review records that will help identify *recognized environmental conditions* in connection with the *property*.

[Note: This section provides more detail regarding Approximate Minimum Search Distance (7.1.2), Accuracy and Completeness (7.1.3), Reasonably Ascertainable/Standard Sources (7.1.4), Alternatives to Standard Sources (7.1.5), Coordination (7.1.6.), Sources of Standard Source Information (7.1.7), Documentation of Sources Checked (7.1.8), and Significance (7.1.9).]

7.2.1 *Environmental Information: Standard Environmental Sources*—The following standard environmental record sources shall be reviewed, subject to the conditions of 7.1.1 through 7.1.7.

[Note: This section provides more detail regarding *Standard Environmental Record Sources: Federal and State* ( 7.2.1.1); *Additional Environmental Record Sources: State or Local* (7.2.2), *Physical Setting Sources* (7.2.3).]

## ASTM E1528-00 (Transaction Screen Process)

### 5. Introduction to Transaction Screen Questionnaire

5.1 Process—The transaction screen process consists of asking questions contained within the transaction screen questionnaire of owners and occupants of the property, observing site conditions at the property with direction provided by the transaction screen questionnaire, and, to the extent reasonably ascertainable, conducting limited research regarding certain government records and certain standard historical sources. The questions asked of owners are the same questions as those asked of occupants.

5.2 Guide—The transaction screen questionnaire is followed by a guide designed to assist the person completing the transaction screen questionnaire. The guide to the transaction screen questionnaire is set out in Sections 7-10 of this practice. The guide is divided into three sections: Guide for Owner/ Occupant Inquiry, Guide to Site Visit, and Guide to Government Records/Historical Sources Inquiry.

5.2.1 To assist the user, its employee or agent, or the environmental professional in preparing a report, the guide repeats each of the questions set out in the transaction screen questionnaire in both the guide for owner/occupant inquiry and the guide to site visit. The questions regarding government records/historical sources inquiry are also repeated in the guide to that section.

7.6 In addition to asking questions of the *owner* of the *property* and *occupants* of the *property* (Section 8) and *visually and physically* observing the *property* (Section 9), the *user* completing the *transaction screen process* should determine, either from governmental agencies or through commercial services providing government environmental records, whether certain known or suspected contaminated sites or activities involving the release of *hazardous substances* or *petroleum products* occur on or near the *property*. See Section 10.

7.6.1 These records may be obtained either directly from the government agencies or from commercial services that provide the records for a fee. Because of the numerous sources that must be searched and the response time of government agencies, commercial services are available that provide a single source for federal and state records. These services may provide a quicker response than the government agencies but fees will be charged for the information.

7.6.2 If government information is obtained from a commercial service, the firm should provide assurances that its records stay current with the government agency record sources. Government information obtained from nongovernment sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government finished product or article from raw material. Industrial uses may be categorized as light or heavy industrial uses, depending upon the scale of the operations and the impact upon surrounding property in terms of smoke, fumes, and noise. Regardless of such categorization, the concern for purposes of the transaction screen process is whether the use involves the processing, storage, manufacture, or transportation of *hazardous substances* or *petroleum products*. For example, further inquiry would be necessary if the industrial use concerned the manufacture of paints, oils, solvents, and other chemical products but not if the use concerned the storage of inert goods in containers.

7.6.3 The identity of firms providing this type of government information may be obtained through local telephone directories or through an inquiry of environmental professionals in the area of the preparer completing the transaction screen questionnaire.

## 10. Guide to Government Records/Historical Sources Inquiry

10.1 Do any of the following federal government record systems list the *property* or any *property* within the search distance noted below:

National Priorities List—within 1.0 mile (1.6 Km)? \_\_\_ Yes \_\_\_ No

CERCLIS List—within 0.5 mile (0.8 Km)? \_\_\_ Yes \_\_\_ No

RCRA CORRACTS Facilities—within 1.0 mile

(1.6 Km)? \_\_\_ Yes \_\_\_ No

RCRA non-CORRACTS TSD Facilities—within 0.5 mile (0.8 Km)? \_\_\_ Yes \_\_\_ No

### 10.1.1 *Guide:*

10.1.1.1 The NPL or National Priorities List is a list compiled by EPA pursuant to CERCLA 42 USC § 9605(a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA's

Hazard Ranking System. See 40 CFR Part 300.

10.1.1.2 The Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) is the list of sites compiled by EPA that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the national Priorities List.

10.1.1.3 RCRA CORRACTS Facilities are those facilities which treat, store and/or dispose of hazardous wastes on-site and at which corrective remedial action is underway, as defined and regulated by RCRA. The RCRA non-CORRACTS TSD Facilities List are those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place and at which corrective remedial action has not been required by EPA, as defined and regulated by RCRA.

10.1.1.4 If the preparer elects to obtain the records directly from government agencies, those records typically must be obtained through a formal written request to the office within each agency that is responsible for maintaining the records or for responding to public requests for records. At the federal level, these requests are governed by the Freedom of Information Act (FOIA). FOIA requires a written request and the request should identify the records the preparer requires and should identify the site and geographic area for which the preparer needs the records (for example, the address of the site and the appropriate city, county, or zip code to be searched).

The request should be directed to the FOIA officer for the regional EPA office responsible for the region in which the site is located. A list of the FOIA offices for each of the EPA regions may be obtained from the federal government or local library. From the federal EPA offices, the *preparer* should anticipate a response no sooner than four to eight weeks.

10.1.1.5 If government information is obtained from a commercial service, the firm should provide assurances that its records stay current with the government agency record sources. Government information obtained from commercial sources may be considered current if the source updates the information at least every 90 days, or for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the updated information available to the public.

10.1.1.6 The information supplied in response to this question in a prior *environmental site assessment* may be used provided it is updated to the present time.

10.2 Do any of the following state record systems list the *property* or any *property* within the search distance noted below:

List maintained by state environmental agency of hazardous waste sites identified for investigation or remediation that is the state agency equivalent to NPL—within 1.0 mile (1.6 Km)?  Yes  No

List maintained by state environmental agency of sites identified for investigation or remediation that is the state equivalent to CERCLIS—within 0.5 mile (0.8 Km)?  Yes  No

Leaking Underground Storage Tank (LUST) List—within 0.5 mile (0.8 Km)?  Yes  No

Solid Waste/Landfill Facilities—within 0.5 mile (0.8 Km)?  Yes  No

#### 10.2.1 *Guide:*

10.2.1.1 The LUST list is a list of sites containing one or more underground storage tanks that have been identified as having leaked or are potentially leaking their contents into the ground or ground water; these sites may be involved in a state cleanup program.

10.2.1.2 The solid waste/landfill facilities list is a list of sites that currently accept, or have accepted in the past, waste of any kind for disposal on site. Solid waste/landfill facilities lists typically are obtained through a state office of solid waste management that is often a division of the primary state environmental agency.

10.2.1.3 Although many states do not have specific Freedom of Information laws, if the preparer elects to obtain the records directly from government agencies, a similar written request for state records should be made to the primary state agency responsible for environmental regulation in that state. Typically, the office responsible for maintaining the records and for responding to requests for records are the same. Once again, the written request should identify the specific records requested and identify the site and geographic area for which the preparer needs the records. The state agency response will vary from state to state and agency to agency, but the *preparer* should anticipate a minimum of four weeks for a response.

10.2.1.4 In some cases, the request should be directed to a specific state office. For example, leaking underground storage tank requests should be made through either the state agency's ground water management division, the state Fire Marshall's office, or the state Emergency

Planning and Management Agency.

10.2.1.5 The identity of the state office to which the request should be made can be obtained by contacting the primary state environmental agency. Also, there are publications listing agency sources for each state. The local public library may contain these publications.

10.3 Based upon a review of *fire insurance maps* or consultation with the local fire department serving the property all as specified in the guide, are any buildings or other improvements on the property or on an adjoining property identified as having been used for an industrial use or uses likely to lead to contamination of the property? \_\_\_Yes \_\_\_No \_\_\_Not Applicable

#### 10.3.1 *Guide:*

10.3.1.1 The focus of this research is to determine whether any past use of the *property* would suggest the presence of contamination associated with the *property*. If *reasonably ascertainable*, one of two sources of data should be examined in the following order of preference: *fire insurance maps* showing the *property* or the local fire department serving the property. However, if the user has first-hand knowledge of the use of the *property* from the present back to 1940 or if the *preparer* interviewed disinterested people with such knowledge, then the *preparer* may eliminate this research and answer “not applicable” to the questions above. In addition, the preparer may eliminate this research and answer “not applicable” to the question if the *preparer* is unable to find appropriate sources of *fire insurance maps* or individuals at the local fire department for the property with knowledge of the property’s past use, after making a reasonable effort in good faith to locate such information or if the information is otherwise not *reasonably ascertainable*.

10.3.1.2 Subject to the previous paragraph, the *preparer* should obtain *fire insurance maps* from the period(s) not covered by the first-hand knowledge of the *user* or of those interviewed, beginning with when the maps are first available for the area or when the area was first thought to be developed. At least two maps should be ordered at points in time separated by at least ten years.

10.3.1.3 *Fire insurance maps* are defined in 3.2.14 and may be available for review from public libraries, colleges, and local historical societies, or from commercial services.

10.3.1.4 In examining a *fire insurance map*, the *user* is only required to review those areas shown in the given source. For example, if the *property* is at the edge of a map sheet, the user



need not order the adjoining sheet. If a source covers a large area, the *user* need only review the area within approximately 1/8 mile (200 m) of the *property*.

10.3.1.5 *Fire insurance maps* reviewed as part of a prior *environmental site assessment* do not need to be searched for or reviewed again, but the *preparer* should make a reasonable effort to determine the uses of the *property* since the last use identified in a prior *environmental site assessment*.

## **ASTM 2247-02 (Phase I for Forestland and Rural Property)**

6.2.1. Phase I Environmental Site Assessment-Four Components- A *Phase I Environmental Site Assessment* shall have four components, as described as follows: *Records Review*- Review of records; See Section 7.

7.1.1 *Introduction: Objective*-The purpose of the *records review* is to obtain and review records that will help identify *recognized environmental conditions* in connection with the *property*.

[Note: This section provides more detail regarding Approximate Minimum Search Distance (7.1.2), Accuracy and Completeness (7.1.3), Reasonably Ascertainable/Standard Sources (7.1.4), Alternatives to Standard Sources (7.1.5), Coordination (7.1.6.), Sources of Standard Source Information (7.1.7), Documentation of Sources Checked (7.1.8), and Significance (7.1.9).

7.2.1 *Environmental Information: Standard Environmental Sources*- The following standard environmental record sources shall be reviewed, subject to the conditions of 7.1.1 through 7.1.7.

[Note: This section provides more detail regarding *Standard Environmental Record Sources: Federal and State (7.2.1.1); Additional Environmental Record Sources: State or Local (7.2.2), Physical Setting Sources (7.2.3).*]

## **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

Not applicable.



**Guidance for Performing Preliminary Assessments Under CERCLA  
EPA/540/G-91/013  
September 1991**

2.1.1 CERCLIS (p.15)

The NCP requires that a PA be conducted on each site entered into CERCLIS. Potential hazardous waste sites identified by the Superfund program, or reported through citizen complaints or referrals from other agencies, are entered into CERCLIS. As sites progress through the Superfund program—from PA through remediation—EPA updates the information in CERCLIS.

CERCLIS contains administrative information and the site name, address, zip code, county code, latitude/longitude coordinates, date discovered, and date and type of any previous site assessment activity. CERCLIS information is updated regularly and is available from hardcopy printouts at EPA Regional and State environmental agency offices.

Verify the physical existence of the site. Because site information is not generally screened before entry into CERCLIS, nonexistent sites or duplicate site names may be encountered. In the past, a small percentage of sites entered into CERCLIS proved to be “non-sites” upon investigation, when no facility matched the site name and address listed as the site location. In addition, sites may be mistakenly entered into CERCLIS more than once. Therefore, verify the site name and cross-reference it against other entries in CERCLIS to ensure it is not a duplicate entry. Be sure to cross-check using the CERCLIS ID number, not just the site name, because distinct sites can have similar or even the same names. The CERCLIS ID number is a unique identifier for each site. Also verify the address of the site from a local street map. From the map you can begin to get an idea of the site setting.

Some sites in CERCLIS have also-known-as (aka) designations or “aliases.” As a site progresses from discovery at the local stage through investigation at the Federal level, its name may be changed to be more descriptive (for example, Longmeadow Dump may be changed to Former Longmeadow Municipal Landfill). Much of your data collection effort will involve accessing State and local agency files, which may list the site under an alternative name. Determining the different names by which a site is known is necessary to complete a comprehensive file search. CERCLIS provides listings of all known aliases for sites entered.

Useful information concerning local geology/hydrology and general site environs (e.g., wetlands, other sensitive environments, local drinking water supply sources) may be obtained from the files of nearby sites previously investigated under CERCLA. Accessing this information may reduce duplication of effort and may also provide names and phone numbers of agencies and individuals you can contact to obtain additional information. CERCLIS can be used to identify nearby sites using zip code, latitude/longitude, or county identifiers. Your office may have additional in-house tracking systems or printouts that list completed investigations.

### 2.2.1 RCRA Sites (p. 18)

Computer printouts available from EPA list the current and past RCRA status of all sites that have identified themselves to EPA as hazardous waste handlers. Consult these printouts to determine if the site being investigated currently has RCRA status. You must also investigate historical RCRA status for facilities that operated after 1980. As discussed above, a site that is currently classified as a "Generator" may have operated for some period of time after November 19, 1980 as a TSF. If so, it is still subject to RCRA corrective action. Determining CERCLA eligibility for such sites requires additional efforts including review of historical EPA RCRA files (Section 2.3.2) and, possibly, discussions with EPA RCRA personnel. The RCRA status of the site should also be checked in the HWDMS database.

### 2.3 File Searches (p. 21)

For many sites, a great deal of information may be available from records of State and/or local investigations, Federal and State permit applications, and Federal hazardous waste notification. These can yield information concerning site operations, waste types and quantities, regulatory history, past environmental violations, and citizen complaints. A good deal of this type of information can be obtained by reviewing Regional EPA files and State environmental agency files. Additional information concerning the site area may be obtained by reviewing in-house files for nearby sites that your office has previously investigated.

Before initiating a file search, you should be familiar with the checklist of PA information needs (Figure 2-1), particularly the general site information and source description sections. Also be familiar with the criteria lists in the PA score sheets (Appendix A) and be aware of the types of questions you need to answer to evaluate the threat of a release from the site and potential impacts on human and environmental targets (Section 3).

### 2.3.1 Types of Information (p. 21)

Information gathered through file searches can be useful in developing professional judgement hypotheses concerning the release of hazardous substances from the site and the exposure of targets to released substances. Collect as much information concerning waste handling practices as possible. This includes information on waste containment and general housekeeping practices.

Documents of particular interest during the file search include site sketches, inspection reports, aerial photographs, permit applications, hazardous waste handling notification forms (RCRA notification forms and CERCLA 103(c) notification forms, filed by facilities to notify EPA of hazardous substances they handled), waste hauling manifests, analytical sampling results, records of citizen complaints, records of violations, and court orders.

Site sketches, maps, and aerial photographs can help identify source types and locations. Permit applications, waste hauling manifests, and Federal hazardous waste notification forms can supply data on the specific types and quantities of waste generated and/or disposed. Previous inspections can provide information on source types, past environmental impacts, and targets. Analytical results of monitoring or inspection activities can provide valuable data concerning the types of hazardous substances found at the site and possible releases. Additionally, citizen complaint reports and court orders may also provide information indicating hazardous substances have been released from the site.

While conducting file searches, always try to obtain copies of source documents. For example, an analytical sampling report prepared by the local board of health after an inspection is better than a letter report prepared at a later date that references the inspection but does not include the actual analytical data. Remember that the PA is the initial step in the site assessment process. Should the site move beyond the PA, data sources used during the PA may carry on to the SI and could eventually be used to support placement on the NPL.

### 2.3.2 EPA Regional Files (p.21-22)

Generally, the first files you will access are at Regional EPA offices. In some Regions, the EPA site assessment contact will give you the files when you receive the PA assignment, in other Regions, you may need to coordinate with the contact to gain access to all the necessary files. The PA is the first step in the Superfund site assessment process and, for most sites, you will be initiating the Superfund file for the site. However, you may be assigned a PA on a site

that may have been the subject of some Federal action such as a removal, regulatory inspection, or permit application. In these instances, Regional files may contain information that will be useful for completing the PA.

First access Regional site assessment files. These may contain useful documents such as CERCLA 103(c) notification forms, PA petitions, or reports on previous site assessment activities at the site. These documents will likely have information concerning the types of wastes disposed, general site operations, and alleged environmental impacts, possibly including information from State activities.

Next access other Regional Superfund files. For example, the site may have had a Superfund removal action (fencing the site, physical removal of hazardous wastes, closing of wells, supplying alternative drinking water, or other emergency measures). Removal program files may provide useful information concerning waste sources, types and quantities of wastes, and past environmental impacts. Coordinate with your Regional EPA site assessment contact to determine if other Superfund offices have information concerning the site being evaluated and to access those files.

You also need to research EPA offices outside the Superfund program, such as RCRA and the National Pollutant Discharge Elimination System (NPDES) program. They may have permit applications and monitoring results with information on specific waste types and quantities, sources, type of site operations, and operating status. Coordinate with your EPA site assessment contact to access and review files from other Regional programs.

### 2.3.3 State Environmental Agency Files (p. 22)

Historical files of State environmental agencies may provide information about the site, as many sites investigated under Superfund were originally discovered by or identified to a State agency. For State environmental agency personnel conducting PAs, files should be readily available. For others, the process of gaining access to State agency files varies. In some States, you can request file information over the phone and have it sent to your office. Most States, however, require prior arrangements to visit the appropriate State agency offices to review and make copies of the desired file information.

The “Site Assessment Information Directory” (available from EPA) contains the names, locations, and telephone numbers of State agencies that can provide data and information

necessary for the PA investigation. For file search purposes, the principal environmental agency for the State is the best candidate. However, a single division or department within that agency is unlikely to have all of the available information for a site. For example, the State Department of Environmental Protection, as the principal environmental agency, may have a Superfund or solid waste division that has information about the site, and may also have separate RCRA and water resources divisions that have additional information.

As with Federal files, State files may contain information derived from permit applications, previous investigations of the site, or from reported environmental impacts. While reviewing State files, gather information concerning the site's operating history, specifically regarding waste types, quantities, and sources; type of site operations; ownership history; and historical waste handling and disposal practices.

#### 2.3.4 In-House Files (p. 22-23)

Although in-house files generally will not provide information specific to the site, they too can be useful sources of information. Research the possibility that other sites in the vicinity have been investigated by your office. In-house files for such sites can provide data on local geology, hydrology, and other site environs information. In addition, valuable targets information can be obtained, such as the locations of public drinking water supply wells or surface water intakes and the extent of municipal supply systems.

Individuals in your office who have performed investigations on sites in the general vicinity of your site are also good resources. These individuals may be able to provide recommendations for sources of information for specific data elements (e.g., the name and telephone number of an individual at the State Fish and Wildlife Department helpful in identifying fisheries and endangered species habitats).

#### 2.4 Obtaining “Desktop” Information (p. 23)

A comprehensive targets survey to identify human populations, sensitive environments, and fisheries potentially affected by the site is a major component of the PA. Much of this information has little to do with waste types or the facility's historical waste handling practices, and will not be found during the file searches discussed in Section 2.3. Preliminary identification of targets and related data gathering may, however, be accomplished without leaving your office (see pathway target discussions in Section 3).

Desktop data sources can provide information concerning geology underlying the site and in the immediate vicinity; location of surface water bodies, fisheries, wetlands, and sensitive environments; location of public drinking water supply wells and surface water intakes; populations served by public water supplies; and residential populations in the vicinity of the site. The following sections present more detailed information on desktop data sources.

#### 2.4.1 Maps (pp. 23-24)

Maps provide valuable information on the physical and environmental setting of the site and its associated targets. As a standard practice at the onset of the PA, obtain United States Geological Survey (USGS) 7.5-minute topographic quadrangle maps covering the 4-mile radius around the site, as well as the 15-mile surface water migration route. USGS topographic maps may be available from in-house libraries or map rooms; otherwise, they can be ordered directly from USGS or purchased from a local map store. It is a good idea to either order multiple copies or make photocopies that you can write on. Once you have received your topographic maps, splice them together (as necessary), outline the site itself, and have a draftsman draw a series of concentric circles around the site with radii of  $\frac{1}{4}$  mile,  $\frac{1}{2}$  mile, 1 mile, 2 miles, 3 miles, and 4 miles. This will be useful to identify and evaluate targets (Section 3).

USGS topographic maps display geographic features of the site and surrounding area. They can be used to identify the surface water migration route, nearby wetlands and sensitive environments, and the nearest resident. Topographic maps can also be used to record various types of data, by highlighting or outlining the surface water migration route, areas served by public and private water supplies, and the locations of the nearest resident and nearest well. In sparsely populated areas, the topographic map can be used to determine the population residing within each of the distance categories, by counting the houses indicated on the map in each distance category and multiplying by the average number of residents per household for the county in which the houses are located (discussed in Section 3).

National Wetlands Inventory Maps, available from the U.S. Fish and Wildlife Service (USF&WS) or USGS, delineate the boundaries of wetlands and can be used like topographic maps to specify wetlands locations, acreage, and frontage miles. Local city and county street maps can be helpful to identify schools, large office parks and business centers, recreational parks, and other potential targets near the site. Flood Insurance Rate Maps can be obtained from the Federal Emergency Management Agency (FEMA) or from local insurance offices. These maps can be used to determine the floodplain in which the site is located. Property maps

delineating historical site boundaries may be available from the community or county tax assessor's office. You may want to obtain these maps during the site reconnaissance (discussed in Section 2.5). These maps may be useful to identify areas that were once part of the site, but are not identified as such on current maps. For example, a particular parcel of land that is currently a community baseball field may have previously been owned and operated as a landfill by the facility you are investigating. Such information is valuable for identifying and characterizing sources.

#### 2.4.2 Geologic Information (p. 24)

As part of the PA investigation, you need to collect information on the general stratigraphy in the vicinity of the site. Your office may have a collection of geologic references that may include the study area. Otherwise, USGS field offices can provide geologic reference materials. In addition, State geological surveys can provide useful reference documents that typically include detailed technical descriptions, stratigraphic columns, and cross-sections. This type of information can be used to develop the general description of the geologic strata and aquifer(s) underlying and in the vicinity of the site, evaluate depth to the shallowest aquifer, and provide information on the nature and properties of geologic materials between the surface and underlying aquifers.

Other related sources of information on local geology and ground water use include a variety of ground water references published by USGS and State geological surveys. Some States have extensive studies concerning ground water resources. These can provide detailed descriptions of aquifers and their uses in different regions or geographic areas. Some may even include fairly comprehensive well inventories that identify public and private well locations, uses, depths, screened intervals, static water levels, and related information.

The geology departments of local or State universities are another source of information on the geology of the area. University libraries may have studies concerning local geology, and university professors may be experts on local geology. Public water supply utilities and local well drilling companies may also provide information on geology, including depth to shallowest aquifer and composition of geologic strata in the vicinity of the site.

#### 2.4.3 Databases and Geographic Information Systems (pp. 24-25)

A variety of databases can provide information about targets. The Geographical Exposure Modeling System (GEMS) is maintained by EPA's Office of Toxic Substances and provides U.S. Bureau of the Census population data for specified distances around a point location. GEMS can



be accessed online through a personal computer and modem. Your Regional EPA site assessment contact can provide information on accessing GEMS. As input, GEMS requires the geographic coordinates of the site and the distance categories for which you desire population information. This approach meshes conveniently with the PA evaluation of population in concentric distance categories around the site, out to a distance of four miles. GEMS does, however, have limitations—particularly for the smaller distances near the site, and for sites in rural areas where populations are typically thinly distributed. Section 3.6.2 discusses the application of GEMS data in more detail.

WELLFAX is a water resource database, maintained by the National Water Well Association (NWWA). WELLFAX contains NWWA's inventory of municipal and community water supplies and provides the number of households served by public water systems, private wells, and other water supply sources. The Federal Reporting Data System (FRDS), maintained by EPA's Office of Drinking Water, contains general information including name, address, and population served by public water supply utilities using ground water or surface water.

For surface water, PATHSCAN can provide information concerning both municipal and private drinking water intakes. PATHSCAN is maintained by EPA's Office of Water Regulations and Standards.

Many States also have databases (usually maintained by environmental agencies) that can be used for preliminary identification of public drinking water supplies. Some State geological surveys maintain well log databases that can supply information concerning wells in the vicinity of your site. In addition to supporting drinking water targets evaluations, these databases can be used to compile information on the strata underlying the site and in the general area.

Many of these databases, especially those containing information on drinking water wells, are incomplete. You should not rely exclusively on such databases to determine ground water targets. Always verify information obtained from databases by contacting each community located within the target distance limit to identify drinking water supply sources. At a minimum, databases may provide the names of the different public or private water companies that you need to contact. How to contact public water utilities is discussed in Section 2.4.5. Appendix B provides a general listing of databases that can be used to gather various types of PA information; the "Site Assessment Information Directory" (available from EPA) identifies Regional and State-specific databases.



Another useful tool for gathering PA data is a geographic information system (GIS). Many offices have GIS software that integrates various types of databases to provide information concerning specific geographic areas or point locations. For example, with only the latitude/longitude coordinates for a site, you might be able to use an in-house GIS to gather population information for the area around the site, plot on a map the locations of all public drinking water wells and their service areas, and obtain geologic data. The specific types of data available will depend on the setup and structure of the GIS. The quality of the data depends on the frequency of updating, making follow-up data collection and verification advisable.

#### 2.4.4 Aerial Photography (pp. 25-26)

Historical aerial photographs of the site can identify source areas that may not be visible during a routine reconnaissance due to physical changes to the site during the years of operation (e.g., surface impoundments that have since been backfilled and paved over). Current aerial photographs will provide an overall view of the site layout that may not be available from the ground. Aerial photographs can help identify and document the location and distance to various targets, identify the surface water migration route, identify and quantify source areas, and many other applications.

Although aerial photographs can be helpful during the PA, do not expend undue effort or costs to obtain them, as most of the information they provide can be obtained from other sources as well. In certain instances, however, they may be especially helpful. For example, if site access problems prevent you from performing an effective reconnaissance (Section 2.5), or if you have very little information concerning site operations, historical aerial photographs may be able to provide information on waste disposal areas.

Good sources for aerial photographs at the PA stage are local ones, including the local tax assessor's office, local planning or zoning commission, and the State department of highways and transportation. These sources may be able to provide aerial photographs of the site and surrounding area relatively quickly and inexpensively. Other sources of aerial photographs include EPA's Environmental Monitoring Systems Laboratory (EMSL), EPA's Environmental Photographic Interpretation Center (EPIC), the U.S. Army Corps of Engineers (COE), the Soil Conservation Service (SCS) of the U.S. Department of Agriculture (USDA), and the USGS. EMSL and EPIC are the official EPA departments responsible for providing aerial photography; their main services are archival searches for current and historical aerial photographs and interpretive analyses. It is a good practice to check turnaround time and delivery schedule for

products and interpretive services from any of these sources.

#### 2.4.5 Telephone Inquiries (p. 26)

During the PA, you can use the telephone to gather a great deal of information. For the ground water pathway, information concerning drinking water target populations can be obtained from phone conversations with appropriate community officials. For the surface water pathway, flow data can be acquired from USGS. In addition, the locations of sensitive environments for the surface water, air, and soil exposure pathways can be verified by contacting State fish and wildlife services and Natural Heritage Programs. Local emergency response units (e.g., fire department) may be able to provide information on the types of hazardous substances used and stored at active facilities. Before contacting outside agencies, check with your supervisor for the proper procedures and protocols to follow in identifying yourself and your reasons for making the inquiry.

The most direct means of collecting drinking water target population information for both the ground water and surface water pathways is to contact the department of public works or the town hall of each community within the target distance limit to identify the appropriate offices that can provide information on water supplies. Larger communities may have water departments that can be contacted directly. Local water officials can usually supply the necessary information, but to avoid having to repeatedly contact them, prepare a list of questions before you call to ensure collecting all required information.

You first need to determine if the community is served by a centralized water system (public or private water distribution company), private wells or surface water intakes, or a combination. You also need to identify the types (wells or surface water intakes) and locations of drinking water supply sources. The following questions are examples of what to ask water authorities about drinking water supplies:

- Does the community have a centralized drinking water supply system?
- Is it public or private?
- Is the source of drinking water ground water, surface water, or a combination of the two?
- Where are the exact locations of the drinking water supply sources (wells and intakes)?
- What are the names of the drinking water sources (e.g., Wellfield Number 1)?
- For wells:

How deep are the wells?

From which aquifer do they withdraw water?  
 Is the water system interconnected such that water from any well is capable of reaching any part of the system?  
 If so, what percent of the system's output is supplied by each well?  
 How many people are served by the drinking water system?  
 Does the system supply water to any other community?  
 Have there been any problems with ground water contamination in the area?  
 Have any wells been closed due to contamination of any kind?  
 If so, request an explanation of the circumstances. S  
 Has the ground water recently been tested (for what and results)?  
 Are there private wells located in the community or the general area?  
 What aquifer(s) do these private wells tap?  
 Can the water company provide a system distribution map?  
 Can the water company mark the location of supply wells and distribution areas on a topographic map?  
 Do neighboring communities have drinking water supply systems (ask for contacts)?

- For surface water intakes:

Where is each intake located?  
 What is the average flow rate of the water body from which each intake draws?  
 How many people are served by the system?  
 Is the water supply system interconnected such that water from any intake is capable of reaching any part of the system?  
 If so, what percentage of the total system's output is supplied by each intake?  
 Is the water treated prior to distribution?  
 If so, why and how?  
 Has an intake ever been closed or taken out of service due to contamination of any kind? If so, request an explanation of the circumstances.  
 Has the surface water recently been tested (for what and results)?  
 Are there private intakes located on surface water bodies in the vicinity?  
 Can the water company provide a system distribution map?  
 Can the water company mark the location of intakes and distribution areas on a topographic map?  
 Do neighboring communities have drinking water supply systems (ask for contacts)?

Sensitive environments need to be identified for the surface water, air, and soil exposure pathways. Review the sensitive environment tables in the PA scoresheets (PA Tables 5 and 7) to familiarize yourself with the descriptions of the sensitive environments that qualify for consideration. The USF&WS and State fish and wildlife services can be contacted to gather information on fisheries and habitats of endangered and threatened species. State Natural Heritage Programs are also good sources of information on sensitive environments (e.g., wetlands and critical habitats). You can contact the heritage program for the State in which the site is located and request information for the surrounding area (see EPA's "Site Assessment Information Directory" for telephone numbers).

Another source of information is the local fire or police department. SARA mandated that all facilities actively handling hazardous materials notify local emergency response units (e.g., fire department, police) of the hazardous materials stored at the facility. Local emergency response authorities may also have information concerning sources and the physical state of wastes (i.e., solids, liquids, or sludges). Such data are helpful in evaluating waste quantity, suspected releases, and targets that may be exposed to hazardous substances.

Information obtained over the telephone needs to be recorded on paper as a means of documenting the source of the information. "Teleconference notes" (telecons) or "records of communication" (ROCs), as these are known, are common references to the PA narrative report (Section 4.2). Several examples are provided in the sample PA narrative report in Appendix C. Note that telecons need not be typed; legible handwriting is acceptable. Telecons must document the following:

- Date and time of the conversation.
- Site name.
- Name, affiliation, and telephone number of the person contacted.
- Name and affiliation of the person making the contact.
- Purpose of the call and questions asked.
- Summary of the conversation and pertinent information obtained.
- Action items or follow-up activities, if any.
- Dated signature of the person making the contact.

## **Generic Brownfields Quality Assurance Project Plan U.S. EPA Region 2**

*All Appropriate Inquiry Criteria Analysis  
Comparison to State, Federal  
and Commercial Assessment Approaches*

*Solid Waste  
and Emergency  
Response (5105T)*

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## **Revision No. 2**

**Revision Date: May 2000 Final**

### C.0 Site Background

The Site-Specific Brownfields SAMP shall contain Historical Data Review and Site Reconnaissance Reports. The Historical Data Review and Site Reconnaissance Reports are to be generated by undertaking a Phase I Brownfields Site Assessment.

### C.1 Historical Data Review Report

To identify potentially contaminated areas of a Brownfields site, it is customary to prepare a Historical Data Review Report to examine previous site operations and disposal practices. This initial “environmental assessment” is commonly referred to as a Phase I Brownfields Site Assessment. Undertaking a Phase I Brownfields Site Assessment is useful in its ability to form the basis of a Historical Data Review Report summary for project planning purposes. Sources of information include federal, state and local officials and files (site inspection reports and legal actions), deed or title records, former facility employees, local residents, and facility records. Historical sampling data should include all available information such as sample locations (on maps when available), matrices, methods of collection and analysis, and relevant contaminant concentrations.

In accordance with the aforementioned requirements, the Site-Specific Brownfields SAMP must provide a summary of the history/background of the particular property under investigation. When available, historical monitoring results from previous investigations may also be relied upon to provide an understanding of the environmental condition of the site. However, it is essential to assess the reliability and usefulness of existing analytical data. Existing analytical data without documentation or QA/QC controls may still be useful, and should be included in the Historical Data Review Report summary. The Historical Data Review Report summary shall describe site-specific chemical processes, raw materials, final products, wastes, and waste storage/disposal practices to the greatest possible extent. In addition, it is customary to include site maps along with facility blueprints and aerial photographs when available in the Historical Data Review Report summary. In conjunction, a local Agricultural Extension Agent should be contacted to provide insights into soil types and drainage patterns. County property and tax records, and United States Geological Survey (USGS) topographic maps are additional sources of site and regional information.

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# Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup

## Site Assessment

### What Do We Need to Know? (p. 18)

Question 3.

- What is known about the site?
- What records exist that indicate potential contamination and past use of the property?
- Have other environmental actions occurred (such as notices of violation)?
- Has an environmental audit been conducted?
- What information is needed to identify the types and extent or the absence of contamination?
- Data or information necessary to make the decision(s) or answer the question(s).

#### Consider:

Level of data quality required (detection limits and accuracy)

### How Do We Find the Answers? (p. 19)

Activities to be conducted during the initial survey of a site include:

Determine whether contamination is likely through the conduct of an ASTM Phase I environmental site assessment or its equivalent. A records search is performed and the site is visited, but no sampling of soil or groundwater occurs. The effort includes the following activities:

- Review and analyze city government and other historical records to identify past use or disposal of hazardous or other waste materials at the site
- Review federal and state lists that identify sites that may have environmental contamination; such lists include, but are not limited to:
  - 1) *EPA's Comprehensive Environmental Response, Compensation, and Liability*

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- Information System (CERCLIS) of potentially contaminated sites,*
- 2) *the National Pollutant Discharge Elimination System (NPDES) of permits issued for discharges into surface water, and*
  - 3) *state records of “emergency removal” actions (for example, the removal of leaking drums or the excavation of explosive waste).*

**Criterion VI. Visual inspections of the facility and of adjoining properties.**

**SBLRBRA §223(B)(ii),(iii)(VI)**

(ii) STANDARDS AND PRACTICES— Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA— In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(VI) Visual inspections of the facility and of adjoining properties

**SBLRBRA §223(B)(ii),(iv)(I)**

(iv) INTERIM STANDARDS AND PRACTICES

(I) PROPERTY PURCHASED BEFORE MAY 31, 1997—With respect to property purchased before May 31, 1997, in making a determination with respect to a defendant described in clause (i), a court shall take into account--

(ee) the ability of the defendant to detect the contamination by appropriate inspection.

**Florida**

**Fla. Stat. Section 376.308(1)(c)  
Liabilities and Defenses of Facilities**

In the case of a discharge of petroleum, petroleum produces, or dry cleaning solvents, the owner of the facility, the dry cleaning facility, or the wholesale supply facility, unless the owner can establish that he or she acquired the title to property contaminated by the activities of a previous



owner or operator or other third party, that he or she did not cause or contribute to the discharge, and that he or she did not know of the polluting condition at the time the owner acquired title. If the owner acquired title subsequent to July 1, 1992, or, in the case of a dry cleaning facility or wholesale supply facility, subsequent to July 1, 1994, he or she must also establish by a preponderance of the evidence that he or she undertook, at the time of acquisition, all appropriate inquiry into the previous ownership and use of the property consistent with good commercial or customary practice in an effort to minimize liability. The court or hearing officer shall take into account . . . the ability to detect such contamination by appropriate inspection.

## **Illinois**

### **415 ILCS 5/**

### **415 ILCS 5/22.2(j)(6)(E)(v)(V)**

(v) For purposes of this subparagraph (E), the term “Phase I Environmental Audit” means an investigation of real property, conducted by environmental professionals, to discover the presence or likely presence of a release or a substantial threat of a release of a hazardous substance or pesticide at, on, to, or from real property, and whether a release or a substantial threat of a release of a hazardous substance or pesticide has occurred or may occur at, on, to, or from the real property. The investigation shall include a review of at least each of the following sources of information concerning the current and previous ownership and use of the real property:

(V) A visual site inspection of the real property and all facilities and improvements on the real property and a visual inspection of properties immediately adjacent to the real property, including an investigation of any use, storage, treatment, spills from use, or disposal of hazardous substances, hazardous wastes, solid wastes, or pesticides. If the person conducting the investigation is denied access to any property adjacent to the real property, the person shall conduct a visual inspection of that adjacent property from the property to which the person does have access and from public rights-of-way.

## **Massachusetts**

## Massachusetts General Laws

Chapter 21A, Section 19: A successor hazardous waste cleanup professional may render a waste site cleanup activity opinion regarding response actions performed under a previous hazardous waste site cleanup professional, and that opinion may be relied upon as sufficient to protect public health, safety, welfare, or the environment, only when the successor hazardous waste site cleanup professional has: (a) reviewed all reasonably available documentation known to the successor hazardous waste site cleanup professional that describes previous releases, site assessment activities and results, and work performed in connection with the assessment, containment or removal action that is the subject of the opinion; (b) *conducted a site visit to observe current conditions and to verify the completion of as much work as is reasonably observable*; and (c) concluded, in the exercise of his independent professional judgment, that he has sufficient information upon which to render the waste site cleanup activity opinion. (Italics added.)

Chapter 21E, Section 5h: “Any person who owns a one- to four-family residence that is a site at which the department has incurred costs for response actions shall not be liable to the department for those costs if he can establish by a preponderance of the evidence that. . . etc. . . . The defense established by this subsection shall not apply if. . . etc. . . . unless . . . he did not know or have reason to know of the release at the time he acquired ownership or possession of the site. In no event shall said owner be deemed to have had reason to know of the release of oil or hazardous material on the site unless a reasonable inquiry would have disclosed such presence at the time when the site was acquired by said owner, so long as the purchase price paid by said owner bore a reasonable relationship to the value of the site in the absence of oil or hazardous material. *For the purposes of this paragraph, a reasonable inquiry shall mean visually inspecting the site for obvious signs of the release of oil or hazardous material.*” (Italics added.)

## Michigan

### Part 201 Rules

Rule 907: “(2) A category N BEA [Baseline Environmental Assessment] shall include all of the following: . . .

(g) Photographs that depict important features of the property and visually evident releases, including abandoned and discarded containers, unless it is impractical to provide photographs or

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photographs would not provide useful information about the property.”

Rule 907: “(3) A category D BEA [Baseline Environmental Assessment] shall include all of the following: . . .

(g) Photographs that depict important features of the property and visually evident releases, including abandoned and discarded containers, unless it is impractical to provide photographs or photographs would not provide useful information about the property.”

Rule 907: “(4) A category S BEA [Baseline Environmental Assessment] shall include all of the following: . . .

(e) Photographs that depict important features of the property and visually evident releases, including abandoned and discarded containers, unless it is impractical to provide photographs or photographs would not provide useful information about the property.”

## **New Jersey**

### **NJSA §§58:10-23.11b, .11f & .11g; NJAC 7:26E (“Technical Rule”)**

#### 7:26E-3.3 Site investigations

(a) The purpose of a site investigation is to determine if any contaminants are present at the site, or as necessary, have emanated or are emanating from the site above any of the applicable unrestricted use remediation standards or if no further remediation is required. If such contaminants are present at the site, then additional remediation is necessary.

(b) A site investigation shall be conducted based upon the information collected pursuant to the preliminary assessment requirements in N.J.A.C. 7:26E-3.1 and shall satisfy all of the following requirements:

1. The general sampling requirements in N.J.A.C. 7:26E-3.4;
2. The building interior sampling requirements in N.J.A.C. 7:26E-3.5, if applicable;
3. The soil sampling requirements in N.J.A.C. 7:26E-3.6;
4. The ground water sampling requirements in N.J.A.C. 7:26E-3.7, if applicable;
5. The surface water and sediment sampling requirements in N.J.A.C. 7:26E-3.8, if applicable;
6. The area specific sampling requirements in N.J.A.C. 7:26E-3.9;
7. The background soil sampling requirements in N.J.A.C. 7:26E-3.10, if applicable;
8. The ecological evaluation requirements in N.J.A.C. 7:26E-3.11; and

9. The historic fill requirements in N.J.A.C. 7:26E-3.12, if applicable.

(c) If required pursuant to an oversight document or other applicable rule, the person responsible for conducting the remediation shall submit reports pursuant to N.J.A.C. 7:26E-3.13 in accordance with the schedules contained in the oversight document or other applicable rule.

(d) It is often appropriate to phase the site investigation so that the areas of concern most likely to be contaminated above the applicable remediation standards are sampled first. If at any time during the site investigation, any contamination is found above the applicable remediation standards, then the site investigation may be discontinued and the remediation continued at either the remedial investigation or remedial action phase.

[Note: Further requirements for site investigations are specified in N.J.A.C. 7:26E-3.4 - 3.13.]

## **Pennsylvania**

Not applicable.

### **ASTM E1527-97 (Phase I Environmental Site Assessment Process)**

4.7.3 Current Investigation—Except as provided in 4.7.2 and 4.7.2 of Practice E 1528 prior environmental site assessments should not be used without current investigation of conditions likely to affect recognized environmental conditions in connection with the property that may have changed materially since the prior environmental site assessment was conducted. At a minimum, for a Phase I Environmental Site Assessment consistent with this practice, a new site reconnaissance, interviews, and an update of the records review should be performed.

6.1 Objective—The purpose of this Phase I Environmental Site Assessment is to identify, to the extent feasible pursuant to the processes prescribed herein, recognized environmental conditions in connection with the property. (See 1.1.1.)

6.2 Four Components— A Phase I Environmental Site Assessment shall have four components, as described as follows:

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6.2.2 Site Reconnaissance, A visit to the property; see Section 8.

## 8. Site Reconnaissance

8.1 Objective—The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the property.

8.2 Observation—On a visit to the property (the site visit), the environmental professional shall visually and physically observe the property and any structure(s) located on the property to the extent not obstructed by bodies of water, adjacent buildings, or other obstacles.

8.2.1 Exterior—The periphery of the property shall be visually and physically observed, as well as the periphery of all structures on the property, and the property should be viewed from all adjacent public thoroughfares. If roads or paths with no apparent outlet are observed on the property, the use of the road or path should be identified to determine whether it was likely to have been used as an avenue for disposal of hazardous substances or petroleum products.

8.2.2 Interior—On the interior of structures on the property, accessible common areas expected to be used by occupants or the public (such as lobbies, hallways, utility rooms, recreation areas, etc.), maintenance and repair areas, including boiler rooms, and a representative sample of occupant spaces, should be visually and physically observed.. It is not necessary to look under floors, above ceilings, or behind walls.

8.2.3 Methodology—The environmental professional shall document, in the report, the method used (for example, grid patterns or other systematic approaches used for large properties, which spaces for owner or occupants were observed) to observe the property.

8.2.4 Limitations—The environmental professional shall document, in the report, general limitations and bases of review, including limitations imposed by physical obstructions such as adjacent buildings, bodies of water, asphalt, or other paved areas, and limiting conditions (for example, snow, rain).

8.2.5 Frequency—It is not expected that more than one visit to the property shall be made by the environmental professional in connection with a Phase I Environmental Site Assessment.. The one visit constituting part of the Phase I Environmental Site Assessment may be referred to as the site visit.

8.3 Prior Assessment Usage—The information supplied in connection with the site reconnaissance portion of a prior environmental site assessment may be used for guidance but shall not be relied upon without determining through a new site reconnaissance whether any conditions that are material to recognized environmental conditions in connection with the property have changed since the prior environmental site assessment.

8.4 Uses and Conditions—The environmental professional(s) conducting the site reconnaissance should note the uses and conditions specified in 8.4.1 through 8.4.4.8 to the extent visually or physically observed during the site visit. The uses and conditions specified in 8.4.4 through 8.4.4.8 should also be the subject of questions asked as part of interviews of owners and occupants (see Section 9). Uses and conditions to be noted shall be recorded in field notes of the environmental professional(s) conducting the site reconnaissance but are only required to be described in the report to the extent specified in 8.4.1 through 8.4.4.8. The environmental professional(s) performing the Phase I Environmental Site Assessment are obligated to identify uses and conditions only to the extent that they may be visually and physically observed on a site visit, as described in this practice, or to the extent that they are identified by the interviews (see Sections 9 and 10) or record review (see Section 7) processes described in this practice.

#### 8.4.1 General Site Setting:

8.4.1.1 Current Use(s) of the Property—The current use(s) of the property shall be identified in the report. Any current uses likely to involve the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products shall be identified in the report. Unoccupied occupant spaces should be noted. In identifying current uses of the property, more specific information is more helpful than less specific information. (For example, it is more useful to identify uses such as a hardware store, a grocery store, or a bakery rather than simply retail use.)

8.4.1.2 Past Use(s) of the Property—To the extent that indications of past uses of the property are visually or physically observed on the site visit, or are identified in the interviews or record review, they shall be identified in the report, and past uses so identified shall be described in the report if they are likely to have involved the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products.. (For example, there may be signs indicating a past use or a structure indicating a past use.)

8.4.1.3 Current Uses of Adjoining Properties—To the extent that current uses of adjoining properties are visually or physically observed on the site visit, or are identified in the interviews or records review, they shall be identified in the report, and current uses so identified shall be

described in the report if they are likely to indicate recognized environmental conditions in connection with the adjoining properties or the property.

8.4.1.4 Past Uses of Adjoining Properties—To the extent that indications of past uses of adjoining properties are visually or physically observed on the site visit, or are identified in the interviews or record review, they shall be noted by the environmental professional, and past uses so identified shall be described in the report if they are likely to indicate recognized environmental conditions in connection with the adjoining properties or the property.

8.4.1.5 Current or Past Uses in the Surrounding Area—To the extent that the general type of current or past uses (for example, residential, commercial, industrial) of properties surrounding the property are visually or physically observed on the site visit or going to or from the property for the site visit, or are identified in the interviews or record review, they shall be noted by the environmental professional, and uses so identified shall be described in the report if they are likely to indicate recognized environmental conditions in connection with the property.

8.4.1.6 Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions—The topographic conditions of the property shall be noted to the extent visually or physically observed or determined from interviews, as well as the general topography of the area surrounding the property that is visually or physically observed from the periphery of the property. If any information obtained shows there are likely to be hazardous substances or petroleum products on the property or on nearby properties and those hazardous substances or petroleum products are of a type that may migrate, topographic observations shall be analyzed in connection with geologic, hydrogeologic, hydrologic, and topographic information obtained pursuant to records review (see 7.2.3) and interviews to evaluate whether hazardous substances or petroleum products are likely to migrate to the property, or within or from the property, into groundwater or soil.

8.4.1.7 General Description of Structures—The report shall generally describe the structures or other improvements on the property, for example: number of buildings, number of stories each, approximate age of buildings, ancillary structures (if any), etc.

8.4.1.8 Roads—Public thoroughfares adjoining the property shall be identified in the report and any roads, streets, and parking facilities on the property shall be described in the report.

8.4.1.9 Potable Water Supply—The source of potable water for the property shall be identified in



the report.

8.4.1.10 Sewage Disposal System—The sewage disposal system for the property shall be identified in the report. Inquiry shall be made as to the age of the system as part of the process under Sections 7, 9, or 10.

8.4.2 Interior and Exterior Observations :

8.4.2.1 Current Use(s) of the Property—The current use(s) of the property shall be identified in the report. Any current uses likely to involve the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products shall be identified in the report. Unoccupied occupant spaces should be noted. In identifying current uses of the property, more specific information is more helpful than less specific information. (For example, it is more useful to identify uses such as a hardware store, a grocery store, or a bakery rather than simply retail use.)

8.4.2.2 Past Use(s) of the Property—To the extent that indications of past uses of the property are visually or physically observed on the site visit, or are identified in the interviews or records review, they shall be identified in the report, and past uses so identified shall be described in the report if they are likely to have involved the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products. (For example, there may be signs indicating a past use or a structure indicating a past use.)

8.4.2.3 Hazardous Substances and Petroleum Products in Connection with Identified Uses—To the extent that present uses are identified that use, treat, store, dispose of, or generate hazardous substances and petroleum products on the property: (1) the hazardous substances and petroleum products shall be identified or indicated as unidentified in the report, and (2) the approximate quantities involved, types of containers (if any) and storage conditions shall be described in the report. To the extent that past uses are identified that used, treated, stored, disposed of, or generated hazardous substances and petroleum products on the property, the information shall be identified to the extent it is visually or physically observed during the site visit or identified from the interviews or the records review.

8.4.2.4 Storage Tanks—Above ground storage tanks, or underground storage tanks or vent pipes, fill pipes or access ways indicating underground storage tanks shall be identified (for example, content, capacity, and age) to the extent visually or physically observed during the site visit or identified from the interviews or records review.

8.4.2.5 Odors—Strong, pungent, or noxious odors shall be described in the report and their



sources shall be identified in the report to the extent visually or physically observed or identified from the interviews or records review.

8.4.2.6 Pools of Liquid—Standing surface water shall be noted. Pools or sumps containing liquids likely to be hazardous substances or petroleum products shall be described in the report to the extent visually or physically observed or identified from the interviews or records review.

8.4.2.7 Drums—To the extent visually or physically observed or identified from the interviews or records review, drums shall be described in the report, whether or not they are leaking, unless it is known that their contents are not hazardous substances or petroleum products (in that case the contents should be described in the report). Drums often hold 55 gal (208 L) of liquid, but containers as small as 5 gal (19 L) should also be described.

8.4.2.8 Hazardous Substance and Petroleum Products Containers (Not Necessarily in Connection With Identified Uses)—When containers identified as containing hazardous substances or petroleum products are visually or physically observed on the property and are or might be a recognized environmental condition: the hazardous substances or petroleum products shall be identified or indicated as unidentified in the report, and the approximate quantities involved, types of containers, and storage conditions shall be described in the report.

8.4.2.9 Unidentified Substance Containers—When open or damaged containers containing unidentified substances suspected of being hazardous substances or petroleum products are visually or physically observed on the property, the approximate quantities involved, types of containers, and storage conditions shall be described in the report.

8.4.2.10 PCBs—Electrical or hydraulic equipment known to contain PCBs or likely to contain PCBs shall be described in the report to the extent visually or physically observed or identified from the interviews or records review. Fluorescent light ballast likely to contain PCBs does not need to be noted.

#### 8.4.3 Interior Observations:

8.4.3.1 Heating/Cooling—The means of heating and cooling the buildings on the property, including the fuel source for heating and cooling, shall be identified in the report (for example, heating oil, gas, electric, radiators from steam boiler fueled by gas).

8.4.3.2 Stains or Corrosion—To the extent visually or physically observed or identified from the

interviews, stains or corrosion on floors, walls, or ceilings shall be described in the report, except for staining from water.

8.4.3.3 Drains and Sumps—To the extent visually or physically observed or identified from the interviews, floor drains and sumps shall be described in the report.

8.4.4 Exterior Observations:

8.4.4.1 Pits, Ponds, or Lagoons—To the extent visually or physically observed or identified from the interviews or records review, pits, ponds, or lagoons on the property shall be described in the report, particularly if they have been used in connection with waste disposal or waste treatment. Pits, ponds, or lagoons on properties adjoining the property shall be described in the report to the extent they are visually or physically observed from the property or identified in the interviews or records review.

8.4.4.2 Stained Soil or Pavement—To the extent visually or physically observed or identified from the interviews, areas of stained soil or pavement shall be described in the report.

8.4.4.3 Stressed Vegetation—To the extent visually or physically observed or identified from the interviews, areas of stressed vegetation (from something other than insufficient water) shall be described in the report.

8.4.4.4 Solid Waste—To the extent visually or physically observed or identified from the interviews or records review, areas that are apparently filled or graded by non-natural causes (or filled by fill of unknown origin) suggesting trash or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal, shall be described in the report.

8.4.4.5 Waste Water—To the extent visually or physically observed or identified from the interviews or records review, waste water or other liquid (including storm water) or any discharge into a drain, ditch, or stream on or adjacent to the property shall be described in the report.

8.4.4.6 Wells—To the extent visually or physically observed or identified from the interviews or records review, all wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells) shall be described in the report.

8.4.4.7 Septic Systems—To the extent visually or physically observed or identified from the

interviews or records review, indications of on-site septic systems or cesspools should be described in the report.

## **ASTM 1527-00 (Phase I Environmental Site Assessment Process)**

6.2.2. Phase I Environmental Site Assessment-Four Components- A *Phase I Environmental Site Assessment* shall have four components, as described as follows: *Site Reconnaissance*- A visit to the *property*: see Section 8.

[Note: Obligations for conducting the site visit are addressed in “Key Site Manager (9.5.1)]

8.1. *Objective*- The objective of the *site reconnaissance* is to obtain information indicating the likelihood of identifying *recognized environmental* conditions in connection with the property.

[Note: This section provides more detail regarding: Observation (8.2), Prior Assessment Usage (8.3), Uses and Conditions (8.4)].

## **ASTM E1528-00 (Transaction Screen Process)**

4.7.3 Except as provided in 4.7.2 and 4.7.2 of Practice E 1527, prior environmental site assessments should not be used without current investigation of conditions likely to affect recognized environmental conditions in connection with the property that may have changed materially since the prior environmental site assessment was conducted. At a minimum, for a transaction screen process consistent with this practice, a new site visit should be performed.

7.3 The site visit portion of the guide considers most of the same questions set forth in the guide to owner/occupant inquiry because the transaction screen process requires both questions of owners and occupants of the property and observations of the property by the preparer.

7.5.1 The periphery of the property should be visually and physically observed, as well as the periphery of all structures on the property, and the property should be viewed from all

adjacent public thoroughfares. Any overgrown areas should be inspected, including roads or paths with no apparent outlet that should be visually and physically observed to their ends.

7.5.2 On the interior of structures on the property, accessible common areas expected to be used by building occupants or the public (such as lobbies, hallways, utility rooms, and recreation areas), a representative sample of owner and occupant spaces, and maintenance and repair areas, including boiler rooms, should be visually and physically observed. It is not necessary to look under floors, above ceilings, or behind walls.

7.5.3 After completing the site visit, the preparer of the transaction screen questionnaire may obtain “yes” answers that require the preparer once again to ask questions of the owner of the property or occupants of the property to satisfy the user that no further inquiry is necessary.

## 9. Guide to Site Visit

9.1 Is the property used for an industrial use? \_\_\_Yes \_\_\_No

9.1.1 Is any adjoining property used for an industrial use? \_\_\_Yes \_\_\_No

### Land Use

Property:

Adjoining properties north:

Adjoining properties south:

Adjoining properties east:

Adjoining properties west:

### 9.1.2 Guide:

9.1.2.1 It is recommended that the preparer describe the uses of the property and adjoining properties.

9.1.2.2 Certain industrial uses on the property may raise concerns regarding the possibility of contamination affecting the property. For purposes of the transaction screen questionnaire, an industrial use is an activity requiring the application of labor and capital for the production or distribution of a product or article, including, without limitation, manufacturing, processing, extraction, refining, warehousing, transportation, and utilities. Manufacturing is defined as a process or operation of producing by hand, machinery, or other means, a finished product or article from raw material. Industrial uses may be categorized as light or heavy industrial uses, depending upon the scale of the operations and the impact upon surrounding property in terms of

smoke, fumes, and noise. Regardless of such categorization, the concern for purposes of the transaction screen process is whether the use involves the processing, storage, manufacture, or transportation of hazardous substances or petroleum products. For example, further inquiry would be necessary if the industrial use concerned the manufacture of paints, oils, solvents, and other chemical products but not if the use concerned the storage of inert goods in containers.

9.1.2.3 The term adjoining properties means any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them.

9.2 Did you observe evidence or do you have any prior knowledge that the property has been used for an industrial use in the past? \_\_\_ Yes \_\_\_ No

9.2.1 Did you observe evidence or do you have any prior knowledge that any adjoining property has been used for an industrial use in the past? \_\_\_ Yes \_\_\_ No

9.2.2 Guide:

9.2.2.1 The user should inspect for any indications present on the property that would cause the user to suspect an industrial facility may once have existed on the site. Old buildings, pipes, containers, or other debris are indicators of previous industrial use of the site.

9.2.2.2 See guide for 9.1.

Owner Use Dates

Previous use of property

Previous use of properties to north

Previous use of properties to south

Previous use of properties to east

Previous use of properties to west

9.3 Is the property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)? \_\_\_ Yes \_\_\_ No

9.3.1 Is any adjoining property used as a gasoline station, motor repair facility, commercial

printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

Yes  No

Land Use

Property:

Adjoining properties north:

Adjoining properties south:

Adjoining properties east:

Adjoining properties west:

9.3.2 Guide:

9.3.2.1 It is recommended that the preparer describe the uses of the property and adjoining properties.

9.3.2.2 Gasoline stations, motor vehicle repair facilities (with or without supplying gas for the motor vehicles), dry cleaners, photo developing laboratories, commercial printing facilities, junkyards or landfills, and waste treatment, storage, disposal, processing, or recycling facilities all involve the use of hazardous substances or petroleum products and therefore require further inquiry concerning the possible release of such substances.

9.3.2.3 The term adjoining properties means any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. Adjoining properties include those that border the property and include properties across the street or any right of way from the property.

9.4 Did you observe evidence or do you have any knowledge that the property has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?  Yes  No

9.4.1 Did you observe evidence or do you have any prior knowledge that any adjoining property has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?  Yes  No

9.4.2 Guide—See guide for 9.2 and 9.3.

#### Owner Use Dates

Previous use of property

Previous use of properties to north

Previous use of properties to south

Previous use of properties to east

Previous use of properties to west

#### LAND ISSUES

9.5 Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the property or at the facility? \_\_\_ Yes \_\_\_ No

9.5.1 Did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the property or at the facility? \_\_\_ Yes \_\_\_ No

#### 9.5.2 Guide:

9.5.2.1 Are there any containers on the site that may contain any one of these items? Is there any reason to suspect that chemicals or hazardous substances or petroleum products in such quantities may be stored on the site? Sheltered areas, cartons, sacks, storage bins, large canisters, sheds, or cellars of existing improvements should be investigated because these are areas where chemicals or hazardous substances or petroleum products may be stored. If the answer to this question is “yes,” list the items and the location(s) where they are stored. If you are unfamiliar with the contents of any container located on the site, the question must be answered “yes” until the materials are identified. The existence of any damaged or containers identified as containing hazardous substances or petroleum products requires further investigation.

9.5.2.2 Hazardous substances or petroleum products may often be unmarked. The preparer should never open any unmarked containers at the facility because they may contain explosive materials or acids.

9.5.2.3 Consumer products in undamaged containers used for routine office maintenance or business, such as copy toner, should not create a need for further inquiry unless the quantity of

such products is in excess of what would be customary for such use. The Environmental Protection Agency has published a guidance document that identifies hazardous substances or petroleum products that must be reported under Section 311 and 312 of EPCRA.<sup>6</sup> This document lists in tabular form the CERCLA Section 103 chemicals. If a preparer has a question regarding whether the substance is a hazardous substance under CERCLA, the preparer may refer to the list of lists or 40 CFR Part 302. In addition, the Environmental Protection Agency has also published a guidance document. This document sets forth the hazardous substances or petroleum products found in many common consumer products listed by trade name.

9.6 Are there currently any industrial drums (typically, 55 gal (208 L)) or sacks of chemicals located on the property or at the facility? \_\_\_ Yes \_\_\_ No

9.6.1 Did you observe evidence or do you have any prior knowledge that there have been previously any industrial drums (typically 55 gal (208 L)) or sacks of chemicals located on the property or at the facility? \_\_\_ Yes \_\_\_ No

9.6.2 Guide—If found, they will require further examination with respect to any hazardous substance associated with them.

9.7 Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site? \_\_\_ Yes \_\_\_ No

9.7.1 Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that is of an unknown origin? \_\_\_ Yes \_\_\_ No

9.7.2 Guide— Fill dirt brought onto the property may appear as mounds or depressions that do not appear to be naturally occurring. Fill dirt may be added in construction of a facility. The term fill dirt is defined in the definitions, and the preparer should refer to the definitions if the preparer has any question concerning the meaning of the term.

9.8 Are there currently any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal? \_\_\_ Yes \_\_\_ No

9.8.1 Did you observe evidence or do you have any prior knowledge that there have been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal? \_\_\_ Yes \_\_\_ No



9.8.2 Guide—The presence of pits, ponds, or lagoons, together with waste treatment or waste disposal may indicate contaminated property. See the definitions with respect to the definition of pits, ponds, or lagoons in 3.2.28.

9.9 Is there currently any stained soil on the property? \_\_\_ Yes \_\_\_ No

9.9.1 Did you observe evidence or do you have any prior knowledge that there has been previously, any stained soil on the property? \_\_\_ Yes \_\_\_ No

9.9.2 Guide—Stained soils are frequently associated with contamination and often are an indication of either current or previous leakage associated with piping and liquid storage containers. Soils that are stained show a marked discoloration as compared to other soils in the immediate vicinity.

9.10 Are there currently any registered or unregistered storage tanks (above or underground) located on the property? \_\_\_ Yes \_\_\_ No

9.10.1 Did you observe evidence or do you have any prior knowledge that there have been previously, any registered or unregistered storage tanks (above or underground) located on the property? \_\_\_ Yes \_\_\_ No

9.10.2 Guide—Tanks are often used to store heating fuels, chemicals, and petroleum products; while tanks may be associated with storage of chemicals, they are most often associated with liquid fuel heating systems (that is, oil furnaces). Examples of tanks are illustrated in Appendix X2.

9.11 Are there currently any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property? \_\_\_ Yes \_\_\_ No

9.11.1 Did you observe evidence or do you have any prior knowledge that there have been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property? \_\_\_ Yes \_\_\_ No

9.11.2 Guide—Vent or fill pipes often signal the current or previous existence of underground storage tanks. Additionally, observations should be made regarding any asphalt or concrete

patching that would indicate the possibility of previous underground storage tank removal. Examples of vent and fill pipes are illustrated in Appendix X2.

#### STRUCTURE ISSUES

9.12 Is there currently evidence of leaks, spills or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings or exposed grounds on the property? \_\_\_Yes \_\_\_No

9.12.1 Did you observe evidence or do you have any prior knowledge that there have been previously any leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings or exposed grounds on the property? \_\_\_Yes \_\_\_No

9.12.2 Guide—Stains (other than water stains) or foul odors may indicate leaks of hazardous substances or petroleum products or contaminants. Floor drains located within a building adjacent to hazardous substance storage areas or connected to an on-site disposal system (for example, septic system) present a potential source of subsurface discharge of contaminants.

#### OTHER ISSUES

9.13 If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system? \_\_\_Yes \_\_\_No

9.13.1 If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency? \_\_\_Yes \_\_\_No

9.13.2 Guide—Evidence of well water generally consists of a 4- to 12-in. (102- to 305-mm) diameter low level pipe protruding from the ground that is capped, as illustrated in Appendix X2.

9.14 Does the property discharge wastewater (not including sanitary waste or storm water) onto or adjacent to the property and/or into a storm water system? \_\_\_Yes \_\_\_No

9.14.1 Does the property discharge wastewater (not including sanitary waste or storm water) onto or adjacent to the property and/or into a sanitary sewer system? \_\_\_Yes \_\_\_No

9.14.2 Guide:

9.14.2.1 All drain traps and pipes should be examined and their end points should be determined. Any ditches or streams on or adjacent to the site should be visually and physically observed for wastewater flow.

9.14.2.2 Some jurisdictions require facilities with large roof or paved areas and construction sites to collect and divert such runoff through a treatment process prior to discharging the stormwater runoff to municipal, separate storm sewer systems, or the waters of the United States. Such units are often called stormwater treatment systems. Oil-water separators are most often found outside a building under a manhole and require routine servicing to remove oil. Oil-water separators are usually in restaurants, repair garages, and service stations. An example of an oil-water separator is shown in Appendix X2.

9.15 Did you observe evidence or do you have any prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned, on the property? \_\_\_ Yes \_\_\_ No

9.15.1 Guide—Past waste disposal practices should be examined because these may have resulted in hazardous substances being released on the property. Does the site evidence any mounds or depressions that suggest a disposal site?

9.16 Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the, presence of PCBs? \_\_\_ Yes \_\_\_ No

9.16.1 Guide:

9.16.1.1 The PCBs are regulated by the Toxic Substances Control Act 15 USC Section 2601 et seq. and, in the absence of a release, are not regulated by CERCLA. The provisions of CERCLA do apply if there is a release of PCBs. Accordingly, if an affirmative answer is obtained to this question, the further focus should be on whether there have been any instances of insulating oil leakage and, if so, whether these are suspected of being PCB or PCB-contaminated.

9.16.1.2 Elevators and auto lifts are often operated by hydraulically controlled systems containing PCBs. If inspection or maintenance records for the elevator, capacitor, or other hydraulic equipment indicate no release has occurred and the machinery does not appear to be damaged or leaking, no further inquiry is required.

9.16.1.3 Transformers containing PCBs may have many different sizes and shapes. Some of the more commonly used transformers are set forth on Appendix X2. Transformers are to be registered pursuant to 40 CFR § 761.30. request should identify the records the preparer requires and should identify the site and geographic area for which the preparer needs the records (for example, the address of the site and the appropriate city, county, or zip code to be searched). The request should be directed to the FOIA officer for the regional EPA office responsible for the region in which the site is located. A list of the FOIA offices for each of the EPA regions may be obtained from the federal government or local library. From the federal EPA offices, the preparer should anticipate a response no sooner than four to eight weeks.

### **ASTM 2247-02 (Phase I Site Assessment for Forestland and Rural Property)**

6.2.2. Phase I Environmental Site Assessment: Four Components—A *Phase I Environmental Site Assessment* shall have four components, as described as follows: *Site Reconnaissance*- A visit to the *property*: see Section 8.

[Note: Obligations for conducting the site visit are addressed in “Key Site Manager (9.5.1)].

8.1. *Objective*—The objective of the *site reconnaissance* is to obtain information indicating the likelihood of identifying *recognized environmental* conditions in connection with the property. And, if conducting additional scope of work found in Guidance Document for Incorporation of Endangered Species Act Considerations and/or Guidance Document for Incorporation of Clean Water Act Non-point Source Considerations, then identify those items of concern found in those scopes.

[Note: This section provides more detail regarding: Observation (8.2), Prior Assessment Usage (8.3), Uses and Conditions (8.4)].

### **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

Not applicable.

**Guidance for Performing Preliminary Assessments Under CERCLA  
EPA/540/G-91/013  
September 1991**

1.3 The Superfund Process

The primary objective of the site assessment phase is to obtain the data necessary to identify the highest priority sites posing threats to human health and the environment. The site assessment phase begins with site discovery, or notification to EPA of possible releases of hazardous substances. Sites are discovered by regional EPA offices, State agencies, and citizens who file a PA petition. Section 105(d) of SARA established the PA petition as a formal mechanism for citizens to report potential hazardous waste sites. Publication 9200.5-301 FS, "Preliminary Assessment Petition, by EPA's Office of Emergency and Remedial Response, describes the process. Once discovered, sites are entered into the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), EPA's computerized inventory of potential hazardous waste sites. EPA then evaluates the potential for a release of hazardous substances from a site during two investigative steps:

- Preliminary Assessment: A PA is a limited-scope investigation performed by States and/or EPA on every CERCLIS site. PA investigators collect readily available information and conduct a site and environs reconnaissance. The PA distinguishes between sites that pose little or no threat to human health and the environment and sites that require further investigation. The PA also identifies sites requiring assessment for possible emergency response actions.
- Site Inspection (SI): If the PA recommends further investigation, an SI is performed. SI investigators typically collect waste and environmental samples to determine the substances present at a site and whether they are being released to the environment. The primary objective of the SI is to identify which sites have a high probability of qualifying for the NPL. A second objective is to identify sites posing immediate health or environmental threats which require emergency response.

At the end of both the PA and SI, EPA applies the HRS to derive a site score and determine either that further investigation is necessary or that the site should receive a "no further remedial action planned" (NFRAP) recommendation. A NFRAP recommendation means that further action under the Federal Superfund program is not planned; however, such sites may be

reexamined later if warranted. File information for NFRAP sites is provided to the State, or other regulatory authorities, which may also take action on their own.

The SI can be conducted in one stage or two. Often, the SI can be structured to test the critical PA conclusions that resulted in the recommendation for an SI; the information developed may be sufficient for EPA to determine either that the site requires no further action or that it is likely to score high enough for NPL consideration. If further investigation is necessary to document an HRS score, an expanded SI can be conducted. A site with an HRS score of 28.50 or greater is eligible for proposal to the NPL, and a formal HRS package may be prepared.

These steps—discovery, entry into CERCLIS, PA, SI, expanded SI (if warranted), HRS package preparation, and placement on the NPL—make up the site assessment phase of the Superfund process. An important aspect of this process is its screening function, identifying sites that will not score high enough or are otherwise ineligible for the NPL, and removing them from further consideration. While all sites in CERCLIS undergo a PA, only about 3 out of 5 (historically) have been found to require an SI, and only 1 in about 15 or 20 warrant placement on the NPL.

## 2.5 Site Reconnaissance

The purpose of a reconnaissance is to visually observe the site and its environs and to collect additional information to assist the PA evaluation. An offsite reconnaissance is generally required; an onsite reconnaissance may be performed, as appropriate (NCP, 40 CFR 300.420). Depending on information needs and the type of reconnaissance, activities may include an onsite visit, an offsite perimeter survey, a site environs survey, and collecting additional information from local authorities.

Under some circumstances, a site reconnaissance may not be necessary. If file searches and desktop data collection activities yield sufficient information to indicate that an SI is necessary, a reconnaissance may not be required to complete the PA; consult with your Regional EPA site assessment contact. It is usually difficult, however, to conclude that no further action is necessary without the benefit of actually observing conditions at and around the site. Exceptions may include sites that are not eligible for response under CERCLA (see Section 2.2 for discussion).

When conducting a reconnaissance, pay particular attention to physical features of the site (e.g., dimensions and locations of sources, buildings) and the surrounding area. Record any

observations that differ from descriptions gathered through previous data collection (e.g., a new housing development not shown on the topographic map). Another important aspect of the site reconnaissance is to evaluate the need for a removal action. A removal action could include the stabilization or removal of wastes, fencing the site, or other emergency response activity that eliminates, controls, or otherwise mitigates an imminent and serious threat to the public health or the environment. Emergency response considerations are discussed in Section 2.6.

[Note: Additional directions for performing site reconnaissance are included in 2.5.1 - 2.5.3.]

### Site Environs Survey

The purpose of the site environs survey is to identify and verify the existence and locations of nearby targets. A windshield survey (i.e., a look around by car) of the surrounding area is useful for this purpose. As part of the windshield survey, perform a house count to obtain population estimates for areas near the site. Identify residential areas near the site that rely on private wells. Verify the overland flow route to the nearest surface water body; if possible, walk along the flow route and look for evidence of hazardous substance migration. Record any features of the surrounding area that may not be indicated on the topographic map, such as new housing, business, or commercial developments. Transcribe all of the information collected during the perimeter and local environs survey onto your local site environs sketch or topographic map.

### Additional Data Collection

During the offsite reconnaissance, you may visit a number of local authorities to collect additional information. Local health departments may have information concerning inspections performed at the site, past complaints from nearby residents (e.g., odors, smoke, unsightly conditions), and health impacts attributed to the site. As discussed in Section 2.4.5, local water authorities may be able to provide water distribution maps or mark the location of public drinking water supply sources and distribution areas on a topographic map. In addition, water officials may provide information on private water wells in the vicinity. The tax assessor's office may have information regarding ownership and boundary history of the site, which may lead to the discovery of other hazardous waste sources not previously identified.

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## **Revision No. 2**

**Revision Date: May 2000 Final**

### C.0 Site Background

The Site-Specific Brownfields SAMP shall contain Historical Data Review and Site Reconnaissance Reports. The Historical Data Review and Site Reconnaissance Reports are to be generated by undertaking a Phase I Brownfields Site Assessment.

### C.2 Site Reconnaissance Reports

Site Reconnaissance Reports evaluate site conditions to identify potentially contaminated areas and sampling hazards. These surveys are used to prepare correct and cost-effective site-specific project plans. The Site Reconnaissance Report corrects deficiencies in the Historical Review Report by:

- Interviewing local residents and past employees about site-related activities.
- Researching facility files and records (if available).
- Visiting and photographing the Brownfields site.
- Delineating the presence or absence of the following site characteristics: waste disposal areas, lagoons, site wastes, dead animals, dead or stressed vegetation, and visible label information on drums, tanks, and containers.

## **Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup**

### **How Do We Find the Answers? (p. 25)**

Activities to be conducted during the initial survey of a site include:

Determine whether contamination is likely through the conduct of an ASTM Phase I environmental site assessment or its equivalent. A records search is performed and the site is visited, but no sampling of soil or groundwater occurs. The effort includes the following activities:

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- Perform a physical or visual examination of the site, including examination of existing structures for structural integrity and asbestos containing material.

**Criterion VII. Specialized knowledge or experience on the part of the defendant.**

**SBLRBRA §223(B)(ii),(iii)(VII)**

(ii) STANDARDS AND PRACTICES—Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA—In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(VII) Specialized knowledge or experience on the part of the defendant.

**SBLRBRA §223(B)(ii),(iv)(I)**

(iv) INTERIM STANDARDS AND PRACTICES

(I) PROPERTY PURCHASED BEFORE MAY 31, 1997—With respect to property purchased before May 31, 1997, in making a determination with respect to a defendant described in clause (i), a court shall take into account--

(aa) any specialized knowledge or experience on the part of the defendant;

**Florida**

**Fla. Stat. Section 376.308(1)(c).  
Liabilities and Defenses of Facilities**

In the case of a discharge of petroleum, petroleum products, or dry cleaning solvents, the owner of the facility, the dry cleaning facility, or the wholesale supply facility, unless the owner can establish that he or she acquired the title to property contaminated by the activities of a previous

owner or operator or other third party, that he or she did not cause or contribute to the discharge, and that he or she did not know of the polluting condition at the time the owner acquired title. If the owner acquired title subsequent to July 1, 1992, or, in the case of a dry cleaning facility or wholesale supply facility, subsequent to July 1, 1994, he or she must also establish by a preponderance of the evidence that he or she undertook, at the time of acquisition, all appropriate inquiry into the previous ownership and use of the property consistent with good commercial or customary practice in an effort to minimize liability. The court or hearing officer shall take into account . . . any specialized knowledge or experience on the part of the defendant.

## **Illinois**

### **415 ILCS 5/**

### **415 ILCS 5/5/22.2(j)(6)(B)**

(B) To establish the defendant had no reason to know, as provided in clause (i) of subparagraph (A) of this paragraph, the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability. For purposes of the preceding sentence, the court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection.

## **Massachusetts**

Not applicable.

## **Michigan**

Not applicable.

## **New Jersey**

**NJSA §§58:10-23.11b, .11f & .11g; NJAC 7:26E (“Technical Rule”)**

## **Pennsylvania**

Not applicable.

### **ASTM E1527-97 (Phase I Environmental Site Assessment Process)**

5.3 Specialized Knowledge or Experience of the User—If the user is aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional. The user should do so before the environmental professional does the site reconnaissance.

6.3.2 User Obligations— The environmental professional shall note in the report whether or not the user has reported to the environmental professional any environmental liens encumbering the property or any specialized knowledge or experience of the user that would provide important information about previous ownership or uses of the property that may be material to identifying recognized environmental conditions.

11.3 Contents of Report—The report shall include those matters required to be included in the report pursuant to various provisions of this practice. In addition, the report shall state whether the user reported to the environmental professional any information pursuant to the user's responsibilities described in Section 5 of this practice (for example, an environmental lien encumbering the property or any relevant specialized knowledge or experience of the user).

X1.2.4 The statute then states at § 9601(35)(B) (emphasis added):

“To establish that the defendant had no reason to know, as provided [above], the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability. ...

“[T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection.”

X1.3.2.3 While the statute does not specifically distinguish certain types of properties and uses from others, or certain types of parties from others, it does list certain factors courts should consider in determining whether one's inquiry under the circumstances is appropriate. The statute, as explained in X1.2, requires a court to consider a party's specialized knowledge or experience.

The statute further mandates a court to consider what is “reasonably ascertainable information about the property,” what contamination is obviously present, and the party’s “ability to detect such contamination.” The very use of terms such as “appropriate” and “reasonably,” and the use of “specialized knowledge and experience” and “ability” in conjunction with the specific person attempting to utilize the defense signifies that Congress did not intend the appropriateness of the inquiry be judged by a bright line standard. If it so intended, Congress would have stated, but did not, that the same inquiry should be made in every case.

X1.3.3.3 At the other extreme, the minimum level of inquiry that a party would be expected to conduct is found by looking at the least environmentally obtrusive class of property and party from a CERCLA perspective. This transaction likely involves the lay buyer of a home or the renter of an apartment. Assuming these parties meet the other prerequisites for the innocent purchaser defense, what level of environmental inquiry must they conduct to avoid Superfund liability? While there are no recorded court cases on this issue, the answer is probably none, unless a particular residential purchaser or renter has some specialized knowledge about or experience with the property in question that would lead a court to conclude that some questions should have been asked. Beyond these rare situations, it is highly unlikely that Congress intended to saddle housing consumers with the burden of investigating or cleaning up contaminated sites. In fact, EPA has issued a statement of enforcement policy to the effect that it will not generally pursue owners of single family residences pursuant to CERCLA. Therefore, for some properties and parties to real estate transactions, it is appropriate to conduct no environmental inquiry in order to meet one's innocent purchaser defense to liability.

## **ASTM 1527-00 (Phase I Environmental Site Assessment Process)**

5.3 *Specialized Knowledge or Experience of the User*—If the *user* is aware of any specialized knowledge or experience that is material to *recognized environmental conditions* in connection with the *property*, it is the user’s responsibility to communicate any information based on such specialized knowledge or experience to the *environmental professional*. The *user* should do so before the *environmental professional* does the *site reconnaissance*.

[Note: See also 6.3.2 *User Obligations*- The *environmental professional* shall note in the report whether or not the user has reported to the *environmental professional* any environmental liens encumbering the *property* or any specialized knowledge or experience of the *user* that would provide important information about previous ownership or uses of the *property* that may be material to identifying *recognized environmental conditions*.]

## **ASTM E1528-00 (Transaction Screening Process)**

4.9 If the user is aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, and the preparer is not the user, it is the user’s responsibility to communicate any information based on such specialized knowledge or experience to the preparer. The user should do so before the preparer makes the site visit.

5.4 *Exercise of Care*— The preparer conducting the transaction screen process should use good faith efforts in determining answers to the questions set forth in the transaction screen questionnaire. The user should take time and care to check whatever records are in the user’s possession. The preparer should ask all persons to whom questions are directed to give answers to the best of the respondent’s knowledge. As required by Section 9601(35)(B) of CERCLA, the user or preparer should discuss with a responsible person in authority in the user’s organization (if any) any specialized knowledge or experience relating to hazardous substances on the property and the preparer should understand such information. user must document the reasons for any such conclusion.

X1.2.4 The statute then states at § 9601(35)(B)(*emphasis added*):

“To establish that the defendant had no reason to know, as provided (above), *the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous*

*ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability... . [T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection.”*

X1.3.2.3 While the statute does not specifically distinguish certain types of properties and uses from others, or certain types of parties from others, it does list certain factors courts should consider in determining whether one’s inquiry under the circumstances is appropriate. The statute, as explained above in X1.2 requires a court to consider a party’s specialized knowledge or experience. The statute further mandates a court to consider what is “reasonably ascertainable information about the property,” what contamination is obviously present, and the party’s “ability to detect such contamination”. The very use of terms such as “ appropriate” and “reasonably”, and the use of “specialized knowledge and experience” and “ability” in conjunction with the specific person attempting to utilize the defense signifies that Congress did not intend the appropriateness of the inquiry be judged by a bright line standard. If it is so intended, Congress would have stated, but did not, that the same inquiry should be made in every case.

X1.3.3.3 At the other extreme, the minimum level of inquiry that a party would be expected to conduct is found by looking at the least environmentally obtrusive class of property and party from a CERCLA perspective. This transaction likely involves the lay buyer of a home or the renter of an apartment. Assuming these parties meet the other prerequisites for the innocent purchaser defense, what level of environmental inquiry must they conduct to avoid Superfund liability? While there are no recorded court cases on this issue, the answer is probably none, unless a particular residential purchaser or renter has some specialized knowledge about or experience with the property in question that would lead a court to conclude that some questions should have been asked. Beyond these rare situations, it is highly unlikely that Congress intended to saddle housing consumers with the burden of investigating or cleaning up contaminated sites. In fact, EPA has issued a statement of enforcement policy to the effect that it will not generally pursue owners of single family residences pursuant to CERCLA.<sup>16</sup> Therefore, for some properties and parties to real estate transactions, it is appropriate to conduct no environmental inquiry in order to meet the innocent purchaser defense to liability.

## **ASTM 2247-02 (Phase I for Forestland and Rural Property)**

*5.3 Specialized Knowledge or Experience of the User*— If the *user* is aware of any specialized knowledge or experience that is material to *recognized environmental conditions* in connection with the *property*, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the *environmental professional*. The *user* should do so before the *environmental professional* does the *site reconnaissance*. The *environmental professional* should request this information of the user prior to the *site reconnaissance*.

## **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

Not applicable.

## **Guidance for Performing Preliminary Assessments Under CERCLA EPA/540/G-91/013 September 1991**

Not applicable.

## **Generic Brownfields Quality Assurance Project Plan U.S. EPA Region 2 Revision No. 2 Revision Date: May 2000 Final**

Not applicable.

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Not applicable.

**Criterion VIII. The relationship of the purchase price to the value of the property, if the property was not contaminated.**

**SBLRBRA §223(B)(ii),(iii)(VII)**

(ii) STANDARDS AND PRACTICES—Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA— In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(VIII) The relationship of the purchase price to the value of the property, if the property was not contaminated.

**SBLRBRA §223(B)(ii),(iv)(I)**

(iv) INTERIM STANDARDS AND PRACTICES

(I) PROPERTY PURCHASED BEFORE MAY 31, 1997- With respect to property purchased before May 31, 1997, in making a determination with respect to a defendant described in clause (i), a court shall take into account--

(bb) the relationship of the purchase price to the value of the property, if the property was not contaminated.

**Florida**

**Fla. Stat. Section 376.308(1)(c)  
Liabilities and Defenses of Facilities**

In the case of a discharge of petroleum, petroleum produces, or dry cleaning solvents, the owner of the facility, the dry cleaning facility, or the wholesale supply facility, unless the owner can establish that he or she acquired the title to property contaminated by the activities of a previous owner or operator or other third party, that he or she did not cause or contribute to the discharge, and that he or she did not know of the polluting condition at the time the owner acquired title. If the owner acquired title subsequent to July 1, 1992, or, in the case of a dry cleaning facility or wholesale supply facility, subsequent to July 1, 1994, he or she must also establish by a preponderance of the evidence that he or she undertook, at the time of acquisition, all appropriate inquiry into the previous ownership and use of the property consistent with good commercial or customary practice in an effort to minimize liability. The court or hearing officer shall take into account . . . the relationship of the purchase price to the value of the property if uncontaminated.

## **Illinois**

### **415 ILCS 5/**

#### **415 ILCS 5/5/22.2(j)(6)(B)**

(B) To establish the defendant had no reason to know, as provided in clause (i) of subparagraph (A) of this paragraph, the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability. For purposes of the preceding sentence, the court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection.

## **Massachusetts**

### **Massachusetts General Laws**

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Chapter 21E, Section 5h: “Any person who owns a one- to four-family residence that is a site at which the department has incurred costs for response actions shall not be liable to the department for those costs if he can establish by a preponderance of the evidence that. . . etc. . . . The defense established by this subsection shall not apply if. . . etc. . . . unless . . . he did not know or have reason to know of the release at the time he acquired ownership or possession of the site. *In no event shall said owner be deemed to have had reason to know of the release of oil or hazardous material on the site unless a reasonable inquiry would have disclosed such presence at the time when the site was acquired by said owner, so long as the purchase price paid by said owner bore a reasonable relationship to the value of the site in the absence of oil or hazardous material.*” (Italics added.)

## **Michigan**

Not applicable.

## **New Jersey**

### **NJSA §§58:10-23.11b, .11f & .11g; NJAC 7:26E (“Technical Rule”)**

Not applicable.

## **Pennsylvania**

Not applicable.

### **ASTM E1527-97 (Phase I Environmental Site Assessment Process)**

5.4 Reason for Significantly Lower Purchase Price-In a transaction involving the purchase of a parcel of commercial real estate, if a user has actual knowledge that the purchase price of the property is significantly less than the purchase price of comparable properties, the user should try to identify an explanation for the lower price and to make a written record of such explanation. Among the factors to consider will be the information that becomes known to the user pursuant to the Phase I Environmental Site Assessment.

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X1.2.4 The statute then states at § 9601(35)(B) (emphasis added):

"To establish that the defendant had no reason to know, as provided [above], the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability... .

The court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection."

X1.3.2.2 First, it must be noted that little case law exists to serve as guidance about the minimum level of inquiry that will be deemed appropriate for the innocent purchaser defense. See, for example, *United States versus Serafini*, 706 F. Supp. 346 (M.D. Pa. 1988), and 1990 U.S. Dist. LEXIS 18466 (M.D. Pa. 1990) (By entertaining disputed facts as to the custom and practice of viewing land prior to purchase, the court implied that appropriate inquiry necessarily varies on a site-by-site basis); *United States versus Pacific Hide and Fur Depot, Inc.*, 716 F. Supp. 1341 (D. Idaho 1989) (No inquiry was required by those who received an ownership interest in property via corporate stock transfer and warranty deed under the facts of this case); *International Clinical Laboratories, Inc. versus Stevens*, 30 ERC 2066, 20 ELR 20,560 (E.D.N.Y. 1990). (Despite a long history of toxic wastewater disposal and presence of the site on the state's hazardous waste disposal site list, the purchaser established the innocent purchaser defense since there were no visible environmental problems at the site, the defendant had no knowledge of environmental problems at the site and the purchase price did not reflect a reduction on account of the problem.)

## **ASTM 1527-00 (Phase I Environmental Site Assessment Process)**

*5.4 Reason for Significantly Lower Purchase Price*—In a transaction involving the purchase of a parcel of *commercial real estate*, if a user has *actual knowledge* that the purchase price of the *property* is significantly less than the purchase price of comparable properties, the *user* should try to identify an explanation for the lower price and to make a written record of such

explanation. Among the factors to consider will be the information that becomes known to the user pursuant to the Phase I Environmental Site Assessment.

### **ASTM E1528-00 (Transaction Screening Process)**

4.10 In a transaction involving the purchase of a parcel of commercial real estate, if a user has actual knowledge that the purchase price of the property is significantly less than the purchase price of comparable properties, the user should try to identify an explanation for the lower price and to make a written record of such explanation. Among the factors to consider will be the information that becomes known to the user pursuant to the transaction screen environmental site assessment.

X1.2.4 The statute then states at § 9601(35)(B)(emphasis added):

“To establish that the defendant had no reason to know, as provided (above), the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability... . [T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection.”

X1.3.2.2 First, it must be noted that little case law exists to serve as guidance about the minimum level of inquiry that will be deemed appropriate for the innocent purchaser defense. See, for example, *United States versus Serafini*, 706 F. Supp. 346 (M.D. Pa. 1988), and 1990 U.S. Dist. LEXIS 18466 (M.D. Pa. 1990) (By entertaining disputed facts as to the custom and practice of viewing land prior to purchase, the court implied that appropriate inquiry necessarily varies on a site-by-site basis); *United States versus Pacific Hide and Fur Depot, Inc.*, 716 F. Supp. 1341 (D. Idaho 1989) (No inquiry was required by those who received an ownership interest in property by means of corporate stock transfer and warranty deed under the facts of this case.); *International Clinical Laboratories, Inc. versus Stevens*, 30 ERC 2066, 20 ELR 20,560 (E.D.N.Y. 1990).

(Despite a long history of toxic wastewater disposal and presence of the site on the state’s

hazardous waste disposal site list, the purchaser established the innocent purchaser defense since there were no visible environmental problems at the site, the defendant had no knowledge of environmental problems at the site, and the purchase price did not reflect a reduction on account of the problem.)

### **ASTM 2247-02 (Phase I for Forestland and Rural Property)**

*5.4 Reason for Significantly Lower Purchase Price-* In a transaction involving the purchase of a parcel of *forestland* or *rural property*, if a user has *actual knowledge* that the purchase price of the *property* is significantly less than the purchase price of comparable properties, the *user* should try to identify an explanation for the lower price and to make a written record of such explanation. However, such explanation is necessary only if the *user* has determined that the lower price is the result of a *recognized environmental condition*. Among the factors to consider will be the information that becomes known to the *user* pursuant to the Phase I Environmental Site Assessment. The *environmental professional* should request this information of the *user* prior to the *site reconnaissance*.

### **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

Not applicable.

### **Guidance for Performing Preliminary Assessments Under CERCLA EPA/540/G-91/013 September 1991**

Not applicable.

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Not applicable.

## **Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup**

Not applicable.



**Criterion IX. Commonly known or reasonably ascertainable information about the property.**

**SBLRBRA §223(B)(ii),(iii)(IX)**

(ii) STANDARDS AND PRACTICES—Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA—In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(IX) Commonly known or reasonably ascertainable information about the property.

**SBLRBRA §223(B)(ii),(iv)(I)**

(iv) INTERIM STANDARDS AND PRACTICES-

(I) PROPERTY PURCHASED BEFORE MAY 31, 1997—With respect to property purchased before May 31, 1997, in making a determination with respect to a defendant described in clause (i), a court shall take into account—

(cc) commonly known or reasonably ascertainable information about the property;

**Florida**

**Fla. Stat. Section 376.308(1)(c)  
Liabilities and Defenses of Facilities**

In the case of a discharge of petroleum, petroleum produces, or dry cleaning solvents, the owner of the facility, the dry cleaning facility, or the wholesale supply facility, unless the owner can establish that he or she acquired the title to property contaminated by the activities

of a previous owner or operator or other third party, that he or she did not cause or contribute to the discharge, and that he or she did not know of the polluting condition at the time the owner acquired title. If the owner acquired title subsequent to July 1, 1992, or, in the case of a dry cleaning facility or wholesale supply facility, subsequent to July 1, 1994, he or she must also establish by a preponderance of the evidence that he or she undertook, at the time of acquisition, all appropriate inquiry into the previous ownership and use of the property consistent with good commercial or customary practice in an effort to minimize liability. The court or hearing officer shall take into account . . . commonly known or reasonably ascertainable information about the property.

## **Illinois**

### **415 ILCS 5/**

### **415 ILCS 5/5/22.2(j)(6)(B)**

(B) To establish the defendant had no reason to know, as provided in clause (i) of subparagraph (A) of this paragraph, the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability. For purposes of the preceding sentence, the court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection.

## **Massachusetts**

### **General Laws of Massachusetts**

Chapter 21, Section 3A(j): “(1) As part of such incentives or negotiations, the commonwealth may, in its sole discretion, enter into a covenant not to sue concerning some or all of any liability to the commonwealth pursuant to this chapter, including future liability; provided, that

each covenant not to sue shall be in the public interest. (2) A person who has resolved his liability to the commonwealth in an administrative or judicially approved settlement shall not be liable for claims for contribution, cost recovery or equitable share regarding matters addressed in the settlement to any person (i) to whom the settling party has provided notice of the settlement, or who has otherwise received notice, and (ii) who has had an opportunity to comment on the settlement to the settling parties. Matters addressed in a settlement shall be defined in each settlement. An opportunity to comment shall mean an opportunity for a person to submit written comments to the settling parties during a period of 90 calendar days commencing with such person's receipt of notice or the date of publication of notice. The settling governmental entity may, in its sole discretion, extend the 90-day comment period upon a request made prior to the expiration of such comment period. *Notice shall include, but shall not be limited to, notice of how, when and to whom to make comments. Notice means actual notice or notice provided by registered mail, return receipt, to all owners of record in the respective registry of deeds or the appropriate land registration office of the registry district for the preceding 50 years for all property within the site, and all parties who have received notice from the department of environmental protection pursuant to section 4. For all others notice means notice by publication. Notice by publication shall be deemed adequate upon publication of the settlement (i) in the Environmental Monitor and (ii) in a newspaper, if any, published in the municipality where the site is located or in a newspaper with general circulation in the town where the site is located, once in each of three successive weeks. If no newspaper is published in such municipality, notice may be published in a newspaper with general circulation where the site is located. A newspaper which by its title page purports to be printed or published in such municipality, and having a circulation therein, shall be sufficient for the purpose of providing notice by publication pursuant to this section.* No such settlement shall be effective prior to the closing of the comment period. Such settlement does not discharge any other person unless its terms so provide, but shall reduce the potential liability of all other liable persons by the amount of the settlement.” (Italics added.)

## Michigan

### Natural Resources and Environmental Protection Act

Act 451, Section 324.20120d: “(1) At a facility where state funds will be spent to develop or implement a remedial action plan or where the department determines there is a significant

public interest, within 30 days after the completion of a remedial investigation for the facility, the department shall provide the county and the township, city, or village in which the facility is located a notice of the completion of the remedial investigation, a summary of the remedial investigation, and notice of an opportunity for the people in the local unit of government to meet with the department regarding the remedial investigation and any proposed feasibility study for the facility. *Upon a request for a public meeting by the governing body of the local unit of government or by 25 citizens of the local unit of government, the department shall, within 30 days of the request, meet with persons in the local unit of government. The person or persons requesting the public meeting shall publicize and provide accommodations for the meeting. The meeting shall be held in the local unit of government in which the facility is located. The department shall provide copies of the notices and summary required in this subsection to the governing body of the local unit of government, to the known persons who are liable under section 20126, and to the main public library of the local unit of government in which the facility is located.* The department shall send representatives to the meeting who are familiar with the facility and who are involved with determining the appropriate remedial actions to be taken at the facility. Persons who are liable under section 20126 for the facility may send representatives to the meeting.

(2) The department shall maintain, and periodically publish, a list of remedial action plans submitted for approval that comply with the requirements of R 299.5515 of the Michigan administrative code.

(3) Before approval of a proposed remedial action plan which is to be implemented with money from the fund, or is based on categorical criteria provided for in section 20120a(1)(f) to (j) or (2), or if section 20118(5) or (6) applies, or the department determines that there is significant public interest, the department shall do all of the following:

(a) Publish a notice and brief summary of the proposed remedial action plan.

(b) Provide for public review and comment pertinent to documents relating to the proposed remedial action plan, including, if applicable, the feasibility study that outlines alternative remedial action measures considered.

(c) Provide an opportunity for a public meeting at or near the facility when any of the following occur:

(I) The department determines that there is a significant public interest or that for any other reason a public meeting is appropriate.

(ii) A city, township, or village in which the facility is located, by a majority vote of its governing body, requests a public meeting.

(iii) A local health department with jurisdiction in the area in which the facility is located requests a public meeting.

(d) Provide a document that summarizes the major issues raised by the public and how they are to be addressed by the final approved remedial action plan.

*(4) For purposes of this section, publication shall include, at a minimum, publication in a local newspaper or newspaper of general circulation in this state. In addition, the administrative record shall be made available by the department for inspection by members of the public at or near the facility and in Lansing.” (Italics added.)*

Act 451, Section 324.21309a: “(1) If initial response actions under section 21307 have not resulted in completion of corrective action, a consultant retained by an owner or operator shall prepare a corrective action plan to address contamination at the site. For corrective action plans submitted as part of a final assessment report pursuant to section 21311a after October 1, 1995, the corrective action plan shall use the process described in RBCA. . . .

*(3) If a corrective action plan prepared under this section does not result in an unrestricted use of the property for any purpose, the owner or operator or a consultant retained by the owner or operator shall provide notice to the public by means designed to reach those members of the public directly impacted by the release and the proposed corrective action. The notice shall include the name, address, and telephone number of a contact person. A copy of the notice and proof of providing the notice shall be submitted to the department. The department shall ensure that site release information and corrective action plans that do not result in an unrestricted use of property are made available to the public for inspection upon request.” (Italics added.)*

## **New Jersey**

### **NJSA §§58:10-23.11b, .11f & .11g**

NJSA §§58:10-23.11b.

"Preliminary assessment" means the first phase in the process of identifying areas of concern and determining whether contaminants are or were present at a site or have migrated or are

migrating from a site, and shall include the initial search for and evaluation of, existing site specific operational and environmental information, both current and historic, to determine if further investigation concerning the documented, alleged, suspected or latent discharge of any contaminant is required. The evaluation of historic information shall be conducted from 1932 to the present, except that the department may require the search for and evaluation of additional information relating to ownership and use of the site prior to 1932 if such information is available through diligent inquiry of the public records; . . . .

NJAC 7:26E (“Technical Rule”)

See Criteria 3: “diligent inquiry” standard.

## **Pennsylvania**

Not applicable.

### **ASTM E1527-97 (Phase I Environmental Site Assessment Process)**

#### 7. Records Review

##### 7.1 Introduction:

7.1.1 Objective—The purpose of the records review is to obtain and review records that will help identify recognized environmental conditions in connection with the property.

7.1.2 Approximate Minimum Search Distance—Some records to be reviewed pertain not just to the property but also pertain to properties within an additional approximate minimum search distance in order to help assess the likelihood of problems from migrating hazardous substances or petroleum products. When the term approximate minimum search distance includes areas outside the property, it shall be measured from the nearest property boundary. The term approximate minimum search distance is used in lieu of radius in order to include irregularly shaped properties.

7.1.2.1 Reduction of Approximate Minimum Search Distance—When allowed by 7.2.1.1, the

approximate minimum search distance for a particular record may be reduced in the discretion of the environmental professional. Factors to consider in reducing the approximate minimum search distance include: (1) the density (for example, urban, rural, or suburban) of the setting in which the property is located; (2) the distance that the hazardous substances or petroleum products are likely to migrate based on local geologic or hydrogeologic conditions; and (3) other reasonable factors. The justification for each reduction and the approximate minimum search distance actually used for any particular record shall be explained in the report. If the approximate minimum search distance is specified as "property only," then the search shall be limited to the property and may not be reduced unless the particular record is not reasonably ascertainable.

7.1.3 Accuracy and Completeness—Accuracy and completeness of record information varies among information sources, including governmental sources. Record information is often inaccurate or incomplete. The user or environmental professional is not obligated to identify mistakes or insufficiencies in information provided. However, the environmental professional reviewing records shall make a reasonable effort to compensate for mistakes or insufficiencies in the information reviewed that are obvious in light of other information of which the environmental professional has actual knowledge.

7.1.4 Reasonably Ascertainable/Standard Sources—Availability of record information varies from information source to information source, including governmental jurisdictions. The user or environmental professional is not obligated to identify, obtain, or review every possible record that might exist with respect to a property. Instead, this practice identifies record information that shall be reviewed from standard sources, and the user or environmental professional is required to review only record information that is reasonably ascertainable from those standard sources. Record information that is reasonably ascertainable means (1) information that is publicly available, (2) information that is obtainable from its source within reasonable time and cost constraints, and (3) information that is practically reviewable.

7.1.4.1 Publicly Available—Information that is publicly available means that the source of the information allows access to the information by anyone upon request.

7.1.4.2 Reasonable Time and Cost—Information that is obtainable within reasonable time and cost constraints means that the information will be provided by the source within 20 calendar days of receiving a written, telephone, or in-person request at no more than a nominal cost intended to cover the source's cost of retrieving and duplicating the information. Information



that can only be reviewed by a visit to the source is reasonably ascertainable if the visit is permitted by the source within 20 days of request.

7.1.4.3 Practically Reviewable—Information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the user can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the property or a geographic area in which the property is located are not generally practically reviewable. Most databases of public records are practically reviewable if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally practically reviewable. Listings in publicly available records which do not have adequate address information to be located geographically are not generally considered practically reviewable. For large databases with numerous facility records (such as RCRA generators and registered USTs), the records are not practically reviewable unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any given zip code because that information would not be practically reviewable. In other words, when so much data is generated that it cannot be feasibly reviewed for its impact on the property, it is not required to be reviewed.

7.1.5 Alternatives to Standard Sources—Alternative sources may be used instead of standard sources if they are of similar or better reliability and detail, or if a standard source is not reasonably ascertainable.

7.1.6 Coordination—If records are not reasonably ascertainable from standard sources or alternative sources, the environmental professional shall attempt to obtain the requested information by other means specified in this practice such as questions posed to the current owner or occupant(s) of the property or appropriate persons available at the source at the time of the request.

7.2.2 Additional Environmental Record Sources: State or Local—One or more additional state sources or local sources of environmental records may be checked, in the discretion of the



environmental professional, to enhance and supplement federal and state sources identified above. Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are generally obtained, pursuant to local good commercial or customary practice, in initial environmental site assessments in the type of commercial real estate transaction involved. To the extent additional state sources or local sources are used to supplement the same record types listed above, approximate minimum search distances should not be less than those specified above (adjusted as provided in 7.2.1.1 and 7.1.2.1). Some types of records and sources that may be useful include:

#### Types of Local Records

- Brownfield Sites
- Lists of Landfill/Solid Waste Disposal Sites
- Lists of Hazardous Waste/Contaminated Sites
- Lists of Registered Underground Storage Tanks
- Local Land Records (for activity and use limitations)
- Records of Emergency Release Reports (SARA § 304)
- Records of Contaminated Public Wells

#### Local Sources

- Department of Health/Environmental Division
- Fire Department
- Planning Department
- Building Permit/Inspection Department
- Local/Regional Pollution Control Agency
- Local/Regional Water Quality Agency
- Local Electric Utility Companies (for records relating to PCBs)

7.2.3 Physical Setting Sources-A current USGS 7.5 Minute Topographic Map (or equivalent) showing the area on which the property is located shall be reviewed, provided it is reasonably ascertainable. It is the only standard physical setting source and the only physical setting source that is required to be obtained (and only if it is reasonably ascertainable). One or more additional physical setting sources may be obtained in the discretion of the environmental professional.. Because such sources provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a site, discretionary physical setting sources shall

be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to the property or from or within the property into the groundwater or soil and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice in initial environmental site assessments in the type of commercial real estate transaction involved, in order to assess the impact of such migration on recognized environmental conditions in connection with the property.

#### Mandatory Standard Physical Setting Source

USGS-Current 7.5 Minute Topographic Map (or equivalent)

#### Discretionary and Non-Standard Physical Setting Sources

USGS and/or State Geological Survey-Groundwater Maps

USGS and/or State Geological Survey-Bedrock Geology Maps

USGS and/or State Geological Survey-Surficial Geology Maps

Soil Conservation Service-Soil Maps

Other Physical Setting Sources that are reasonably credible (as well as reasonably ascertainable)

[See also Criteria 3 for review of historical sources.]

X1.2.4 The statute then states at § 9601(35)(B) (emphasis added):

"To establish that the defendant had no reason to know, as provided [above], the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability... .

[T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect

such contamination by appropriate inspection."

X1.3.2.3 While the statute does not specifically distinguish certain types of properties and uses from others, or certain types of parties from others, it does list certain factors courts should consider in determining whether one's inquiry under the circumstances is appropriate. The statute, as explained in X1.2, requires a court to consider a party's specialized knowledge or experience. The statute further mandates a court to consider what is "reasonably ascertainable information about the property," what contamination is obviously present, and the party's "ability to detect such contamination." The very use of terms such as "appropriate" and "reasonably," and the use of "specialized knowledge and experience" and "ability" in conjunction with the specific person attempting to utilize the defense signifies that Congress did not intend the appropriateness of the inquiry be judged by a bright line standard. If it so intended, Congress would have stated, but did not, that the same inquiry should be made in every case.

X1.3.2.4 What is reasonable and obvious to one party may not be so to other parties, and ability, by necessity, varies among all parties. The statute, therefore, recognizes that different properties and parties must be treated differently. That is, different parties may conduct different levels of inquiry appropriate to their circumstances.

## **ASTM 1527-00 (Phase I Environmental Site Assessment Process)**

5.2.1 *Reasonably Ascertainable—Environmental liens or activity and use limitations* that are unrecorded or are recorded any place other than *recorded land title records* are not considered to be in *recorded land title records* that are *reasonably ascertainable*. *Recorded land title records* need not be checked if they otherwise do not meet the definition of the term *reasonably ascertainable*.

7.1.4 *Reasonably Ascertainable/Standard Sources*—Availability of record information varies from information source to information source, including governmental jurisdiction. The *user* or *environmental professional* is not obligated to identify, obtain, or review every possible record that might exist with respect to a *property*. Instead, this practice identifies record information that shall be reviewed from standard sources, and the *user* or *environmental professional* is required to review only record information that is reasonably ascertainable from those standard sources. Record information that is *reasonably ascertainable* means (1)

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information that is publicly available, (2) information that is obtainable from its source within reasonable time and cost constraints, and (3) information is practically reviewable. [NOTE: This is also covered under Record Reviews].

[Note: Environmental information addressed pursuant to s. 7.2 provides the caveat the such information should be included if it is reasonably ascertainable. See Additional Environmental Record Sources, s. 7.2.2; Physical Setting Sources, s. 7.2.3.]

[Note: Historical information addressed pursuant to s. 7.3 provides the caveat that such information should be included if it is reasonably ascertainable. See Uses of property, 7.3.2; Uses of Properties in Surrounding Area, 7.3.3]

## **ASTM E1528-00 (Transaction Screening Process)**

5.1 Process—The transaction screen process consists of asking questions contained within the transaction screen questionnaire of owners and occupants of the property, observing site conditions at the property with direction provided by the transaction screen questionnaire, and, to the extent reasonably ascertainable, conducting limited research regarding certain government records and certain standard historical sources. The questions asked of owners are the same questions as those asked of occupants.

5.5.1 While the person conducting the transaction screen process has an obligation to ask the questions set forth in the transaction screen questionnaire, in many instances the parties to whom the questions are addressed will have no obligation to answer them. The user is only required to obtain information to the extent it is reasonably ascertainable.

8.16.1.1 Copies of reasonably ascertainable prior environmental site assessments of the property or any portion thereof should be obtained and examined to determine whether further action or inquiry is necessary in connection with any environmental problems raised by a prior environmental site assessment. each new installation.

10.3.1.1 The focus of this research is to determine whether any past use of the property would suggest the presence of contamination associated with the property. If reasonably ascertainable, one of two sources of data should be examined, in the following order of

preference: fire insurance maps showing the property or the local fire department serving the property. However, if the user has first-hand knowledge of the use of the property from the present back to 1940 or if the preparer interviewed disinterested people with such knowledge, then the preparer may eliminate this research and answer “not applicable” to the questions above. In addition, the preparer may eliminate this research and answer “not applicable” to the question if the preparer is unable to find appropriate sources of fire insurance maps or individuals at the local fire department for the property with knowledge of the property’s past use, after making a reasonable effort in good faith to locate such information or if the information is otherwise not reasonably ascertainable.

X1.2.4 The statute then states at § 9601(35)(B)(emphasis added): “To establish that the defendant had no reason to know, as provided (above), the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability... . [T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection.”

X1.3.2.3 While the statute does not specifically distinguish certain types of properties and uses from others, or certain types of parties from others, it does list certain factors courts should consider in determining whether one’s inquiry under the circumstances is appropriate. The statute, as explained above in X1.2 requires a court to consider a party’s specialized knowledge or experience. The statute further mandates a court to consider what is “reasonably ascertainable information about the property,” what contamination is obviously present, and the party’s “ability to detect such contamination”. The very use of terms such as “appropriate” and “reasonably”, and the use of “specialized knowledge and experience” and “ability” in conjunction with the specific person attempting to utilize the defense signifies that Congress did not intend the appropriateness of the inquiry be judged by a bright line standard. If it is so intended, Congress would have stated, but did not, that the same inquiry should be made in every case.

X1.3.2.4 What is reasonable and obvious to one party may not be so to other parties, and ability, by necessity, varies among all parties. The statute, therefore, recognizes that different properties and parties must be treated differently. That is, different parties may conduct

different levels of inquiry appropriate to their circumstances.

## **ASTM 2247-02 (Phase I for Forestland or Rural Property)**

5.2.1. *Reasonably Ascertainable*—Environmental liens that are unrecorded or are recorded any place other than *recorded land title records* are not considered to be in *recorded land title records* that are *reasonably ascertainable*. *Recorded land title records* need not be checked if they otherwise do not meet the definition of the term *reasonably ascertainable*.

5.2.2. *Recorded Land Title Records*—The term *recorded land title records* means records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the *property* recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the property is located. (Often such records are kept by a municipal or county recorder or clerk.) The *user* should provide these records when they are in its possession and are *reasonably ascertainable*.

7.1.4 *Reasonably Ascertainable/Standard Sources*—Availability of record information varies from information source to information source, including governmental jurisdiction. The *user* or *environmental professional* is not obligated to identify, obtain, or review every possible record that might exist with respect to a *property*. Instead, this practice identifies record information that shall be reviewed from standard sources, and the *user* or *environmental professional* is required to review only record information that is reasonably ascertainable from those standard sources. Record information that is *reasonably ascertainable* means (1) information that is publicly available, (2) information that is obtainable from its source within reasonable time and cost constraints, and (3) information is practically reviewable. [NOTE: This is also covered under Record Reviews].

[Note: Environmental information addressed pursuant to s. 7.2 provides the caveat the such information should be included if it is reasonably ascertainable. See Additional Environmental Record Sources, s. 7.2.2; Physical Setting Sources, s. 7.2.3.]

[Note: Historical information addressed pursuant to s. 7.3 provides the caveat that such information should be included if it is reasonably ascertainable. See Uses of property, 7.3.2; Uses of Properties in Surrounding Area, 7.3.3]

9.5.2.4 *Occupant Identification*—The report shall identify the *occupants* interviewed, as *reasonably ascertainable*, their interest in the subject *property*, title, their relationship to the *property*, and the duration of their occupancy.

## **Standard Guide for Brownfield Redevelopment**

Not applicable.

## **Guidance for Performing Preliminary Assessments Under CERCLA EPA/540/G-91/013 September 1991**

Not applicable.

## **Generic Brownfields Quality Assurance Project Plan U.S. EPA Region 2 Revision No. 2 Revision Date: May 2000 Final**

Not applicable.

## **Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup**

Not applicable.

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**Criterion X. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.**

**SBLRBRA §223(B)(ii),(iii)(VII)**

(ii) STANDARDS AND PRACTICES— Not later than 2 years after the date of the enactment of the Brownfields Revitalization and Environmental Restoration Act of 2001, the Administrator shall by regulation establish standards and practices for the purpose of satisfying the requirement to carry out all appropriate inquiries under clause (i).

(iii) CRITERIA— In promulgating regulations that establish the standards and practices referred to in clause (ii), the Administrator shall include each of the following:

(X) The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.

**SBLRBRA §223(B)(ii),(iv)(I)**

(iv) INTERIM STANDARDS AND PRACTICES-

(I) PROPERTY PURCHASED BEFORE MAY 31, 1997- With respect to property purchased before May 31, 1997, in making a determination with respect to a defendant described in clause (i), a court shall take into account--

(dd) the obviousness of the presence or likely presence of contamination at the property;

**Florida**

**Fla. Stat. Section 376.308(1)(c)  
Liabilities and Defenses of Facilities**

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In the case of a discharge of petroleum, petroleum produces, or dry cleaning solvents, the owner of the facility, the dry cleaning facility, or the wholesale supply facility, unless the owner can establish that he or she acquired the title to property contaminated by the activities of a previous owner or operator or other third party, that he or she did not cause or contribute to the discharge, and that he or she did not know of the polluting condition at the time the owner acquired title. If the owner acquired title subsequent to July 1, 1992, or, in the case of a dry cleaning facility or wholesale supply facility, subsequent to July 1, 1994, he or she must also establish by a preponderance of the evidence that he or she undertook, at the time of acquisition, all appropriate inquiry into the previous ownership and use of the property consistent with good commercial or customary practice in an effort to minimize liability. The court or hearing officer shall take into account . . . the obviousness of the presence or likely presence of contamination at the property.

## **Illinois**

### **415 ILCS 5/**

### **415 ILCS 5/5/22.2(j)(6)(B)**

(B) To establish the defendant had no reason to know, as provided in clause (i) of subparagraph (A) of this paragraph, the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability. For purposes of the preceding sentence, the court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection.

## **Massachusetts**

Not applicable.

## Michigan

Not applicable.

## New Jersey

### **NJSA §§58:10-23.11b, .11f & .11g; NJAC 7:26E (“Technical Rule”)**

Not applicable.

## Pennsylvania

Not Applicable.

### **ASTM E1527-97 (Phase I Environmental Site Assessment)**

X1.2.4 The statute then states at § 9601(35)(B) (emphasis added):

"To establish that the defendant had no reason to know, as provided [above], the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability... .

[T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection."

### **ASTM 1527-00 (Phase I Environmental Site Assessment Process)**

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[See 8. Site Reconnaissance for requirements related to the site visit and visually and/or physically observed conditions.]

X1.2.4 The statute then states at § 9601(35)(B) (emphasis added):

"To establish that the defendant had no reason to know, as provided [above], the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability... .

[T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection."

### **ASTM E1528-00 (Transaction Screening Process)**

X1.2.4 The statute then states at § 9601(35)(B)(emphasis added):

“To establish that the defendant had no reason to know, as provided (above), the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability... . [T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection.”

### **ASTM 2247-02 (Phase I for Forestland or Rural Property)**

[See 8. Site Reconnaissance for requirements related to the site visit and visually and/or physically observed conditions.]

X1.2.4 The statute then states at § 9601(35)(B) (emphasis added):

"To establish that the defendant had no reason to know, as provided [above], the defendant must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability... .

[T]he court shall take into account any specialized knowledge or experience on the part of the defendant, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property, and the ability to detect such contamination by appropriate inspection."

### **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

Not applicable.

### **Guidance for Performing Preliminary Assessments Under CERCLA EPA/540/G-91/013 September 1991**

Not applicable.

### **Generic Brownfields Quality Assurance Project Plan U.S. EPA Region 2 Revision No. 2 Revision Date: May 2000 Final**

Not applicable.

### **Road Map to Understanding Innovative Technology Options for**

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## **Brownfields Investigation and Cleanup**

Not applicable.

## **Provisions That Do Not Apply To Any Single Criterion, But May Be of Interest:**

### **Community Participation Provisions**

#### **SBLRBRA § 211(b)(3)(C)(ii)**

SEC. 211. Brownfields Revitalization Funding

(b) Brownfields Revitalization Funding— Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9604) is amended by adding at the end the following:

(3) Grants and Loans for Brownfield Remediation-

(C) Considerations—In determining whether a grant under subparagraph (A)(ii) or (B)(ii) is warranted, the President or the eligible entity, as the case may be, shall take into consideration--

(ii) the extent to which a grant will meet the needs of a community that has an inability to draw on other sources of funding for environmental remediation and subsequent redevelopment of the area in which a brownfield site is located because of the small population or low income of the community;

#### **SBLRBRA § 211(b)(5)(C)(ix)**

(5) Grant Applications-

(C) Ranking Criteria—The Administrator shall establish a system for ranking grant applications received under this paragraph that includes the following criteria:

(ix) The extent to which the grant provides for involvement of the local community in the process of making decisions relating to cleanup and future use of a brownfield site.

## **SBLRBRA § 211(b)(6)(A)**

### **Community Participation**

#### **(6) Implementation of Brownfields Programs-**

(A) Establishment of Program—The Administrator may provide, or fund eligible entities or nonprofit organizations to provide, training, research, and technical assistance to individuals and organizations, as appropriate, to facilitate the inventory of brownfield sites, site assessments, remediation of brownfield sites, community involvement, or site preparation.

### **Florida**

#### **Fla. Stat. Section 1013.365(4)**

**[No provisions related to community, but Florida has a program specifically for schools.]**

A. Schools on contaminated site prohibited.--

#### **Section 1013.365 (4) DUTIES OF DISTRICT SCHOOL BOARD.**

Before taking title to real property upon which a K-12 school may be built or initiating action to locate a K-12 school on real property already owned by the school district, the district school board shall conduct appropriate due diligence including all appropriate inquiry into the previous ownership and use of the property consistent with good commercial or customary practice in an effort to determine the existence of any potential air, water, or soil contamination that may exist on or adjacent to the proposed K-12 school site. Any evidence of a discharge of pollutants or hazardous substances on or adjacent to a proposed K-12 school site shall prompt the district school board to conduct further investigation using at least a Phase II Environmental Audit, in accordance with standards established by the American Society for Testing and Materials (ASTM), that includes air, water, and soil sampling. If the results of the environmental audit confirm the presence of contaminants or pollution on or adjacent to the proposed K-12 school site at concentrations that pose a threat to human health or the environment, then the district school board shall conduct appropriate site rehabilitation in accordance with the provisions of subsection (5) before initiating K-12 school construction at

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the site.

## **Illinois**

### **415 ILCS 5/**

Not applicable.

## **New Jersey**

### **NJSA §§58:10-23.11b, .11f & .11g; NJAC 7:26E (“Technical Rule”)**

Not applicable.

### **ASTM E1527-97 (Phase I Environmental Site Assessment Process)**

Not applicable.

### **ASTM 1527-00 (Phase I Environmental Site Assessment Process)**

Not applicable.

### **ASTM E1528-00 (Transaction Screening Process)**

Not applicable.

### **ASTM 2247-02 (Phase I for Forestland or Rural Property)**



Not applicable.

### **ASTM E1984 (Standard Guide for Brownfield Redevelopment)**

See entire document for discussion of Stakeholders and Community Participation.

### **Guidance for Performing Preliminary Assessments Under CERCLA EPA/540/G-91/013 September 1991**

Not applicable.

### **Generic Brownfields Quality Assurance Project Plan U.S. EPA Region 2 Revision No. 2 Revision Date: May 2000 Final**

Not applicable.

### **Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup**

#### **Background (p. 2)**

Preparing brownfields sites for productive reuse requires the integration of many elements—financial issues, community involvement, liability considerations, environmental assessment and cleanup, regulatory requirements, and more—as well as coordination among many groups of stakeholders. The assessment and cleanup of a site must be carried out in a way that integrates all those factors into the overall redevelopment process. In addition, the cleanup strategy will vary from site to site. At some sites, cleanup will be completed before the

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property is transferred to new owners. At other sites, cleanup may take place simultaneously with construction and redevelopment activities. Regardless of when and how cleanup is accomplished, the challenge to any brownfields program is to clean up sites in accordance with redevelopment goals. Such goals may include cost-effectiveness, timeliness, and avoidance of adverse effects on structures on the site and on neighboring communities, as well as redevelopment of the land in a way that benefits communities and local economies.

### **How to Submit Comments (p. 5)**

EPA invites comments from the members of the brownfields community to help ensure that any future versions of the Road Map meet their needs.

Please submit comments to:

Carlos Pachon

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Phone: (703) 603-9904

### **Community Involvement (p. 10)**

It is important that brownfields decision makers encourage acceptance of redevelopment plans, and cleanup alternatives by involving members of the community early in the decision-making process through community meetings, newsletters, or other outreach activities. For an individual site, the community should be informed about how the use of a proposed technology might affect redevelopment plans or the adjacent neighborhood. For example, the planting of trees for the use of phytoremediation may create aesthetic or visual improvements; on the other hand, the use of phytoremediation may bring about issues related to site security or long-term maintenance that could affect access to the site.

EPA can assist members of the brownfields community by directing its members to appropriate resources and providing opportunities to network and participate in the sharing of information. A number of Internet sites, databases, newsletters, and reports provide

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opportunities for brownfields stakeholders to network with other stakeholders to identify information about cleanup and technology options. As noted in the preceding section, EPA's Brownfields Technology Support Center is a valuable new resource for brownfields decision makers (see page 11 for more information).

## **Site Assessment (pp. 17-19)**

### ***What Do We Need to Know?***

6. What are the special needs and concerns of the community? How can community involvement be encouraged? How will community views be solicited?
7. What environmental conditions will the community find acceptable? What environmental standards should be considered to ensure that community stakeholders are satisfied with the outcome of the cleanup, in light of the identified and proposed reuse?

### ***How Do We Find the Answers?***

- Determine how to incorporate and encourage community participation:
- Identify regulatory requirements for public involvement (see page 13 in the section, Before You Begin, for a description of community services provided by HSRC)
- Assess community interest in the project
- Identify community-based organizations
- Review any community plans for redevelopment

## **Site Investigation (pp. 27-29)**

### ***What Do We Need to Know?***

Factors that should be considered during the site investigation, if there is evidence of potential or actual contamination include:

4. What issues has the community raised that may affect the site investigation?

## ***How Do We Find the Answers?***

Educate members of the community about the site investigation process and actively involve them in decision making; consider risk communication techniques to facilitate those activities

### ***Keys to Technology Selection and Acceptance (p. 38)***

#### **2. Build Consensus**

Investing time, before the site work begins, in developing decisions that are acceptable to all decision makers will foster more efficient site activities and make successful cleanup more likely. Conversely, allowing work to begin at a site before a common understanding and acceptance of the decisions have been established increases the likelihood that the cleanup process will be inefficient, resulting in delays and inefficient use of time and money. Further, decision makers must understand that there is uncertainty in all scientific and technical decisions (see below for more information about uncertainty). Clearly defining and accepting uncertainty thresholds before making decisions about the site remedy will build consensus. Decisions also should be made in the context of applicable regulatory requirements, political considerations, budget available for the project, and time constraints.

#### **3. Understand the Technology**

A thorough knowledge of a technology's capabilities and limitations is necessary to secure its acceptance. All technologies are subject to limitations in performance. Planning for the strengths and weaknesses of a technology maximizes understanding of its benefits and its acceptance. "Technology approvers," typically regulators, community groups, and financial service providers are likely to be more receptive of a new approach if the proposer provides a clear explanation of the rationale for its use and demonstrates confidence in its applicability to specific site conditions and needs. This latter point underscores the importance of carefully selecting an experienced, multidimensional team of professionals who have the expertise necessary to plan, present, and implement the chosen approach.

#### **4. Allow Flexibility**

Streamlining site activities, whether site assessment, site investigation, removal, treatment, or monitoring, requires a flexible approach. Site-specific conditions, including various physical conditions, contamination issues, stakeholder needs, uses of the site, and supporting decisions, require that all decision makers understand the need for flexibility. Although presumptive

remedies, standard methods, applications at other sites, and program guidance can serve as the basis for designing a site-specific cleanup plan and can help decision makers avoid “starting from scratch” at each site, decision makers should be wary of depending too heavily on “boilerplate language” and prescriptive methodologies, as well as standard operating procedures and “accepted” methods. While such tools provide excellent starting points, they lack the flexibility to meet site-specific goals. To ensure an efficient and effective cleanup, the actual technology approach, whether established or innovative, must focus on decisions specific to the site.

### **Cleanup Options (pp. 41-42)**

#### ***What Do We Need to Know?***

4. How can the community participate in the review and selection of cleanup options? Are the options acceptable in light of community concerns about protection during cleanup and reuse of the site? What environmental standards should be considered to ensure that community stakeholders are satisfied with the outcome and process of cleanup, given the intended reuse?

#### ***How Do We Find the Answers?***

Educate members of the community about the site cleanup selection process and actively involve them in decision making.

### **Cleanup Design and Implementation (pp. 63-64)**

#### ***What Do We Need to Know?***

3. How best can the community participate in the design and implementation of the cleanup plan?

#### ***How Do We Find the Answers?***

Develop conceptual plans for cleanup and subsequent monitoring that incorporate technology options and consider the effect of any cleanup activities on the proposed reuse of the property and the schedule for project design or construction:

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- Develop or review the schedule for completion of the project
- Obtain a final amount for the funds available for project development
- Coordinate the renovation and construction of infrastructure with cleanup activities
- Coordinate activities with developers, financiers, construction firms, and members of the local community

## Miscellaneous Provisions of Interest

### Michigan

#### *Natural Resources and Environmental Protection Act*

Act 451, Section 324.20126: “(3) Notwithstanding subsection (1), the following persons are not liable under this part unless the person is responsible for an activity causing a release at the facility: . . .

(h) A person who did not know and had no reason to know that the property was a facility. *To establish that the person did not know and did not have a reason to know that the property was a facility, the person shall have undertaken at the time of acquisition all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice. A determination of liability under this section shall take into account any specialized knowledge or experience on the part of the person, the relationship of the purchase price to the value of the property if uncontaminated by a hazardous substance, commonly known or reasonable ascertainable information about the property, the obviousness of the presence or likely presence of a release or threat of release at the property, and the ability to detect a release or threat of release by appropriate inspection.*” (Italics added.)

#### *Part 201 Rules*

Rule 907: “(1) This rule sets forth the minimal technical standards for each category of BEA [Baseline Environmental Assessment]. All elements from the minimal technical standards for

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the appropriate category of BEA shall be included in a BEA, except as provided in R 299.5909. In addition the specific elements required for each category of a BEA, as set forth in subrules (2), (3), (4), and (5) of this rule, a submitter shall conduct all appropriate inquiry into the previous uses of the property, including a search of pertinent government records, consistent with good commercial or customary practice and describe the results of the inquiry in the BEA.”

## **Pennsylvania**

### ***Hazardous Sites Cleanup Act***

Section 710: “(b) Exceptions.

(1) An owner of real property is not responsible for the release or threatened release of a hazardous substance from a site in or on the property when the owner demonstrates to the department that all of the following are true:

(I) The real property on which the site concerned is located was acquired by the owner after the disposal or placement of a hazardous substance on, in or at the site.

(ii) The owner has exercised due care with respect to the hazardous substances concerned, taking into consideration the characteristics of such hazardous substances, in light of all relevant facts and circumstances.

(iii) The owner took precautions against foreseeable acts or omissions of any third party and the consequences that could foreseeably result from such acts or omissions.

(iv) The owner obtained actual knowledge of the release or threatened release of a hazardous substance at the site when the owner owned the real property, and the owner did not subsequently transfer ownership of the property to another person without disclosing such knowledge.

(v) The owner has not, by act or omission, caused or contributed to the release or threatened release of a hazardous substance which is the subject of the response action relating to the site.

(vi) The owner meets one of these requirements:

*(A) At the time the owner acquired the site, the owner did not know, and had no reason to know, that a hazardous substance which is the subject of the release or threatened release was disposed of on, in or at the site. For purposes of this subparagraph, the owner must have undertaken, at the time of acquisition, all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to*

*minimize liability. The department shall take into account specialized knowledge or experience on the part of the owner, the relationship of the purchase price to the value of the property if uncontaminated, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of contamination at the property and the ability to detect the contamination by appropriate inspection.” (Italics added.)*

**The following information should be noted:**

- Massachusetts and Michigan have numerous provisions related to “innocent landowners,” but Pennsylvania has very few because its law mainly addresses the liability of landowners who knowingly purchase contaminated sites.
- Florida has a special statute requiring appropriate inquiry for building schools. This is listed that in the section on “Other Provisions” since it is limited in scope. It could also be listed under all the criteria, but uses general language and refers to ASTM standards for Phase II, therefore, it is included in this section.
- The detail from all of the ASTM standards were not included in cases in which they were similar. Bracketed notes are used to explain that, for example, more detail was included in specific sections of ASTM 1527-00 when that section was quoted in ASTM 1527-97.