Designation: E 2247 – 02

Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property[1]

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1. Scope

1.1 *Purpose*—The purpose of this practice is to define good commercial and customary practice in the United States of America for conducting a *Phase I environmental site assessment*[2] of a *property* 120 acres or greater of *forestland* or *rural property* or with a developed use of only *managed forestland* and/or agriculture with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and *petroleum products*. The property need not be adjoining; however, the separate areas should have substantially the same general land use and be part of the same transaction. The property may contain isolated areas of non-*forestland* and non-*rural property*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner defense* to CERCLA liability; that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined in 42 USC § 9601(35)(B). (See Appendix X1 for an outline of CERCLA's liability and defense provisions).

1.1.1 *Recognized Environmental Conditions*—In defining a standard of good commercial and customary practice for conducting an *environmental site assessment* of a parcel of *property*, the goal of the processes established by this practice is to identify *recognized environmental conditions*. The term *recognized environmental conditions* means the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into *structures* on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The scope of the work in Section 12 (Non-Scope Considerations) also applies to conditions that would affect the quality of water and threatened and endangered species on a *property* (as defined in the Clean Water Act and the Endangered Species Act specific to non-point source BMP deviations and the taking of threatened and endangered species). The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment or that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.1.2 *Three Related Practices*—This practice is closely related to Practices E 1527 and E 1528. Both E 1527 and E 1528 are *environmental site assessments* for *commercial real estate* (see 4.3). This practice also shares similar protocols with Appendix guidance documents X3 and X4: Phase I Environmental Site Assessment Guides for Clean Water Act Non-Point Source Considerations and Threatened and Endangered Species Considerations on *Forestland* or *Rural Property*.

1.1.3 *Petroleum Products—Petroleum products* are included within the scope of this practice because they are of concern with respect to many parcels of *forestland* or *rural property* and current custom and usage is to include an inquiry into the presence of *petroleum products* when doing an *environmental site assessment* of *forestland* or *rural property*. Inclusion of *petroleum products* within the scope of this practice is not based upon the applicability, if any, of CERCLA to *petroleum products*. (See Appendix X1 for discussion of *petroleum exclusion* to CERCLA liability.)

1.1.4 *CERCLA Requirements Other Than Appropriate Inquiry*—This practice does not address whether requirements in addition to *appropriate inquiry* have been met in order to qualify for CERCLA's *innocent landowner defense* (for example, the duties specified in 42 USC § 9607(b)(3)(a) and (b) and cited in Appendix X1).

1.1.5 *Other Federal, State, and Local Environmental Laws*—This practice does not address requirements of any state or local laws or of any federal laws other than the *appropriate inquiry* provisions of CERCLA's *innocent landowner defense*. *Users* are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. *Users* should also be

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[2] All definitions, descriptions of terms, and acronyms are defined in Section 3. Whenever terms defined in 3.2 or described in 3.3 are used in this practice, they are in *italics*.

aware that there are likely to be other legal obligations with regard to *hazardous substances* or *petroleum products* discovered on a *property* that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance.

1.1.6 *Documentation*—The scope of this practice includes research and reporting requirements that support the *user's* ability to qualify for the *innocent landowner defense*. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice must be provided in the written report (refer to 7.1.8 and 11.2).

1.2 *Objectives—Objectives* guiding the development of this practice are (*1*) to synthesize and put in writing good commercial and customary practice for *environmental site assessments* for *forestland* or *rural property*, (*2*) to facilitate high quality, standardized *environmental site assessments*, (*3*) to ensure that the standard of *appropriate inquiry* is practical and reasonable, and (*4*) to clarify an industry standard for *appropriate inquiry* in an effort to guide legal interpretation of CERCLA's *innocent landowner defense*.

1.3 *Considerations Beyond Scope*—The use of this practice is strictly limited to the scope set forth in this section. Section 12 of this practice identifies, for informational purposes, certain environmental conditions (for example, threatened and endangered species and non-point source considerations) that may exist on a *forestland* or *rural property* that are beyond the scope of this practice but may warrant discussion between the *environmental professional* and the *user* about a *forestland* or *rural property* transaction.

1.4 *Organization of This Practice*—This practice has several parts and two appendixes. Section 1 concerns the Scope. Section 2 relates to Referenced Documents. Section 3, Terminology, contains definitions of terms not unique to this practice, descriptions of terms unique to this practice, and acronyms. Section 4 describes the Significance and Use of this practice. Section 5 describes *User's* Responsibilities. Sections 6-11 contain the main body of the *Phase I Environmental Site Assessment*, including evaluation and report preparation. Section 12 provides additional information regarding non-scope considerations (see 1.3). The appendixes are included for information and are not part of the procedures prescribed in this practice. Appendix X1 explains the liability and defense provisions of CERCLA that will assist the *user* in understanding the *user's* responsibilities under CERCLA; it also contains other important information regarding CERCLA and this practice. Appendix X2 provides a recommended table of contents and report format for a *Phase I Environmental Site Assessment Report*. Guidance Documents X1 and X2 provide guidance to address the evaluation of non-point source and threatened and endangered species considerations, respectively.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

1.6 *This practice offers a set of instructions for performing one or more specific operations and should be supplemented by education, experience, and professional judgment. Not all aspects of this practice may be applicable in all circumstances. This ASTM standard practice does not necessarily represent the standard of care by which the adequacy of a given professional service must be judged, nor should this document be applied without consideration of a project's unique aspects. The word "standard" in the title means only that the document has been approved through the ASTM consensus process.*

2. Referenced Documents

2.1 *ASTM Standards:*

E 1527 Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process[3]

E 1528 Practice for Environmental Site Assessments: Transaction Screen Process[3]

3. Terminology

3.1 This section provides definitions, descriptions of terms, and a list of acronyms for many of the words used in this practice. The terms are an integral part of this practice and are critical to an understanding of the practice and its use.

3.2 *Definitions:*

3.2.1 *apiary*—a place where bees are kept; a collection of hives or colony of bees.

3.2.2 *Best Management Practices (BMPs)*—minimum standards necessary for protecting and maintaining a particular State's water quality, as well as certain wildlife habitat values, during forestry activities. (See Section 12, non-scope considerations.)

3.2.3 *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)*—the list of sites compiled by the United States Environmental Protection Agency (EPA) that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List.

3.2.4 *construction debris*—concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to *property*.

3.2.5 *contaminated public wells*—public wells used for drinking water that have been designated by a government entity as contaminated by toxic substances (for example, chlorinated solvents), or as having water unsafe to drink without treatment.

3.2.6 *CORRACTS list*—list of hazardous waste treatment, storage, or disposal facilities and other RCRIS facilities (due to past interim status or storage of hazardous waste beyond 90 days) who have been notified by the EPA to undertake corrective action under the Resource Conservation and Recovery Act (RCRA).

3.2.7 *demolition debris*—concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to *property*.

3.2.8 *drum*—a container (typically, but not necessarily, holding 55 gal [208 L] of liquid) that may be used to store *hazardous substances* or *petroleum products*.

[3] *Annual Book of ASTM Standards*, Vol 11.04.

3.2.9 *dry wells*—underground areas where soil has been removed and typically replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional), and wastewater disposal.

3.2.10 *dwelling*—structure or portion thereof used for residential habitation.

3.2.11 *environmental lien*—a charge, security, or encumbrance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*, including, but not limited to, liens imposed pursuant to CERCLA 42 USC § 9607(1) and similar state or local laws.

3.2.12 *Emergency Response Notification System (ERNS) list*—EPA's list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 Code of Federal Regulations (CFR) Parts 302 and 355.

3.2.13 *Federal Register (FR)*—publication of the United States government published daily (except for federal holidays and weekends) containing all proposed and final regulations and some other activities of the federal government. When regulations become final, they are included in the CFR, as well as published in the *Federal Register*.

3.2.14 *hazardous substance*—a substance defined as a *hazardous substance* pursuant to CERCLA 42 USC § 9601(14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 USC § 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a *hazardous substance* under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)" See Appendix X1.

3.2.15 *hazardous waste*—any *hazardous waste* having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress). The Solid Waste Disposal Act of 1980 amended RCRA. RCRA defines a *hazardous waste*, in 42 USC § 6903, as: "A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

3.2.16 *landfill*—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *solid waste disposal site* and is also known as a garbage dump, trash dump, or similar term.

3.2.17 *lessee*—individual or entity which does not own the *property* but has a written lease or other agreement to use the *property*.

3.2.18 *material safety data sheet (MSDS)*—written or printed material concerning a *hazardous substance* which is prepared by chemical manufacturers, importers, and employers for hazardous chemicals pursuant to OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

3.2.19 *National Contingency Plan (NCP)*—the National Oil and Hazardous Substances Pollution Contingency Plan, found at 40 CFR § 300; that is, the EPA's blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

3.2.20 *National Priorities List (NPL)*—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.

3.2.21 *Natural Areas Inventory (NAI)*—list compiled by various state agencies that shows records of reported observations of threatened and endangered species.

3.2.22 *occupant*—a person or entity who is using the *property* or a portion of the *property* and includes, but is not limited to, scattered residential tenancies, agricultural and silvicultural tenancies, small-scale commercial/industrial tenancies, and recreational tenancies such as hunting clubs.

3.2.23 *owner*—generally the fee owner of record of the *property*.

3.2.24 *petroleum exclusion*—the exclusion from CERCLA liability provided in 42 USC § 9601(14), as interpreted by the courts and EPA: "The term (*hazardous substance*) does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a *hazardous substance* under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

3.2.25 *petroleum products*—those substances included within the meaning of the *petroleum exclusion* to CERCLA, 42 USC § 9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a *hazardous substance* under Subparagraphs (A) through (F) of 42 USC § 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and

such synthetic gas). The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil, pursuant to *Standard Definitions of Petroleum Statistics*.[4]

3.2.26 *Phase I Environmental Site Assessment*—the process described in this practice.

3.2.27 *pits, ponds, or lagoons*—man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

3.2.28 *property*—the real *property* that is the subject of the *environmental site assessment* described in this practice. Real *property* includes, but is not limited to, buildings and other fixtures, and improvements located on the *property* and affixed to the land.

3.2.29 *property tax files*—the files kept for *property* tax purposes by the local jurisdiction where the *property* is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is *reasonably ascertainable* and pertaining to the *property*. See 7.3.4.3.

3.2.30 *RCRA generators*—those persons or entities that generate hazardous wastes, as defined and regulated by RCRA.

3.2.31 *RCRA generators list*—list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

3.2.32 *RCRA TSD facilities*—those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

3.2.33 *RCRA TSD facilities list*—list kept by EPA of those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

3.2.34 *recorded land title records*—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.) Such records may be obtained from title companies or directly from the local government agency. Information about the title to the *property* that is recorded in a U.S. district court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located, are not considered part of *recorded land title records*.

3.2.35 *records of emergency release notifications (SARA § 304)*—Section 304 of EPCRA or Title III of SARA requires operators of facilities to notify their local emergency planning committee (as defined in EPCRA) and state emergency response commission (as defined in EPCRA) of any release beyond the facility's boundary of any reportable quantity of any extremely *hazardous substance*. Often the local fire department is the local emergency planning committee. Records of such notifications are "Records of Emergency Release Notifications" (SARA § 304).

3.2.36 *report*—the written record prepared by the *environmental professional* and constituting part of a "*Phase I Environmental Site Assessment*," as required by this practice.

3.2.37 *silvicultural*—following generally accepted forest management principles for tending, harvesting, and reproducing forests and crops.

3.2.38 *solid waste disposal site*—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *landfill* and is also known as a garbage dump, trash dump, or similar term.

3.2.39 *solvent*—a chemical compound that is capable of dissolving another substance and may itself be a *hazardous substance*, used in a number of manufacturing/industrial processes including, but not limited to, the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in metal fabricating industries.

3.2.40 *state registered USTs list*—state lists of underground storage tanks required to be registered under Subtitle I, Section 9002 of RCRA.

3.2.41 *sump*—a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

3.2.42 *TSD facility*—treatment, storage, or disposal facility (see *RCRA TSD facilities*).

3.2.43 *underground storage tank (UST)*—any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10 % or more beneath the surface of the ground.

3.2.44 *USGS 7.5 Minute Topographic Map*—the map (if any) available from or produced by the United States Geological Survey, entitled "USGS 7.5 Minute Topographic Map," and showing the *property*. See 7.3.4.2.

3.2.45 *wastewater*—water that (*1*) is or has been used in an industrial or manufacturing process, (*2*) conveys or has conveyed sewage, or (*3*) is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as storm water flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

3.2.46 *zoning/land use records*—those records of the local government in which the *property* is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the planning department of a municipality or county. See 7.3.4.3(*6*).

[4] *Standard Definitions of Petroleum Statistics*, American Petroleum Institute, Fourth Edition, 1988.

3.3 *Definitions of Terms Specific to This Standard:*

3.3.1 *actual knowledge*—the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge; that is, knowledge imputed to an individual or entity.

3.3.2 *adjoining properties*—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.

3.3.3 *aerial photographs*—photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the *property*. *Aerial photographs* are often available from government agencies or private collections unique to a local area. See 7.3.4.1 of this practice.

3.3.4 *appropriate inquiry*—that inquiry constituting "all *appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined in CERCLA, 42 USC § 9601(35)(B), that will give a party to a *forestland* or *rural property* transaction the *innocent landowner defense* to CERCLA liability (42 USC § 9601(A) and (B) and § 9607(b)(3)), assuming compliance with other elements of the defense. See Appendix X1.

3.3.5 *approximate minimum search distance*—the area for which records must be obtained and reviewed pursuant to Section 7 subject to the limitations provided in that section. This may include areas outside the *property* and shall be measured from the nearest *property* boundary. This term is used in lieu of radius to include irregularly shaped properties.

3.3.6 *building department records*—those records of the local government in which the *property* is located indicating permission of the local government to construct, alter, or demolish improvements on the *property*. Often *building department records* are located in the building department of a municipality or county. See 7.3.4.3(*3*).

3.3.7 *commercial real estate*—any real *property* except a dwelling or *property* with no more than four dwelling units exclusively for residential use (except that a dwelling or *property* with no more than four dwelling units exclusively for residential use is included in this term when it has a commercial function, as in the building of such dwellings for profit). This term includes, but is not limited to, undeveloped real *property* and real *property* used for industrial, retail, office, agricultural, forestry, other commercial, medical, or educational purposes; *property* used for residential purposes that has more than four residential dwelling units; and *property* with no more than four dwelling units for residential use when it has a commercial function, as in the building of such dwellings for profit.

3.3.8 *commercial real estate transaction*—a transfer of title to or possession of real *property* or receipt of a security interest in real *property*, except that it does not include transfer of title to or possession of real *property* or the receipt of a security interest in real *property* with respect to an individual dwelling or building containing fewer than five dwelling units, nor does it include the purchase of a lot or lots to construct a dwelling for occupancy by a purchaser, but a commercial real estate transaction does include real *property* purchased or leased by persons or entities in the business of building or developing dwelling units.

3.3.9 *due diligence*—the process of inquiring into the environmental characteristics of a parcel of *forestland* or *rural property* or other conditions, usually in connection with a *real estate* transaction. The degree and kind of *due diligence* vary for different properties and differing purposes. See Appendix X1.

3.3.10 *endangered species*—any species as defined in the Federal Endangered Species Act (USC 42 guidance document for incorporation of Endangered Species Act considerations) ... "which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insect as determined by the Secretary to constitute a pest whose protection under the provisions of this Act (Endangered Species Act) would present an overwhelming and overriding risk to man." (See non-scope considerations).

3.3.11 *environmental audit*—the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe this practice, although an environmental audit may include an *environmental site assessment* or, if prior audits are available, may be part of an *environmental site assessment*. See Appendix X1.

3.3.12 *environmental professional*—a person possessing sufficient training and experience necessary to conduct a *site reconnaissance*, *interviews*, and other activities in accordance with this practice, and from the information generated by such activities, having the ability to develop opinions and conclusions regarding *recognized environmental conditions* in connection with the *property* in question. An individual's status as an *environmental professional* may be limited to the type of assessment to be performed or to specific segments of the assessment for which the professional is responsible. The person may be an independent contractor or an employee of the *user*.

3.3.13 *Endangered Species Act*—USC 42 guidance document for incorporation of Endangered Species Act considerations.

3.3.14 *environmental site assessment (ESA)*—the process by which a person or entity seeks to determine if a particular parcel of real *property* (including improvements) is subject to *recognized environmental conditions*. At the option of the *user*, an *environmental site assessment* may include more inquiry than that constituting *appropriate inquiry* or, if the *user* is not concerned about qualifying for the *innocent landowner defense*, less inquiry than that constituting *appropriate inquiry* (see Appendix X1). An environmental site assessment is both different from and less rigorous than an *environmental audit*.

3.3.15 *fill dirt*—dirt, soil, sand, or other earth, that is obtained offsite, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real *property*. It does not include material that is used in limited quantities for normal landscaping activities.

3.3.16 *forestland-property*—that is either *historically undeveloped* (see 3.3.18) or *managed forestland* (see 3.3.25).

3.3.17 *hazardous waste/contaminated sites*—sites on which a release has occurred, or is suspected to have occurred, of any *hazardous substance*, *hazardous waste*, or *petroleum products*, and that release or suspected release has been reported to a government entity.

3.3.18 *historically undeveloped forestland*—a *property* is historically undeveloped or unmanaged forestland if it contains no *relevant man-made changes* and is of such size or of such a nature that *visible* and *physical* observance of the *property* as contemplated in Section 8 of this practice is not capable of being accomplished within reasonable time and cost constraints, will yield little information relevant to the *property*, or will generate extraordinary amounts of irrelevant information. Large tracts of *historically undeveloped forestland* may contain isolated areas of *commercial real estate* which are not relevant to the *historically undeveloped forestland*.

3.3.19 *innocent landowner defense*—that defense to CERCLA liability provided in 42 USC § 9601(35) and § 9607(b)(3). One of the requirements to qualify for this defense is that the party makes "all appropriate inquiry into the previous ownership and uses of the *property* consistent with good commercial or customary practice." There are additional requirements to qualify for this defense. See Appendix X1.

3.3.20 *interviews*—those portions of this practice that are contained in Sections 9 and 10 thereof and address questions to be asked of *owners* and *occupants* of the *property* and questions to be asked of local government officials.

3.3.21 *key site manager*—the person identified by the *owner* of a *property* as having good knowledge of the uses and physical characteristics of the *property*. See 9.5.1.

3.3.22 *local government agencies*—those agencies of municipal or county government having jurisdiction over the *property*. Municipal and county government agencies include, but are not limited to, cities, parishes, townships, and similar entities.

3.3.23 *leaking underground storage tanks (LUST) sites list*—state lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA gives EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so.

3.3.24 *major occupants*—those occupants, suboccupants, or other persons or entities each of which uses at least 40 % of the leasable area of the *property* or any anchor occupant when the *property* is a shopping center.

3.3.25 *managed forestland*—a *property* is *managed forestland* if it has received the practical application of biological, physical, quantitative, managerial, economic, social, and policy principles to the regeneration, management, utilization, and conservation of forests to meet specific goals and objectives while maintaining the productivity of the forest. The management of *forestland* may include the management for aesthetics, fish, recreation, urban values, water, wilderness, wildlife, wood products, and/or other forest resource values, goals, or objectives.

3.3.26 *obvious*—that which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while visually or physically observing the *property*.

3.3.27 *other historical sources*—any source or sources other than those designated in 7.3.4.1 and 7.3.4.2 that are credible to a reasonable person and that identify past uses of the *property*. The term includes, but is not limited to: miscellaneous maps, newspaper archives, and records in the files and/or personal knowledge of the *property owner* and/or *occupants*. See 7.3.4.3.

3.3.28 *physical setting sources*—sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a *property*. See 7.2.3.

3.3.29 *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 hazardous waste generators and registered underground storage tanks), 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 *practically reviewable*.

3.3.30 *publicly available*—information that is *publicly available* means that the source of the information allows access to the information by anyone upon request.

3.3.31 *reasonably ascertainable—for purposes of this practice*, information that is (*1*) *publicly available*, (*2*) obtainable from its source within reasonable time and cost constraints, and (*3*) *practically reviewable*.

3.3.32 *recognized environmental conditions*—the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into *structures* on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk

of harm to public health or the environment or that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

3.3.33 *records review*—that part that is contained in Section 7 of this practice that addresses which records shall or may be reviewed.

3.3.34 *relevant man-made changes*—generally include commercial or industrial buildings intended to enhance a *property*'s value or adapt it for new or further purposes such that said changes render the *property commercial real estate* as defined in Section 3.3.8 of Practice E 1527.

3.3.35 *rural property—property* that includes non-*commercial real estate*, undeveloped real *property*, real *property* used for agricultural purposes, or *commercial real estate* used only for the transportation of people or products (including, but not limited to, natural resource development, for example, mining, oil and gas, etc.).

3.3.36 *site reconnaissance*—that part that is contained in Section 8 of this practice and addresses what should be done in connection with the *site visit*. The *site reconnaissance* includes, but is not limited to, the *site visit* done in connection with such a *Phase I Environmental Site Assessment*.

3.3.37 *site visit*—the visit to the *property* during which observations are made constituting the *site reconnaissance* section of this practice. The *site visit* may include several visits to the site to ensure the *methodology* of the *site visit* is met (for example, large parcels of land).

3.3.38 *standard environmental record sources*—those records specified in 7.2.1.1.

3.3.39 *standard historical sources*—those sources of information about the history of uses of *property* specified in 7.3.4.

3.3.40 *standard physical setting source*—a current USGS 7.5 minute topographic map (if any) showing the area on which the *property* is located. See 7.2.3.

3.3.41 *standard practice(s)*—the activities set forth in this practice.

3.3.42 *standard sources*—sources of environmental, physical setting, or historical records specified in Section 7 of this practice.

3.3.43 *Streamside Management Zone (SMZ)*—an area of varying width adjacent to a watercourse in which special management precautions are necessary to protect natural resources.

3.3.44 *"taking"*—the process defined in the Endangered Species Act, that is: the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

3.3.45 *threatened species*—the term means, as defined in the Federal Endangered Species Act (USC 42 guidance document for incorporation of Endangered Species Act considerations), any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

3.3.46 *user*—the party seeking to use this practice to perform an *environmental site assessment* of the *property*. A *user* may include, without limitation, a purchaser of *property*, a potential *occupant* of *property*, an *owner* of *property*, a lender, or a *property* manager.

3.3.47 *visually and/or physically observed*—during a *site visit* pursuant to this practice, this term means observations made by vision while walking through a *property* and the *structures* located on it and observations made by the sense of smell, particularly observations of noxious or foul odors. The term "walking through" is not meant to imply that disabled persons who cannot physically walk may not conduct a *site visit*; they may do so by the means at their disposal for moving through the *property* and the *structures* located on it.

3.4 *Acronyms:*

3.4.1 *CERCLA*—Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (as amended, 42 USC § 9601 *et seq*.).

3.4.2 *CERCLIS*—Comprehensive Environmental Response, Compensation, and Liability Information System (maintained by EPA).

3.4.3 *CFR*—Code of Federal Regulations.

3.4.4 *CORRACTS*—TSD facilities subject to Corrective Action under RCRA.

3.4.5 *CWA*—Clean Water Act; see Appendix X1.

3.4.6 *EPA*—United States Environmental Protection Agency.

3.4.7 *EPCRA*—Emergency Planning and Community Right to Know Act ((also known as SARA Title III), 42 USC § 11001 *et seq*.).

3.4.8 *ERNS*—emergency response notification system.

3.4.9 *ESA*—environmental site assessment (different than an *environmental audit*; see 3.3.14, herein referred to as the Assessment).

3.4.10 *FIFRA*—Federal Insecticide, Fungicide, and Rodenticide Act.

3.4.11 *FOIA*—U.S. Freedom of Information Act (5 USC 552 *et seq*.).

3.4.12 *FR*—Federal Register.

3.4.13 *LUST*—leaking underground storage tank.

3.4.14 *MSDS*—material safety data sheet.

3.4.15 *NCP*—National Contingency Plan.

3.4.16 *NPDES*—national pollutant discharge elimination system.

3.4.17 *NPL*—national priorities list.

3.4.18 *PCBs*—polychlorinated biphenyls.

3.4.19 *PRP*—potentially responsible party (pursuant to CERCLA 42 USC § 9607(a)).

3.4.20 *RCRA*—Resource Conservation and Recovery Act (as amended, 42 USC § 6901 *et seq*.).

3.4.21 *SARA*—Superfund Amendments and Reauthorization Act of 1986 (amendment to CERCLA).

3.4.22 *SMZ*—Streamside Management Zone.

3.4.23 *TSCA*—Toxic Substances Control Act.

3.4.24 *USC*—United States Code.

3.4.25 *USDA* —Unites States Department of Agriculture.

3.4.26 *USGS*—United States Geological Survey.

3.4.27 *UST*—underground storage tank.

4. Significance and Use

4.1 *Uses*—This practice is intended for use on a voluntary basis by parties who wish to assess the environmental condition of *forestland* or *rural property*. While use of this practice is intended to constitute *appropriate inquiry* for purposes of

CERCLA's *innocent landowner defense*, it is not intended that its use be limited to that purpose. This practice is intended primarily as an approach to conducting an inquiry designed to identify *recognized environmental conditions* in connection with a *property*, and *environmental site assessments* that are both more and less comprehensive than this practice (including, in some instances, no *environmental site assessment*) may be appropriate in some circumstances. Further, no implication is intended that a person must use this practice in order to be deemed to have conducted inquiry in a commercially prudent or reasonable manner in any particular transaction. Nevertheless, this practice is intended to reflect a commercially prudent and reasonable inquiry.

4.2 *Clarifications on Use*:

4.2.1 *Use Not Limited to CERCLA*—This practice is designed to assist the *user* in developing information about the environmental condition of a *property* and as such, has utility for a wide range of persons, including those who may have no actual or potential CERCLA liability and/or may not be seeking the *innocent landowner defense*.

4.2.2 *Residential Occupants/Lessees/Purchasers and Others*—No implication is intended that it is currently customary practice for residential occupants/lessees of multifamily residential buildings, occupants/lessees of single-family homes or other residential real estate, or purchasers of dwellings for one's own residential use, to conduct an *environmental site assessment* in connection with these transactions. Thus, these transactions are not included in the term *forestland* or *rural property* transactions, and it is not intended to imply that such persons are obligated to conduct an *environmental site assessment* in connection with these transactions for purposes of *appropriate inquiry* or for any other purpose. In addition, no implication is intended that it is currently customary practice for *environmental site assessments* to be conducted in other unenumerated instances (including, but not limited to, many forestland and rural acreage leasing transactions, many acquisitions of easements, and many loan transactions in which the lender has multiple remedies). However, forestland and rural acreage transactions may include improvements (including, but not limited to, residential dwellings, barns, sheds, garages, and greenhouses). Areas with such improvements shall be examined during the *site reconnaissance* as described in Section 8. Inspection of such improvements will normally focus on the exterior of the *structures*. The *environmental professional* shall determine, in his/her professional judgment, whether the interior inspections of such improvements are warranted. Factors influencing this determination can include whether: (*1*) there is specific knowledge of a potential environmental concern, (*2*) the improvement is accessible, and (*3*) the inspection is coordinated by the *key site manager*.

4.2.3 *Site-specific*—This practice is site-specific in that it relates to assessment of environmental conditions on a specific parcel of *forestland* or *rural property*. Consequently, this practice does not address many additional issues raised in transactions such as purchases of business entities or interests therein, or of their assets, that may well involve environmental liabilities pertaining to properties previously owned or operated or other offsite environmental liabilities.

4.3 *Three Related Practices*—This practice sets forth one procedure for an *environmental site assessment* known as a "Phase I Environmental Site Assessment for Forestland or Rural *Property*," "Phase I Environmental Site Assessment," a "Phase I ESA," or simply a "Phase I." This practice is separate from Practice E 1528 and separate from Practice E 1527. These practices are each intended to meet the standard of *appropriate inquiry* necessary to qualify for the *innocent landowner defense*. It is essential to consider that these practices, taken together, provide for three alternative practices of *appropriate inquiry*.

4.3.1 *Election to Commence with This Practice*—The *user* may commence inquiry to identify *recognized environmental conditions* in connection with a *property* by performing this practice when conditions identified in 1.1 are met.

4.3.2 *Who May Conduct*—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.

4.4 *Additional Services*—As set forth in 11.9, additional services may be contracted for between the *user* and the *environmental professional*.

4.5 *Principles*—The following principles are an integral part of each practice and are intended to be referred to in resolving any ambiguity or exercising such discretion as is accorded the *user* or *environmental professional* in performing an *environmental site assessment* or in judging whether a *user* or *environmental professional* has conducted *appropriate inquiry* or has otherwise conducted an adequate *environmental site assessment*.

4.5.1 *Uncertainty Not Eliminated*—No *environmental site assessment* can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a *property*. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for *recognized environmental conditions* in connection with a *property*, and this practice recognizes reasonable limits of time and cost.

4.5.2 *Not Exhaustive—Appropriate inquiry* does not mean an exhaustive assessment of a clean *property*. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an *environmental site assessment* and the reduction of uncertainty about unknown conditions resulting from additional information.

4.5.3 *Level of Inquiry Is Variable*—Not every *property* will warrant the same level of assessment. Consistent with good commercial or customary practice, the appropriate level of *environmental site assessment* will be guided by the type of

property subject to assessment, the expertise and risk tolerance of the *user*, and the information developed in the course of the inquiry. For purposes of this practice, the level of *appropriate inquiry* of isolated areas of *commercial real estate* contained within *forestland* or *rural property* shall meet the requirements of Practice E 1527. This practice is no less stringent than Practice E 1527; however, the means by which this practice intends to satisfy that level of *appropriate inquiry* within reasonable time and cost constraints are different than under Practice E 1527.

4.5.4 *Comparison With Subsequent Inquiry*—It should not be concluded or assumed that an inquiry was not *appropriate inquiry* merely because the inquiry did not identify *recognized environmental conditions* in connection with a *property*. *Environmental site assessments* must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent *environmental site assessments* should not be considered valid standards to judge the appropriateness of any prior assessment based on hindsight, new information, use of developing technology or analytical techniques, or other factors.

4.6 *Continued Viability of Environmental Site Assessment*—An *environmental site assessment* meeting or exceeding this practice and completed less than 180 days previously is presumed to be valid. An *environmental site assessment* meeting or exceeding this practice and completed more than 180 days previously may be used to the extent allowed by 4.7-4.7.5.

4.7 *Prior Assessment Usage*—This practice recognizes that *environmental site assessments* performed in accordance with this practice will include information that subsequent *users* may want to use to avoid undertaking duplicative assessment procedures. Therefore, this practice describes procedures to be followed to assist *users* in determining the appropriateness of using information in *environmental site assessments* performed previously. The system of prior assessment usage is based on the following principles that should be adhered to in addition to the specific procedures set forth elsewhere in this practice:

4.7.1 *Use of Prior Information*—Subject to 4.7.4, *users* and *environmental professionals* may use information in prior *environmental site assessments* provided such information was generated as a result of procedures that meet or exceed the requirements of this practice and then only provided that the specific procedures set forth in the practice are met.

4.7.2 *Prior Assessment Meets or Exceeds*—Subject to 4.7.4, a prior *environmental site assessment* may be used in its entirety, without regard to the specific procedures set forth in this practice, if, in the reasonable judgment of the *user*: the prior *environmental site assessment* meets or exceeds the requirements of this practice and the conditions at the *property* likely to affect *recognized environmental conditions* in connection with the *property* are not likely to have changed materially since the prior *environmental site assessment* was conducted. In making this judgment, the *user* should consider the type of *property* assessed and the conditions in the area surrounding the *property*.

4.7.3 *Current Investigation*—Except as provided in 4.7.2 of this practice, 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.

4.7.4 *Actual Knowledge Exception*—If the *user* or *environmental professional(s)* conducting an *environmental site assessment* has *actual knowledge* that the information being used from a prior *environmental site assessment* is not accurate or if it is *obvious*, based on other information obtained by means of the *environmental site assessment* or known to the person conducting the *environmental site assessment*, that the information being used is not accurate, such information from a prior *environmental site assessment* may not be used.

4.7.5 *Contractual Issues Regarding Prior Assessment Usage*—The contractual and legal obligations between prior and subsequent *users* of *environmental site assessments* or between *environmental professionals* who conducted prior *environmental site assessments* and those who would like to use such prior *environmental site assessments* are beyond the scope of this practice.

4.8 *Rules of Engagement*—The contractual and legal obligations between an *environmental professional* and a *user* (and other parties, if any) are outside the scope of this practice. No specific legal relationship between the *environmental professional* and the *user* is necessary for the *user* to meet the requirements of this practice.

5. User's Responsibilities

5.1 *Scope*—The purpose of this section is to describe tasks that will help identify the possibility of *recognized environmental conditions* in connection with the *property*. These tasks do not require the technical expertise of an *environmental professional* and are generally not performed by *environmental professionals* performing a *Phase I Environmental Site Assessment*. They may be performed by the *user*.

5.2 *Checking Title Records for Environmental Liens*—*Reasonably ascertainable recorded land title records* 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*.

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*.

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*.

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*.

5.5 *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*.

6. Phase I Environmental Site Assessment

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:

6.2.1 *Records Review*—Review of records; see Section 7,

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

6.2.3 *Interviews*:

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

6.2.3.2 *Interviews* with local government officials; see Section 10,

6.2.4 *Report*—Evaluation and report; see Section 11.

6.3 *Coordination of Parts*:

6.3.1 *Parts Used in Concert*—The *records review*, *site reconnaissance*, and *interviews* are intended to be used in concert with each other. If information from one source indicates the need for more information, other sources may be available to provide information. For example, if a previous use of the *property* as a gasoline station is identified through the *records review*, but the present *owner* and *occupants* interviewed report no knowledge of an *underground storage tank*, the person conducting the *site reconnaissance* should be alert for signs of the presence of an *underground storage tank*.

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*.

6.4 *No Sampling*—This practice does not include any testing or sampling of materials (for example, soil, water, air, or building materials).

6.5 *Who May Conduct a Phase I*:

6.5.1 *Environmental Professional's Duties*—The *interviews* and *site reconnaissance*, as well as review and interpretation 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.

6.5.2 *Environmental Professional Supervision*—Information for the *records review* needed for completion of a *Phase I Environmental Site Assessment* may be provided by a number of parties including government agencies, third-party vendors, the *user*, and present and past *owners* and *occupants* of the *property*, provided that the information is obtained by or under the supervision of an *environmental professional* or is obtained by a third-party vendor specializing in retrieval of the information specified in Section 7. Prior assessments may also contain information that will be appropriate for usage in a current *environmental site assessment* provided the prior usage procedures set forth in Sections 7, 8, and 9 are followed. The *environmental professional(s)* participating in the *site reconnaissance* and responsible for the report shall review all of the information provided.

6.5.2.1 *Reliance*—An *environmental professional* is not required to verify independently the information provided but may rely on information provided unless he or she has *actual knowledge* that certain information is incorrect or unless it is *obvious* that certain information is incorrect based on other information obtained in the *Phase I Environmental Site Assessment* or otherwise actually known to the *environmental professional*.

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* and connecting *SMZs*, water bodies, and buffer zones. 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 at 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; (*3*) the relationship of *SMZs*, water bodies, and buffer zones to adjacent properties; and (*4*) 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 vary 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 45 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, NAIs, 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.

7.1.7 *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 non-governmental 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.

7.1.8 *Documentation of Sources Checked*—The report shall document each source that was used, even if a source revealed no findings. Sources shall be sufficiently documented, including name, date request for information was filled, date information provided was last updated by source, date information was last updated by original source (if provided other than by original source; see 7.1.7) so as to facilitate reconstruction of the research at a later date.

7.1.9 *Significance*—If a *standard environmental record source* (or other sources in the course of conducting the *Phase I Environmental Site Assessment*) identifies the *property* or another site within the *approximate minimum search distance*, the report shall include the *environmental professional's* judgment about the significance of the listing to the analysis of *recognized environmental conditions* in connection with the *property* (based on the data retrieved pursuant to 7.2, additional information from the government source, or other sources of information). In doing so, the *environmental professional* may make statements applicable to multiple sites (for example, a statement to the effect that none of the sites listed is likely to have a negative impact on the *property* except…).

7.2 *Environmental Information*:

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

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 (kilometres)
Federal NPL site list	1.0 (1.6)
Federal CERCLIS list	0.5 (0.8)
Federal RCRA CORRACTS TSD 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
NFRAP List	
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, at 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 *forestland* or *rural property* 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
Lists of Landfill/Solid Waste Disposal Sites
Lists of Hazardous Waste/Contaminated Sites
Lists of Registered Underground Storage Tanks
Records of Emergency Release Reports (SARA § 304)
Records of Contaminated Public Wells
Records of Threatened and Endangered Species observations (Natural Areas Inventories)
Records of Best Management Practices Violations

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)
Department of Natural Resources
Division of Forestry

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 at 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 *forestland* or *rural property 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) and readily available aerial photographs

Discretionary and Non-Standard Physical Setting Sources
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*)

7.3 *Historical Use Information*:

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 and 7.3.4.2 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 1700s, it might be feasible to identify uses back to the early 1900s, using sources such as *USDA* land use maps or *USGS 7.5 minute topographic maps* (or equivalent). Although other sources, such as *recorded land title records*, might go back to the 1700s, 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 and 7.3.4.2, or it may come from *other historical sources* (such as someone with personal knowledge of the *property*; see 7.3.4.3). However, checking other historical sources would not be required. For purposes of 7.3.2, the term "developed use" includes agricultural and forestry 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 7.3.4.3 may be used to satisfy 7.3.2-7.3.2.2, 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 and 7.3.4.2 (except those excluded by (*1*) and (*2*) of 7.3.2.3) shall be deemed sufficient historical use information to comply with this practice.

7.3.3 *Uses of Properties in Surrounding Area*—Uses in the area surrounding the *property* shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the *property* itself (for example, an *aerial photograph* will usually show the surrounding area). If the *environmental professional* uses sources that include the surrounding area, surrounding uses should be identified to a distance determined at the discretion of the *environmental professional* (for example, if an aerial photo shows the area surrounding the *property*, then the *environmental professional* shall determine how far out from the *property* the photo should be analyzed). Factors to consider in making this determination include, but are not limited to: the extent to which information is *reasonably ascertainable*; the time and cost involved in reviewing surrounding uses (for example, analyzing *aerial photographs* is relatively quick, but reviewing *property tax files* for adjacent properties or reviewing *local street directories* for more than the few streets that surround the site is typically too time-consuming); the extent to which information is useful, accurate, and complete in light of the purpose of the records review (see 7.1.1); the likelihood of the information being significant to *recognized environmental conditions* in connection with the *property*; the extent to which potential concerns are *obvious*; known hydrogeologic/geologic conditions that may indicate a high probability of *hazardous substances* or *petroleum products* migration to the *property*; how recently local development has taken place; information obtained from *interviews* and other sources; and local good commercial or customary practice.

7.3.4 *Standard Historical Sources*:

7.3.4.1 *Aerial Photographs*—The term "aerial photographs" means photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the *property*. Aerial photographs are often available from government agencies or private collections unique to a local area.

7.3.4.2 *USGS 7.5 Minute Topographic Maps*—The term *USGS 7.5 Minute Topographic Maps* means the map (if any) available from or produced by the United States Geological Survey, entitled "USGS 7.5 minute topographic map," and showing the *property*.

7.3.4.3 *Other Historical Sources*—The term *other historical sources* means any source or sources other than those designated in 7.3.4.1 and 7.3.4.2 that are credible to a reasonable person and that identify past uses of the *property*. This category includes, but is not limited to: miscellaneous maps, tract maps, newspaper archives, and records in the files and/or personal knowledge of the *property owner* and/or *occupants*, or below:

(1) Property Tax Files—The term *property tax files* means the files kept for *property* tax purposes by the local jurisdiction where the *property* is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is *reasonably ascertainable* and pertaining to the *property*.

(2) Mineral, Oil, and Gas Development Maps.

(3) Livestock Dipping Vats Records.

(4) Local Street Directories—The term *local street directories* means directories published by private (or sometimes government) sources and showing ownership and/or use of sites by reference to street addresses. Often local street directories are available at libraries of local governments, colleges or universities, or historical societies.

(5) Building Department Records—The term *building department records* means those records of the local government in which the *property* is located indicating permission of the local government to construct, alter, or demolish improvements on the *property*. Often building department records are located in the *building department* of a municipality or county.

(6) Zoning/Land Use Records—The term *zoning/land use records* means those records of the local government in which the *property* is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the planning department of a municipality or county.

7.4 *Prior Assessment Usage—Standard historical sources* reviewed as part of a prior *environmental site assessment* do not need to be searched for or reviewed again, but uses of the *property* since the prior *environmental site assessment* should be identified either through *standard historical sources* (as specified in 7.3) or by alternatives to *standard historical sources*, to the extent such information is *reasonably ascertainable*. (See 4.7.)

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*. 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.

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 include areas generally accessible by foot, vehicle, or reasonably accessible by aircraft, to the extent not obstructed by bodies of water, adjacent buildings, or other obstacles.

8.2.1 *Property*—The periphery of the *property* shall be *visually and/or physically observed* where accessible, 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 are observed on the *property*, the use of the road or path shall be identified and evaluated to determine whether it was likely to have been used as an avenue for disposal of solid waste, *hazardous substances*, or *petroleum products*.

8.2.2 *Structures*—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, sheds, etc.), maintenance and repair areas, storage areas, including boiler rooms, and a representative sample of *occupant* spaces, should be *visually and/or 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, statistical plot systems, aerial flyover, or other systematic approaches used for large properties, which spaces for *owner* or *occupants* were observed, and so forth) to observe the *property*, as agreed upon between the *user* and the *environmental professional*.

8.2.4 *Limitations*—The *environmental professional* shall document, in the *report*, general limitations and the basis of review, including limitations due to the size and accessibility of the *property*, limitations imposed by physical obstructions such as adjacent buildings, bodies of water, asphalt or other paved areas, dense vegetation, topography, and other limiting conditions (for example, snow, rain, mining, and oil and gas leases).

8.2.5 *Frequency*—It is not expected that the *environmental professional* in connection with a *Phase I Environmental Site Assessment* shall make more than one visit to the *property*. The one visit (which may consist of more than one day, see 3.3.36) 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 8.4.1-8.4.4.7 to the extent *visually and/or physically observed* during the *site visit*. The uses and conditions specified in 8.4.1-8.4.4.7 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 8.4.1-8.4.4.7. 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/or 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 *records 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* including pertinent activities related to *managed forestland* and/or agriculture 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 specific recreational uses, silvicultural and agricultural practices, apiary, mining, etc., rather than simply forestry and agricultural use).

8.4.1.2 *Past Use(s) of the Property*—To the extent that indications of past uses of the *property* are *visually and/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*, including pertinent activities related to managed forestland and/or agriculture. (For example, it is more useful to identify uses such as specific recreational uses, *silvicultural* and agricultural practices, *apiary*, mining, etc., rather than simply forestry and agricultural use.)

8.4.1.3 *Current Uses of Adjoining Properties*—To the extent that current uses of *adjoining properties* are *visually and/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 and/or physically observed* on the *site visit*, or are identified in the *interviews* or *records 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 and/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 *records 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 and/or physically observed* or determined from *interviews*, as well as the general topography of the area surrounding the *property* that is *visually and/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. If Guidance Document for Incorporation of Clean Water Act Non-point Source Considerations is used in support of this assessment, then these same conditions shall be evaluated for BMP violations that have the potential for migration due to the topography of the subject or surrounding *property*. Whether the above conditions exhibit evidence that indicates that threatened and endangered species will be potentially taken (as defined in Guidance Document for Incorporation of Endangered Species Act Considerations and section 1.1.1), shall be noted in the report.

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, or located on, 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 *Property and Structure 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. If the Guidance Document for Incorporation of Clean Water Act Non-point Source Considerations is used in support of this assessment, then any current uses likely to involve Best Management Practices violations through forestry or agricultural activities or the "taking" of threatened and endangered species through forestry activities 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, specify campground, timbering, livestock grazing, or crop production rather than simply recreational, forestry, and agricultural use).

8.4.2.2 *Past Use(s) of the Property*—To the extent that indications of past uses of the *property* are *visually and/or physically observed* on the *site visit*, or are identified in the *interviews* or *records review*, they shall be identified in the report (for example, there may be signs indicating a past use or a structure indicating a past use). 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*, or, if Guidance Document for Incorporation of Clean Water Act Non-point Source Considerations is used in support of this assessment, they were likely to involve Best Management Practices violations through forestry or agricultural activities or the "taking" of threatened and endangered species through such activities.

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 and/or physically observed* during the *site visit* or identified from the *interviews* or the *records review*.

8.4.2.4 *Liquid Storage Systems*—Aboveground storage tanks, 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 and/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 and/or physically observed* or identified from the *interviews* or *records review*.

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

8.4.2.7 *Drums*—To the extent *visually and/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 and/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 and/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 and/or physically observed* or identified from the *interviews* or *records review*. Fluorescent light ballast likely to contain PCBs does not need to be noted.

8.4.2.11 *Best Management Practices*—If this assessment is being conducted in concert with Guidance Document for Incorporation of Clean Water Act Non-point Source Considerations, then Best Management Practices, SMZs, culverts, and any other customary practices used to protect water quality in non-point source areas shall be identified. Any indications of non-point source pollution arising from the placement or exclusion of these measures shall be described in the report. For details see the attached site investigation summary.

8.4.2.12 *Threatened and Endangered Species*—If this assessment is being conducted in concert with Guidance Document for Incorporation of Clean Water Act Non-point Source Considerations and Guidance Document for Incorporation of Endangered Species Act Considerations, observations and indications of threatened and endangered species shall be noted in the report. The location of these indications shall be described by map. Any indications of the "taking" of threatened and endangered species shall be fully described in the report (for example, logging activities within the primary zone of a bald eagle's nest). For details see the attached site investigation summary.

8.4.3 *Structure 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, etc.).

8.4.3.2 *Stains or Corrosion*—To the extent *visually and/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 and/or physically observed* or identified from the *interviews*, floor drains and *sumps* shall be described in the report.

8.4.4 *Property Observations*:

8.4.4.1 *Pits, Ponds, Ditches, Caves, Streams, or Lagoons*—To the extent *visually and/or physically observed* or identified from the *interviews* or *records review*, *pits*, *ponds*, *streams*, *ditches*, 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*, *ditches*, *streams*, or *lagoons* on *properties* adjoining the *property* shall be described in the report to the extent they are *visually and/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 and/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 and/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 and/or physically observed* or identified from the *interviews* or *records review*, evidence of discarded material, 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 and/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 and/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 and/or physically observed* or identified from the *interviews* or *records review*, indications of onsite septic systems or cesspools should be described in the report.

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.

9.4 *Timing*—Except as specified in 9.8 and 9.9, it is at 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*, *user*, or their respective representative 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, farm manager, ranch manager, timber or natural resource 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 at 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-Use Properties*—Includes scattered residential tenancies, agricultural and silvicultural tenancies, small-scale commercial/industrial tenancies, and recreational tenancies such as hunting clubs. For multi-use properties with several *occupants*, it may not be necessary to interview all of the *occupants*. Selection of *occupants* to interview should be based upon the criteria specified in 9.5.2.2. 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, as *reasonably ascertainable*, their interest in the subject *property*, title, their relationship to the *property*, 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 Specific Knowledge*—Prior to the *site visit*, the *property owner*, *key site manager* (if any is identified), and the *user* (if different from the *property owner*) shall be asked whether they have any specialized knowledge or experience that is material to any *recognized environmental conditions* in connection with the *property* (for example, affecting value, deed restrictions).

9.9 *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 9.9.1 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 possible, the *environmental professional* conducting the *site visit* shall review the available documents prior to or at the beginning of the *site visit*.

9.9.1 *Helpful Documents*:

9.9.1.1 Environmental Site Assessment reports,

9.9.1.2 Environmental audit reports,

9.9.1.3 Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, water management permits, underground injection permits, NPDES permits, etc.),

9.9.1.4 Registrations for underground and aboveground storage tanks,

9.9.1.5 Material safety data sheets,

9.9.1.6 Community right-to-know plan,

9.9.1.7 Safety plans, preparedness and prevention plans, spill prevention, countermeasure and control plans, etc.,

9.9.1.8 Reports regarding hydrogeologic conditions on the *property* or surrounding area,

9.9.1.9 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*,

9.9.1.10 Hazardous waste generator notices or reports,

9.9.1.11 Geotechnical studies,

9.9.1.12 Tract maps,

9.9.1.13 Fertilization studies, and

9.9.1.14 FIFRA and TSCA records.

9.10 *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*.

10. Interviews With Local Government Officials

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

10.2 *Content—Interviews* with *local government officials* 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 be decided at the discretion of the *environmental professional(s)* conducting the *Phase I Environmental Site Assessment for Forestland or Rural Property*, provided that the questions shall generally be directed toward identifying *recognized environmental conditions* in connection with the *property*.

10.3 *Medium*—Questions to be asked may be asked in person or by telephone, at the discretion of the *environmental professional*.

10.4 *Timing*—It is at the discretion of the *environmental professional* whether to ask questions before or after the *site visit* described in Section 8, or in some combination thereof.

10.5 *Who Should Be Interviewed*:

10.5.1 *Local Agency Officials*—A reasonable attempt shall be made to interview at least one staff member of any one of the following types of local government agencies:

10.5.1.1 Local fire department that serves the *property*,

10.5.1.2 Local health agency or local/regional office of state health agency serving the area in which the *property* is located, or

10.5.1.3 Local agency or local/regional office of state agency having jurisdiction over hazardous waste disposal, forestry activities, agricultural activities, or other environmental matters in the area in which the *property* is located.

10.6 *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.

10.7 *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.

10.8 *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. If the person conducting the *interview(s)* asks questions but does not receive answers or receives partial answers, this section shall not thereby be deemed incomplete, provided that 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 their responses.

11. Evaluation and Report Preparation

11.1 *Report Format*—The report of findings for the *Phase I Environmental Site Assessment for Forestland or Rural Property* should generally follow the recommended report format attached as Appendix X2 unless otherwise required by the *user*.

11.2 *Documentation*—The findings, opinions, and conclusions in the *Phase I Environmental Site Assessment* report shall be supported by documentation. If the *environmental professional* has chosen to exclude certain documentation from the report, the *environmental professional* shall identify in the report the reasons for doing so (for example, a confidentiality agreement). Supporting documentation shall be included in the report or adequately referenced to facilitate reconstruction of the assessment by an *environmental professional* other than the *environmental professional* who conducted it. Sources that reveal no findings also shall be documented.

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*).

11.4 *Scope of Services*—The report shall describe all services performed in sufficient detail to permit another party to reconstruct the work performed.

11.5 *Findings*—The report shall have a findings section which summarizes known or suspect environmental conditions associated with the *property*, and which may include *recognized environmental conditions*, historical *recognized environmental conditions*, and de minimis conditions, among other environmental conditions.

11.6 *Opinion*—The report shall include the *environmental professional's* opinion(s) of the impact on the *property* of known or suspect environmental conditions identified in the findings section. The logic and reasoning used by the *environmental professional* in evaluating information collected during the course of the investigation related to known or suspect environmental conditions shall be discussed. The opinion shall specifically include the *environmental professional's* rationale for concluding that a known or suspect environmental condition is or is not currently a *recognized environmental condition*. Known or suspect environmental conditions identified by the *environmental professional* as *recognized environmental conditions* currently shall be listed in the conclusions section of the report.

11.7 *Conclusions*—The report shall include a conclusions section that summarizes all *recognized environmental conditions* connected with the *property* and the impact of these *recognized environmental conditions* on the *property*. The report shall include one of the following statements:

11.7.1 "We have performed a *Phase I Environmental Site Assessment for Forestland or Rural Property* in conformance with the scope and limitations of ASTM Practice E 2247 of [insert address or legal description], the *property*. Any exceptions to, or deletions from, this practice are described in Section [ ] of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the *property*," or

11.7.2 "We have performed a *Phase I Environmental Site Assessment for Forestland or Rural Property* in conformance with the scope and limitations of ASTM Practice E 2247 of [insert address or legal description], the *property*. Any exceptions to, or deletions from, this practice are described in Section [ ] of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the *property* except for the following: (list)."

11.8 *Deviations*—All deletions and deviations from this practice (if any) shall be listed individually and in detail and all additions should be listed.

11.9 *Additional Services*—Any *additional services* contracted for between the *user* and the *environmental professional(s)*, including a broader scope of assessment, more detailed conclusions, liability/risk evaluations, recommendation for Phase II testing, Endangered Species Act and Clean Water Act issues, remediation techniques, and so forth, are beyond the scope of this practice, and should only be included in the report if so specified in the terms of engagement between the *user* and the *environmental professional*.

11.10 *References*—The report shall include a references section to identify published referenced sources relied upon on preparing the *Phase I Environmental Site Assessment*. Each referenced source shall be adequately annotated to facilitate retrieval by another party.

11.11 *Signature*—The *environmental professional(s)* responsible for the *Phase I Environmental Site Assessment for Forestland or Rural Property* shall sign the report.

11.12 *Credentials*—The report shall name the *environmental professional(s)* involved in conducting the *Phase I Environmental Site Assessment*. One of two options shall be available to address qualifications of those persons involved in conducting the *Phase I Environmental Site Assessment*: (*1*) the report shall include a qualifications statement of the *environmental professional(s)* responsible for the *Phase I Environmental Site Assessment* and preparation of the report, and the qualifications statement shall include relevant individual and corporate qualifications; or (*2*) a written qualifications statement of the *environmental professional(s)* responsible for the *Phase I Environmental Site Assessment* and preparation of the report, including relevant individual and corporate qualifications, shall be delivered to the *user*.

12. Non-Scope Considerations

12.1 *General*:

12.1.1 *Additional Issues*—There may be environmental issues or conditions at a *property* that parties may wish to assess in connection with *forestland* or *rural property* that are outside the scope of this practice (the non-scope considerations). As noted by the legal analysis in Appendix X1 of this practice, some substances may be present on a *property* in quantities and under conditions that may lead to contamination of the *property* or of nearby properties but are not included in CERCLA's definition of hazardous substances (42 USC § 9601(14)) or do not otherwise present potential CERCLA liability, Clean Water Act liability, or Endangered Species Act liability. In any case, they are beyond the scope of this practice.

12.1.2 *Outside Standard Practices*—Whether or not a *user* elects to inquire into non-scope considerations in connection with this practice or any other environmental site assessment (for example, ASTM Guidance Document for Incorporation of Clean Water Act Non-point Source Considerations), no assessment of such non-scope considerations is required for appropriate inquiry as defined by this practice.

12.1.3 *Other Standards*—There may be standards or protocols for assessment of potential hazards and conditions associated with non-scope conditions developed by governmental entities, professional organizations, or other private entities (for example, ASTM Guidance Document for Incorporation of Clean Water Act Non-point Source Considerations).

12.1.4 *List of Additional Issues*—Following are several non-scope considerations that persons may want to assess in connection with *forestland* or *rural property*. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list of non-scope considerations is not intended to be all-inclusive:

12.1.4.1 Asbestos-Containing Materials,
12.1.4.2 Best Management Practices for Silviculture,
12.1.4.3 Cultural and Historical Resources,
12.1.4.4 Ecological Resources,
12.1.4.5 Health and Safety,
12.1.4.6 High Voltage Powerlines,
12.1.4.7 Indoor Air Quality,
12.1.4.8 Industrial Hygiene,
12.1.4.9 Lead-Based Paint,
12.1.4.10 Lead in Drinking Water,
12.1.4.11 Non-Point Sources,
12.1.4.12 Radon,
12.1.4.13 Regulatory Compliance,
12.1.4.14 Threatened and Endangered Species, and
12.1.4.15 Wetlands.

APPENDIXES

(Nonmandatory Information)

X1. LEGAL BACKGROUND TO FEDERAL LAW AND THE PRACTICES ON ENVIRONMENTAL ASSESSMENTS IN COMMERCIAL REAL ESTATE TRANSACTIONS

INTRODUCTION

The legal section of Subcommittee E50.02 on Environmental Assessments In Commercial Real Estate Transactions provides the following background to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended including amended by the Superfund Amendments and Reauthorization Act (SARA), 42 USC § 9601 *et seq*. The background to CERCLA, commonly known as the Superfund law, outlines the potential liability for the cleanup of hazardous substances, available defenses to such liability, appropriate inquiry under Superfund, statutory definition of hazardous substances, petroleum products and petroleum exclusion to CERCLA, and reasons why certain environmental-hazards are excluded from the scope of Superfund and this practice and Practice E 1528.

There are several elements of Superfund liability and the commonly termed "innocent purchaser" defense, that arise out of the statutory third-party defense, that may impact the development and understanding of this practice and Practice E 1528.

X1.1 *Superfund Liability:*

X1.1.1 A plaintiff must establish all of the following elements of liability under Superfund before a defendant will be held liable under Superfund for a *government's* response costs:[5]

X1.1.1.1 The site is a facility, as defined at § 9601(9),

X1.1.1.2 A release or threatened release of a hazardous substance from the site occurred (release is defined at § 9601(22)) as *any* amount of any hazardous substance; "hazardous substance" is defined at § 9601(14) (see statutory definition of "hazardous substance"),

X1.1.1.3 A release or threatened release caused the plaintiff to incur response costs. Response costs are defined at § 9601(25) to mean costs related to both removal actions (§ 9601(23)) and remedial actions (§ 9601(24)), and

[5] 42 USC § 9607(a). (All statutory references are to Title 42 of the United States Code, unless otherwise specified.) See *United States versus Aceto Agricultural Chemicals Corp*., 872 F.2d 1373 (8th Cir. 1989). Private plaintiffs, as well as the government, may seek response costs under Superfund from defendants. While many users of these ASTM practices or other private parties may think in terms of how to defend against Superfund liability, they should recognize that they may decide to conduct cleanup actions and seek response costs from other parties.

X1.1.1.4 Defendants fall within at least one of the four classes of responsible parties.[6]

X1.1.2 In order to recover response costs, a government plaintiff must prove that the costs were not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan (commonly referred to as the National Contingency Plan or NCP), 40 CFR § 300.[7] A private plaintiff must prove its costs were necessary costs of response and that the response action was consistent with the NCP, 42 USC § 9607 (a).[8]

X1.1.3 If there is a release or threatened release of hazardous substances on a site, private parties, even if they are not PRPs, may decide to incur response costs and seek recovery from other private parties, and PRPs may seek contribution from other PRPs.

X1.1.4 There is an important difference between government's burden to show that its response costs are "not inconsistent with the NCP" and the burden a private party bears to show that its response costs are "consistent with the NCP." See § 9607 (a)(4)(A) and (B). Courts have interpreted this statutory difference to give the government a rebuttable presumption that its response costs are consistent with the NCP, whereas a private party who undertakes response costs and seeks recovery from responsible parties bears the burden of proving its response was consistent with the NCP.[9] The EPA takes the position that a private party who undertakes a response action must be only in "substantial compliance," rather than strict technical compliance, with the NCP, as long as a CERCLA-quality cleanup is achieved. The NCP requirements for a private party response-action are set forth at 40 CFR § 300.700.

X1.2 *Defenses to Liability:*

X1.2.1 Assuming all the elements of liability exist, a party may avoid liability only by meeting one of the defenses listed in § 9607(b). These listed defenses are exclusive of all others.[10] Section 9607(b) states (*emphasis added*):

> "There shall be no liability under subsection (a) for a person otherwise liable who can establish by a preponderance of the evidence [the lowest evidentiary standard available, meaning more probable than not] that the release or threat of release of a hazardous substance and the damages resulting therefrom were *caused solely by*—
> 1) an act of God;
> 2) an act of war;
> 3) *an act or omission of a third party other* than an employee or agent of the defendant, or *than one whose act or omission occurs in connection with a contractual relationship* (see the definition of "contractual relationship" in X1.2.2), existing directly or indirectly, with the defendant..., if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned..., and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such actions or omissions."

X1.2.2 Under § 9601(35)(A), a contractual relationship "includes, but is not limited to, land contracts, deeds, or other instruments transferring title or possession...". These contractual relationships with third parties eliminate the defense to liability unless the defendant is an innocent purchaser. Or as stated by the statute at § 9601(35)(A) (emphasis added), a contractual relationship with the third party defeats the defense.

> "Unless the real property on which the facility is located was acquired by the defendant after disposal or placement of the hazardous substance..., and one or more of the following circumstances is also established by the defendant by a preponderance of the evidence:
> (i) At the time the defendant acquired the facility the defendant *did not know and had no reason to know* that any hazardous substance, which is the subject of the release or threatened release, was disposed of on, in, or at the facility.
> (ii) The defendant is the government...
> (iii) The defendant acquired the facility by inheritance or bequest."

X1.2.3 Therefore, the so-called innocent purchaser defense arises out of the third-party defense of § 9607(b)(3). Restated, this defense to Superfund liability is available only if the defendant shows the following:

X1.2.3.1 The release or threat of release was caused solely by a third party,

X1.2.3.2 The third party is not an employee or agent of the defendant,

X1.2.3.3 The acts or omissions of the third party did not occur in connection with a direct or indirect contractual relationship to the defendant, or if there was a contractual relationship, the defendant acquired the property after disposal or placement of the hazardous substance, and at the time the defendant acquired the facility the defendant did not know and *had no reason to know* that any hazardous substance that is the subject of the release or threatened release was disposed of on, in, or at the facility, and

X1.2.3.4 The defendant exercised due care with respect to the hazardous substances and took precautions against foreseeable acts or omissions of the third party.

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[6] The four classes of potentially responsible parties (PRPs) are listed as § 9607(a) as follows:

(*1*) Owner and operator of a facility (See § 9601 (20)(A): the term "owner or operator" does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect his security interest in the facility. In *re: Bergsoe Metal Corporation*, 910 F.2d 668 (9th Cir. Aug. 9, 1990); *Guidice versus BFG Electroplating and Manufacturing Co*., 732 F.Supp. 556 (W.D.Pa. 1989); *United States v. Mirabile*, 23 ERC 1511 (E.D.Pa. 1985). But see *United States versus Fleet Factors Corp*., 901 F.2d 1550 (11th Cir. 1990); *United States versus Maryland Bank and Trust Co*., 632 F. Supp. 573 (D. Md. 1986). For clarification of the security interest exclusion, see EPA's rule on lender liability under CERCLA, 57 Federal Register 18344 (April 29, 1992),

(*2*) Any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(*3*) Any person who by contract, agreement, or otherwise arranged for disposal or treatment or transport of hazardous substances, and

(*4*) Any person who accepts hazardous substances for transport to a facility selected by such person.

[7] The National Contingency Plan is the federal government's blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

[8] See *Dedham Water Co. versus Cumberland Farms Dairy, Inc*., 889 F.2d 1146 (1st Cir. 1989); other cases cited at ABA, *Natural Resources, Energy, and Environmental Law: 1989 The Year In Review*, p. 215, Note 155.

[9] *Amland Properties Corp. versus Aluminum Co. of America*, 711 F. Supp. 784, 794 (D. N.J. 1989); *Artesian Water Co. versus New Castle County*, 659 F. Supp. 1269, 1291 (D. Del. 1987); *United States versus Northeastern Pharmaceutical and Chemical Co*., 579 F. Supp. 823 (W.D. Mo. 1984), *aff'd in part, rev'd on other grounds*, 810 F.2d 726 (8th Cir. 1986).

[10] *United States versus Aceto Agricultural Chemicals Corp*., 872 F.2d 1373 (8th Cir. 1989). But see *United States versus Marisol, Inc*., 725 F. Supp. 833 (M.D. Pa. 1989) (equitable defenses under CERCLA may be available after the development of a factual record).

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 *Appropriate Inquiry in Commercial Real Estate Transactions:*

X1.3.1 One of the major questions that parties to commercial real estate transactions face when considering their potential Superfund liability is, "What level of inquiry into the previous ownership and uses of the *property* is appropriate to establish the innocent purchaser defense to Superfund liability?" These practices are structured to articulate the level of inquiry under Superfund that is appropriate for different situations.

X1.3.2 *The Appropriate Level of Inquiry*:

X1.3.2.1 The level of environmental inquiry that is appropriate under Superfund cannot be the same for every *property* or every party to a real estate transaction. The level of inquiry, in fact, will change depending on the particular *property* or party involved in a transaction. The statutory language, Congressional history, and common sense support this conclusion.

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).

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.

X1.3.2.5 The statutory standard of "appropriate inquiry" suggests the level of inquiry will depend on the circumstances and the underlying facts. Since the facts are almost always different, the level of inquiry must change with them. The legislative history on this particular issue demonstrates that Congress intended that the level of inquiry change with the type of property and party:[11]

> The duty to inquire under this provision shall be judged as of the time of acquisition. Defendants shall be held to a higher standard as public awareness of the hazards associated with hazardous releases has grown, as reflected by this Act, the 1980 Act [CERCLA], and other Federal and State statutes. Moreover, good commercial or customary practice with respect to inquiry in an effort to minimize liability shall mean that a reasonable inquiry must have been made in all circumstances, in light of best business and land transfer principles. Those engaged in commercial transactions should, however, be held to a higher standard than those who are engaged in private residential transactions.

X1.3.2.6 Because few cases address the standard of inquiry in the innocent purchaser defense and the legislative history describing congressional intent is sparse, common sense is a useful guide in interpreting statutory language. If CERCLA mandated that the level of inquiry be the same for every property or potential defendant, then a lay consumer (renter or buyer) of a home, a purchaser of a small environmentally benign business, and a multinational corporate buyer of an industrial complex would have to conduct the same environmental site assessment (ESA) of the different properties in question. Additionally, the statute makes no mention of a Phase I ESA or any other specific type of inquiry one is to conduct in order for the inquiry to be deemed appropriate. If all inquires had to be at the same level to be "appropriate," it would be illogical to stop at a Phase I ESA since some commercial or industrial properties routinely undergo, in the exercise of good commercial and customary practices, intrusive sampling (typically a Phase II ESA activity). Therefore, since routinely some properties undergo sampling, an inflexible standard would require sampling of all properties, no matter what its use. This could not have been the intended result of SARA.

X1.3.3 *The Minimum Inquiries to Satisfy All Appropriate Inquiry*:

[11] H.R. Rep. No. 962, 99th Cong., 2d Sess. 187 (1986), *reprinted at* 1986 U.S. Code Cong. and Admin. News 3276, 3280.

X1.3.3.1 Recognizing that inquiry changes with the underlying circumstances, the next question concerns that level of inquiry, if any, that Superfund requires to utilize the innocent landowner defense.

X1.3.3.2 As noted above, in some real estate transactions a Phase II ESA is routinely conducted. A Phase I ESA is conducted in these transactions only as a necessary prerequisite to outline the scope of the Phase II ESA. A Phase II ESA typically involves taking soil, water, and air samples to determine their contaminant content or verify that no contaminants are present or likely present. Note, however, that this simplistic outline of the Phase II ESA is misleading since the party can always dig down one foot deeper, take one more sample, or conduct one more test. The problem of how much inquiry is conducted, or at what level a party should begin, involves proving a negative, that is that no contamination is present.[12] Since, according to the statute, inquiries should be judged by the circumstances existing at the time of acquisition, then there could be some properties and parties to real estate transactions where it may be appropriate to begin the inquiry with an intrusive Phase II ESA in order to invoke the innocent purchaser defense to liability.

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.[13] 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.

X1.3.3.4 The minimum level of appropriate inquiry under Superfund, therefore, ranges from no specialized inquiry to conducting an intrusive Phase II ESA. In order to satisfy these practices, to do no specialized inquiry, such as the Transaction Screen or Phase I ESA, is not enough for commercial real estate transactions. Under current commercial and customary practice and in light of best business and land transfer principles, however, no environmental site assessments are conducted in many real estate transactions, particularly those involving smaller properties, vacant land, or transactions of low monetary value. This practice and Practice E 1528 and the minimum level of inquiry under these practices, actually raises the average level of inquiry that should be performed where the parties want to come within the protection of the innocent landowner defense.

X1.3.3.5 The burden of proof is on the defendant to sustain by a preponderance of the evidence, the innocent purchaser defense. This is the least onerous burden of proof available to a party in litigation. The defendant must show only that the evidence offered to support the level of inquiry that was taken at the time of acquisition is of greater weight or more convincing than the evidence offered in opposition to it. In other words, the evidence on the inquiry issue taken as a whole shows that the fact sought to be proved is more probable than not. There may be technical or business judgments on whether the inquiry conducted or any other fact in a particular case is sufficient to meet the needs or concerns of a party to the real estate transaction. The bottom line, however, is that the judgment on whether the specific facts of a case, in light of statutory language, are sufficient to produce liability or a viable defense to liability is a legal one and such judgments constitute the practice of law.

X1.3.3.6 Practice E 1528 is designed as the minimum level of inquiry to satisfy the practice from which a party to a commercial real estate transaction should proceed, recognizing that some parties to some commercial real estate transactions may wish to proceed by beginning with a Phase I or a Phase II ESA.

X1.4 *Statutory Definition of Hazardous Substance:*

X1.4.1 The statute at 42 USC § 9601(14)(A-F) defines hazardous substance by referring to five other statutes as well as to Superfund's own § 9602. The following is a description of the relevant portions of the other statutes and § 9602 of Superfund:

42 USC § 9601(14)(A): "[A]ny substance designated pursuant to section 1321(b)(2)(A) of Title 33." Title 33 USC § 1321 lies within the Clean Water Act and refers to, among other things, hazardous substance liability. 33 USC § 1321(b)(2)(A) states that the EPA shall develop, "as may be appropriate, regulations designating as hazardous substances, other than oil as defined in this section, such elements and compounds which, when discharged in any quantity into the navigable waters of the United States..., present an imminent and substantial danger to the public... health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches."

42 USC § 9601(14)(B): "[A]ny element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title." Section 9602 gives EPA the authority to designate as a hazardous substance "such elements, compounds, mixtures, solutions, and substances which, when released into the environment may present substantial danger to the public health or welfare

[12] The inability to prove a negative creates a dilemma for the potential defendant. If the party's inquiry discovers contamination, then under the statute the party will not be able to avail itself of the innocent purchaser defense. If the inquiry does not discover contamination, EPA or another private party can argue in a response action that the inquiry was not "appropriate" and, therefore, the defendant can have no defense. The Subcommittee E50.02 explicitly recognizes this dilemma as beyond any reasonable interpretation of Congressional intent. The scope of the E50.02 Standard Practice resolves the party's dilemma in the only reasonable way by stating: "It should not be concluded or assumed that the inquiry was not appropriate inquiry merely because the inquiry did not identify existing recognized environmental conditions in connection with a property. Environmental site assessments must be evaluated based on the reasonableness of the judgments made at the time and under the circumstances in which they were made." See 4.5.4.

[13] EPA, *Policy Towards Owners of Residential Property at Superfund Sites*, OSWER Directive No. 9834.6, July 3, 1991.

or the environment..."

42 USC § 9601(14)(C): "[A]ny hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 USCA § 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 USCA § 6901 *et seq.*] has been suspended by Act of Congress)." The Solid Waste Disposal Act of 1980 amended the Resource Conservation and Recovery Act (RCRA). 42 USCA § 6921 of RCRA provides authority to the EPA to develop criteria for identifying characteristics of hazardous waste and for listing particular hazardous wastes within the meaning of 42 USCA § 6903(5) of RCRA. RCRA, § 6903(5), defines hazardous waste to mean "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics, may—

(A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed." For the identification and listing of hazardous wastes under RCRA, see 40 CFR § 261.1 *et seq.*

42 USC § 9601(14)(D): "[A]ny toxic pollutant listed under Section 1317(a) of Title 33." Section 1317(a) of Title 33 refers to toxic and pretreatment effluent standards under the Clean Water Act. The EPA is charged in this section with publishing and revising from time to time a list of toxic pollutants, taking "into account toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms." Each toxic pollutant listed according to this section shall be subject to effluent limitations. For toxic pollutant effluent standards, see 40 CFR § 129.1 *et seq.*

42 USC § 9601(14)(E): "[A]ny hazardous air pollutant listed under Section 112 of the Clean Air Act [42 USCA § 7412]." Section 7412 of Title 42 deals with national emission standards for hazardous air pollutants. The EPA is charged here with publishing and revising from time to time "a list which includes each hazardous air pollutant for which [it] intends to establish an emission standard under this section." The term "hazardous air pollutant" means an air pollutant that in EPA's judgment "causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness." For emission standards for hazardous pollutants, see 40 CFR § 61.01 *et seq.*

42 USC § 9601(14)(F): "[A]ny imminently hazardous chemical substance or mixture with respect to which the [EPA] has taken action pursuant to Section 2606 of Title 15." Section 2606 of Title 15 deals with imminent hazards under the Toxic Substances Control Act (TSCA). The EPA is authorized under 15 USC § 2606 to seize an imminently hazardous chemical substance or mixture or seek other relief, such as requiring notice to users of the chemical substance or public notice of the risk associated with the substance or mixture. The term " 'imminently hazardous chemical substance or mixture' means a chemical substance or mixture which presents an imminent and unreasonable risk of serious or widespread injury to health or the environment."

X1.4.2 After Subsections A-F, outlined above, the Superfund definition of "hazardous substance" in § 9601(14) then goes on to state:

> "The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

X1.4.3 The EPA has collected a list of "those substances in the statutes referred to in Section 101(14) of the Act [42 USC § 9601(14)]" 40 CFR § 302.1 (1989) ("List of Hazardous Substances And Reportable Quantities," 40 CFR Part 302). This list changes with notices in the Federal Register. Also, any time a new hazardous waste is listed, the waste automatically becomes a hazardous substance.

X1.5 *Petroleum Products:*

X1.5.1 Under the petroleum exclusion of CERCLA (42 USC § 9601(14)), petroleum and crude oil have been explicitly excluded from the definition of hazardous substances under CERCLA. Nevertheless, petroleum products are included within the scope of both practices because they are of concern in many commercial real estate transactions and current custom and usage is to include an inquiry into the presence of petroleum products in an environmental site assessment. Inclusion of petroleum products within the scope of the practices is not based upon the applicability, if any, of CERCLA to petroleum products.

X1.5.2 One reason to include petroleum products within the scope of the practices is because to do so reflects custom and usage: when environmental assessments are conducted in connection with commercial real estate transactions, they customarily include an assessment of the presence or likely presence of petroleum products under conditions that may lead to contamination. For example, environmental assessments ordinarily seek to assess whether there may be underground or aboveground storage tanks that may be leaking, whether those tanks contain petroleum products or some other product.

X1.5.3 In addition, although CERCLA may exclude petroleum products, other laws require cleanup of releases or spills of petroleum products. For example, petroleum products sometimes (for example, when they cannot be reclaimed from soil) become hazardous wastes subject to RCRA Subtitle C (42 USC § 6921 *et seq.*), must be cleaned up if released from underground storage tanks pursuant to RCRA Subtitle I (42 USC § 6991 *et seq.*), must be cleaned up pursuant to the Oil Pollution Act of 1990 (33 USC § 1321 *et seq.*), and must be cleaned up if released into the navigable waters of the United States pursuant to the Clean Water Act (33 USC § 1251 *et seq.*).

X1.5.4 Moreover, case law and EPA interpretations of the petroleum exclusion require an analysis of the facts of each case to determine whether a particular petroleum product is included in CERCLA's petroleum exclusion. The exclusion has been broadly interpreted to exclude gasoline and leaded gasoline from CERCLA's definition of hazardous substances regardless of the fact that gasoline and leaded gasoline contain certain indigenous components and additives which have themselves been designated as hazardous pursuant to CERCLA. See *Wilshire Westwood Associates versus Atlantic Richfield Corporation*, 881 F.2d 801 (9th Cir. 1989). The interpretation was narrowed when a judicial distinction was made between petroleum fractions produced by distillation processes and waste products resulting from contaminated tank scale. See *United States versus Western Processing Co.*, 761 F.Supp. 713 (W.D. Wash. 1991). Another decision narrowly interpreted CERCLA's petroleum exclusion to be inapplicable to oil-related wastes containing hazardous substances because the primary purpose of the exclusion is to remove "spills or other releases strictly of oil" from the scope of CERCLA response and liability (not releases of hazardous substances mixed with oil). See *City of New York versus E Guidance Document for*

Incorporation of Endangered Species Act Considerations on Corporation, 744 F. Supp. 474 (S.D.N.Y. 1990). For additional discussion, see EPA Memorandum entitled, "The Petroleum Exclusion Under the Comprehensive Environmental Response Compensation and Liability Act," issued by EPA's General Counsel, Francis S. Blake, July 31, 1987.

X1.6 *Exclusion of Certain Hazards From Superfund:*

X1.6.1 The information that follows is provided to explain why these potential environmental hazards are not covered by Superfund's appropriate inquiry responsibilities:

X1.6.2 As a preliminary matter, it should be noted that an environmental site assessment that does not address substances excluded from CERCLA (whether those substances are excluded because they are petroleum products or by virtue of other characteristics) but that otherwise constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" should nevertheless entitle the user to the innocent purchaser defense, assuming that other requirements of the defense are met.

X1.6.3 *Radon*:

X1.6.3.1 A case discussing Superfund and radon is *Amoco Oil Company versus Borden, Inc*., 889 F.2d 664 (5th Cir. 1989). This case dealt with a private cost recovery action by the buyer of a site against the seller for response costs relating to radiation from phosphogypsum wastes left on the site. Radon emanated from these radioactive wastes. The case points out that the "EPA has designated radionuclides as hazardous substances under § 9602(a) of CERCLA... Additionally, the... EPA under § 112 of the Clean Air Act... lists radionuclides as a hazardous air pollutant. Radon and its daughter products are considered radionuclides, which are defined as 'any nuclide that emits radiation.' " Therefore, radon is a CERCLA hazardous substance. Also, when discussing what constitutes a release of a hazardous substance under the statute, the statute is plain that there is no quantitative requirement and that a release, broadly defined at 42 USC § 9601(22), of *any* amount constitutes a CERCLA release.

X1.6.3.2 Liability under Superfund depends on several factors, as noted in X1.1. Only one of four factors is the release or threatened release of a hazardous substance. The other three factors are (*1*) the site is a facility, (*2*) the defendant falls within at least one of four classes of potentially responsible parties (PRPs), and (*3*) the release or threatened release *caused* the plaintiff (that can be the government or another private party) to incur response costs. Further, response costs must not be inconsistent with the National Contingency Plan (NCP), *and must not be limited by § 9604(a)(3)*. And, of course, there is no need to raise the innocent purchaser defense and its appropriate inquiry requirements unless the elements of liability will be met.

X1.6.3.3 Where radon from any source occurs in a building, three of the liability elements under CERCLA are met. There is a release of a hazardous substance, the building is a facility, and we can assume the defendant is a PRP. However, under 42 USC § 9604(a)(3)(A), "[r]emedial actions taken in response to hazardous substances as they occur naturally are specifically excluded from the NCP and are therefore not recoverable." *Amoco Oil Company versus Borden, Inc*., 889 F.2d at 570. The statute is plain.[14]

> "(3) Limitations on response
> The President shall not provide for a removal or remedial action under this section in response to a release or threat of release—
> (A) *of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found*;
> (B) from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures;[15] or
> (C) into public or private drinking water supplies due to deterioration of the system through ordinary use.[16]
> (4) Exception to limitations
> Notwithstanding paragraph (3) of this subsection, to the extent authorized by this section, the President may respond to any release or threat of release if, in the President's discretion, it constitutes a public health or environmental emergency and no other person with the authority and capability to respond to the emergency will do so in a timely manner."

X1.6.3.4 Therefore, no liability under CERCLA attaches for naturally occurring radon. If a party to a real estate transaction wants to look for radon within a building, no amount of radon investigation will have any bearing on one's innocent purchaser defense under Superfund. Investigation of naturally occurring radon would be included, if at all, in the portion of the practice that deals with non-scope issues.

X1.6.4 *Asbestos*:

X1.6.4.1 The analysis of asbestos is similar to that involving radon. Before considering appropriate inquiry responsibilities, the four elements of CERCLA liability must be satisfied. Once again, as with radon, they are not met.

X1.6.4.2 Section 9604(a)(3)(B) of CERCLA prohibits response actions involving a release or threat of release "from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures." There are a number of cases dealing with asbestos that interpret this statutory language. One such case is *First United Methodist Church of Hyattsville versus United States Gypsum Co*. that cites to other relevant cases.

X1.6.4.3 In *First United* the church brought a private cost recovery action against the manufacturer of asbestos-containing acoustical plaster. In holding that the action was barred by a state statute of repose (a certain time allowed by statute for bringing litigation) and that CERCLA did not preempt the state statute of repose, the court stated that § 9604(a)(3)(B) of CERCLA "represents much more than a procedural limitation on the President's authority; it is a substantive limitation of the breadth of CERCLA itself."[17] Therefore, the limitations of § 9604(a)(3) apply to private parties as well.

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[14] 42 USC § 9604(a)(3) and (4) (*emphasis added*).

[15] This provision has implications for asbestos and lead-based paint. See X1.6.4 and X1.6.5.

[16] This provision has implications for lead from lead pipes and solder. See X1.6.5.

[17] One such case is *First United Methodist Church of Hyattsville versus United States Gypsum Co*., 882 F.2d 862 (4th Cir. 1989), that cites to other relevant cases.

X1.6.4.4 Citing to the legislative history, the *First United* court concluded, "[i]n view of this clear expression of Congressional intent, we wil[l] not expand CERCLA to encompass asbestos-removal actions." The court further explained:[18]

> "In closing, we note that this interpretation of CERCLA fully comports with the most fundamental guide to statutory construction-common sense. To extend CERCLA's strict liability scheme to all past and present owners of buildings containing asbestos as well as to all persons who manufactured, transported, and installed asbestos products into buildings,would be to shift literally billions of dollars of removal cost liability based on nothing more than an improvident interpretation of a statute that Congress never intended to apply in this context. [FN12] . . . Certainly, if Congress had intended for CERCLA to address the monumental asbestos problem, it would have said so more directly when it passed SARA. . . .
>
> *FN12*—It is for this reason, that Congress simply did not intend for CERCLA to remedy the asbestos-removal problem, that we decline to follow the reasoning of *Prudential, Knox and Covalt* in rejecting First United's preemption argument. Instead of recognizing the fact that CERCLA is out of context in this situation, these courts rejected similar attempts to invoke the statute by construing CERCLA's key terms in a way to exclude asbestos-removal actions.*Covalt*, 860 F.2d [1434] at 1438-39 (defining "environment" to exclude the interior of a workplace); *Knox*, 690 F. Supp at 756-57 (defining "release" in terms of "spills" or "disposal"); *Prudential*, [711 F. Supp 1244] at 1254-55 (defining "disposal" to exclude the sale of a product for consumer use). We find this analysis unsatisfactory because it runs the risk of unnecessarily restricting the scope of CERCLA merely to dispose of claims that the statute was never intended to encompass in the first place. It is far better to simply acknowledge the inapplicability of CERCLA to asbestos-removal claims than to restrict its operative terms."

X1.6.4.5 Since asbestos that is a part of the structure of, and results in exposure within, residential buildings or business or community structures is excluded from CERCLA liability, it should not be investigated pursuant to a party's innocent purchaser appropriate inquiry requirements. Like naturally occurring radon, investigation of asbestos-containing materials that are part of the structure of buildings should be included, if at all, in the portion of this practice that deals with non-scope issues. Note, however, if asbestos is disposed of on a site and, therefore, is no longer part of the structure of a building, the cleanup of the disposed asbestos is subject to Superfund response actions. Likewise, if a building is sold with the knowledge that it will be demolished, one court ruled that the sale constitutes a disposal falling under CERCLA's liability provisions.[19]

X1.6.5 *Lead in Drinking Water and Lead-Based Paint*—These hazards can be evaluated in terms of the exclusions of 42 USC § 9604(a)(3)(B) and (C), in an analysis similar to the analysis applied above to radon and asbestos. While there is no reported case law on these environmental issues as they relate to Superfund, the statutory language seems clear that these environmental hazards are not encompassed by Superfund's appropriate inquiry responsibilities. Note, however, like asbestos, where there is a disposal of these substances on the site or in a facility, CERCLA liability may arise.

X1.6.6 *Wetlands*

X1.6.7 *Threatened and Endangered Species*

X1.6.8 *Clean Water Act (Non-Point Source Pollution)*

[18] The same at 869; See also *3550 Stevens Creek Associates versus Barclays Bank of California*, 915 F.2d 1355 (9th Cir. 1990).

[19] *CP Holdings, Inc. versus Goldberg-Zoino & Associates, Inc.*, 769 F. Supp. 432 (D.N.H. 1991).

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X3. GUIDANCE FOR INCORPORATION OF ENDANGERED SPECIES ACT CONSIDERATIONS INTO A PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR FORESTLAND OR RURAL PROPERTY

X3.1 Purpose

X3.1.1 The purpose of this non-scope guidance document is to provide a procedure to evaluate the property for the likely presence of listed state or federal threatened and endangered species. This guide is not intended to satisfy the United States Fish and Wildlife Service or state equivalent certification of an environmental professional to conduct a full Threatened and Endangered Species assessment.

X3.2 Background

X3.2.1 The Endangered Species Act of 1973 has a purpose of providing a means whereby the ecosystems upon which endangered and threatened species depend may be preserved and to provide for the conservation of such endangered or threatened species. To achieve this purpose, the act defines an endangered and threatened species and designates the critical habitats for these species. The act also prohibits the "taking" of any endangered or threatened species.

X3.2.2 The likely presence of an endangered or threatened species may affect business value, planned operations, or the development of the property, and may require additional evaluation based upon the planned use of the property.

X3.3 Requirements of the Endangered Species Act

X3.3.1 Section 9 of the Endangered Species Act establishes prohibitions to the "taking" of any endangered species or the attempt to engage in the "taking" of any endangered species. However, the Endangered Species Act allows for a "special" rule with regard to threatened species. This "special" rule is listed under Section 4(d) of the Endangered Species Act. Under the Section 4(d) rule, the regulations can be tailored for a particular species, allowing for a "special" rule specifically adapted to protecting that particular threatened species. The Section 4(d) rule is often written by local and state agencies that are more in tune with the circumstances affecting the threatened species. The Section 4(d) rule is typically not as restrictive and does not contain all of the restrictions that Section 9 of the Endangered Species Act contains.

X3.3.2 Additionally, Section 10 of the Endangered Species Act allows for a person to obtain in appropriate circumstances a permit allowing for "incidental" taking of a threatened species. Application for this permit must be made, on an individual basis, to the U.S. Fish and Wildlife Service prior to any "incidental" taking. Justification for the "incidental" taking must be presented in the application. The U.S. Fish and Wildlife Service reviews and rules on each application separately. Adoption of a Section 4(d) rule could designate specific circumstances where "incidental" taking is allowed, thus eliminating the need for a Section 10 application and permit in those circumstances.

X3.4 Definitions

X3.4.1 *endangered species*—any species as defined in the Federal Endangered Species Act (16 USC 1531) "… which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insect as determined by the Secretary to constitute a pest whose protection under the provisions of this Act (Endangered Species Act) would present an overwhelming and overriding risk to man." (See non-scope considerations.) Note: the definition of an endangered species may be altered or expanded by State equivalent regulations.

X3.4.2 *likely presence*—physical observation of the species, or of activity or evidence of the species.

X3.4.3 *habitat*—the place or environment where a plant or animal naturally or normally lives and grows.

X3.4.4 *natural areas inventory (NAI)*—list compiled by various state agencies that show records of reported observations of threatened and endangered species.

X3.4.5 *taking*—the process defined in the Endangered Species Act, that is: the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The definition of "taking" may be altered or expanded by State equivalent regulations.

X3.4.6 *threatened species*—the term means, as defined in the Federal Endangered Species Act (16 USC 1531), any

species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

X3.5 Procedure

X3.5.1 *Interviews*:

X3.5.1.1 *Objective* —The purpose of the interviews is to obtain information about the likely presence of threatened and endangered species in connection with the property.

X3.5.2 *Interviews with Owners and Occupants*:

X3.5.2.1 *Objective*—The purpose of Interviews outlined herein is to obtain information indicating the likely presence of endangered or threatened species in connection with the property.

X3.5.2.2 *Who Should be Interviewed—Key Site Manager*—Prior to the site visit, the owner, user, or their respective representative 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, farm manager, ranch manager, timber or natural resource manager, 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).

X3.5.2.3 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. If the attempt is successful, the key site manager shall be interviewed in conjunction with the site visit. If such an attempt is unsuccessful, then the interview shall be conducted during the course of the assessment with the personnel most knowledgeable of the likely presence of threatened and endangered species on the property. 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.

X3.5.2.4 *Content*—Interviews with owners and occupants consist of questions to be asked in the manner as described in Section 9 of the Standard Practice. The content of the questions to be asked shall attempt to obtain information about known habitats, previous investigations with respect to threatened or endangered species, or knowledge of sightings of threatened or endangered species.

X3.5.3 *Interviews with Government Agencies*:

X3.5.3.1 *Objective*—The objective of interviews outlined herein is to obtain information indicating the likely presence of endangered or threatened species in connection with the property.

X3.5.3.2 *Who Should be Interviewed*—Local agency or local/regional office of state agency having jurisdiction over threatened or endangered species in the area in which the property is located.

X3.5.3.3 *Content*—Interviews with government agencies consist of questions to be asked in the manner as described in Section 10 of the Standard Practice. The content of the questions to be asked shall attempt to ascertain if the agency is aware of known habitats, previous investigations with respect to threatened or endangered species, or knowledge of sightings of threatened or endangered species.

X3.5.4 *Records Review*:

X3.5.4.1 *Objective*—The purpose of the records review outlined herein is to obtain records that will help identify the likely presence of endangered or threatened species in connection with the property.

X3.5.4.2 *Standard Record Sources*—The following record sources should be reviewed:

Natural Areas Inventory
U.S. Fish and Wildlife Service (Recovery Plans)
State Department of Environmental Protection Agency
State Department of Natural Resources Agency
Various Non-government Agencies / Institutions

X3.5.4.3 It is up to the environmental professional using this guidance document to determine the necessity of checking these and/or additional records.

X3.5.4.4 *Additional Environmental Species Records Sources*—Also, various non-government agencies or institutions may maintain listing of endangered and threatened species, and their designated critical habitats. These additional sources may be checked for all portions of the property. It is up to the discretion of the environmental professional conducting the environmental site assessment as to the necessity of checking these additional record sources.

X3.5.5 *Site Reconnaissance*

X3.5.5.1 *Objective*—The purpose of the site reconnaissance outlined herein is to observe and record any evidence of the likely presence of endangered or threatened species in connection with the property.

X3.5.5.2 *Observation*—In the course of the site reconnaissance the environmental professional shall visually observe the property as outlined in Section 8 of the Standard Practice. Visits shall include sites found during the records review that show the likely presence of threatened and endangered species in connection with the property.

X3.5.6 *Report and Conclusion(s)*:

X3.5.6.1 The results of the records review, site reconnaissance, and interviews, as described above, shall be included as an appendix to the Phase I Environmental Site Assessment report, or as a stand-alone report, as agreed upon by the users and the environmental professional. The environmental professional shall include, as agreed upon by the users and the environmental professional, an opinion as to the likely presence of endangered or threatened species in connection with the property. The finding of no likely presence of a threatened or endangered species may not satisfy the due diligence obligations of the user should a threatened or endangered species later be discovered on the property.

FIELD FORM FOR GUIDANCE DOCUMENT X.3
(Non-scope Considerations)

Forestland and Rural Acreage Endangered Species Considerations

Site Information:

Tract / Job Name:

Total Acres Inspected:

Owner/Client:

Description of Area:

Significant Dominant Features:

Listing of significant surface waters (waterways, lakes, ponds, etc.)

Listing of significant topographic features (mountains, valleys, mesas, etc.)

Listing of significant park and recreational areas (national parks, national forests, state forests, etc.)

Databases:

Database Reviewed	Date (mo/day/yr)

Endangered Species Listed:

Species Name	Habitat Listed	Potential Habitats On-site

Threatened Species Listed:

Species Name	Habitat Listed	Potential Habitats On-site

Potential Habitats Observed:

Species Name	Location on Property	Description

Threatened or Endangered Species Sighted:

Species Name	Location on Property	Description

Are there 4D Rules in place for Threatened Species in this area?

List primary agency for implementation of the 4D Rules.

Are there any "incidental taking" permits in place for the subject property? (if yes, describe duration of permit)

Note: See attached site map for locations of findings.

X4. GUIDANCE FOR INCORPORATION OF THE CLEAN WATER ACT NON-POINT SOURCE CONSIDERATIONS INTO A PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR FORESTLAND OR RURAL PROPERTY

X4.1 Purpose

X4.1.1 The purpose of this non-scope guidance document is to provide a procedure to evaluate riparian areas where management practices have been implemented for indications of water quality impacts from non-point source runoff.

X4.2 Background

X4.2.1 In 1972, Congress laid the basic framework for federal water pollution control regulation by enacting the Federal Water Pollution Control Act, which required EPA to set effluent standards and water quality requirements. In 1977, this act was reauthorized as the Clean Water Act and the regulatory focus was shifted to the control of toxic water pollutants. Since then, Congress has amended the act to protect water from other sources of pollution including runoff from farming, forestry, mining, and other uses of forestland and rural acreage.

X4.3 Objective of the Clean Water Act

X4.3.1 There are two basic elements to the Clean Water Act: a statement of goals and objectives, and a system of mechanisms designed to attain those goals and objectives. The Act's stated objective is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters."

X4.3.2 The Clean Water Act addresses non-point sources, for example, runoff from farms, forests, land development activities, and other rural activities in Sections 208 and 319. State-controlled programs address non-point sources generally through non-regulatory means such as planning, incentives, and cost-share mechanisms. State-developed Best Management Practices (BMPs) contain regulatory or non-regulatory restrictions, depending on the state, on land use or management practices near water bodies. Portions of these are the typical mechanisms used by states to implement non-point source prevention programs. In addition, most states have water quality programs that are enforced when water quality is impacted by land management practices.

X4.4 Definitions

X4.4.1 *best management practices*—minimum standards necessary for protecting and maintaining a particular State's water quality as well as certain wildlife habitat values, during forestry activities.

X4.4.2 *non-point source (NPS)*—water pollution which is not traceable to any discrete or identifiable facility but rather is generated by activities in a broad treatment area.

X4.4.3 *non-point source considerations—for purposes of this guidance document*, non-point source considerations are impacts to water quality only in riparian areas, caused by land management activities in connection with the property.

X4.4.4 *riparian area—for purposes of this guidance document*, riparian areas are streams or other jurisdictional water bodies and the areas immediately adjacent to them, extending to the width described in the applicable State or Federal Best Management Practices.

X4.4.5 *runoff*—the portion of precipitation on land that ultimately reaches streams often with dissolved or suspended material.

X4.5 Procedure

X4.5.1 *Interviews*:

X4.5.1.1 *Objective*—The purpose of the interviews is to obtain information about non-point source considerations in connection with the property.

X4.5.2 *Interviews with Owners and Occupants*:

X4.5.2.1 *Objective*—The objective of interviews outlined herein is to obtain information indicating improvements or disturbances that may impact water quality in riparian areas in connection with the property.

X4.5.2.2 *Who Should be Interviewed*—Key Site Manager—Prior to the site visit, the owner, user, or their respective representative 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, farm manager, ranch manager, timber or natural resource manager, or head maintenance person. (If the user is the current property owner, the user has the obligation to identify a key site manager, even if it is the user himself or herself).

X4.5.2.3 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. If the attempt is successful, the key site manager shall be interviewed in conjunction with the site visit. If such an attempt is unsuccessful, an interview shall be conducted during the course of the assessment with the personnel most knowledgeable of the conditions in connection with the property. 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.

X4.5.2.4 *Content*—Interviews with owners and occupants consist of questions to be asked in the manner as described in Section 9 of the Standard Practice. The content of the questions asked shall attempt to ascertain the management practices employed on the property that may impact water quality in riparian areas.

X4.5.3 *Interviews with Government Agencies*:

X4.5.3.1 *Objective*—The objective of interviews outlined herein is to obtain information indicating any water quality violations in connection with the property and the corrective actions imposed. Further, the objective is to record any information that may indicate prospective regulations that would result in impacts to the future use of the property.

X4.5.3.2 *Who Should be Interviewed*—Local agency or local/regional office of state agency having jurisdiction in water quality in the area in which the property is located, for example:

National Resource Conservation Service
State Agriculture, Forestry, Mining, Oil, & Gas Agencies
State water quality agency
Current and previous landowners

X4.5.3.3 *Content*—Interviews with government agencies consist of questions to be asked in the manner as described in Section 10 of the Standard Practice. The content of the questions to be asked shall attempt to ascertain if the agency is aware of water quality violations in the riparian areas on the property.

X4.5.4 *Records Review*:

X4.5.4.1 *Objective*—The purpose of the records review is to identify practices that may affect the riparian areas on a property. These practices may be found in the records of the water quality protection programs that regulate activities on a property.

X4.5.4.2 *Record Sources*—The following record sources should be reviewed:

State 305(b) list
State 319 list
State 303(d) list
State stream use classification
State BMP violation records
Industry-specific non-point sources

X4.5.4.3 *Additional Records*:

State BMP guidelines
State river basin assessments
Municipal water quality protection regulations
State non-point source pollution prevention programs
State water pollution control acts

X4.5.4.4 It is up to the environmental professional conducting this guidance document to determine the necessity of checking these and/or additional records.

X4.5.5 *Site Reconnaissance*

X4.5.5.1 *Objective*—The purpose of the site reconnaissance outlined herein is to observe and record any improvements or disturbances in riparian areas in connection with the property that may have resulted in water quality impacts.

X4.5.5.2 *Observation*—In the course of the site reconnaissance, the environmental professional shall visually observe the property as outlined in Section 8 of the Standard Practice or the environmental professional should visit a representative sample (as established between the user and producer). Visits shall also include sites that could pose potential water quality considerations that were discovered during interviews or record surveys.

X4.5.6 *Report and Conclusion(s)*:

X4.5.6.1 The results of the records review, site reconnaissance, and interviews, as described above, shall be included as an appendix to the Phase I Environmental Site Assessment report, or as a stand-alone report, as agreed upon by the users and the environmental professional. The environmental professional will include an opinion, as mutually agreed upon by the user and producer, as to any evidence or likelihood of water quality violations, or any restrictions on the land use due to water quality protection efforts by local, state, or federal government agencies.

NON-POINT SOURCE CONSIDERATIONS PROPERTY RECORD

Site Information:

Property / Job Name:

Total Acres Inspected:

Owner/Client:

Description of Area: (i.e., region, soils, sea level, topographic relief, vegetation)

Dominant Features (determined from topographic or political maps):

List or describe riparian areas (waterways, lakes, ponds, perennial streams, protected waters)

List significant topographic features (mountains, valleys, mesas, sinkholes)

Records Review:
(Instructions)

Databases:

Database Reviewed	Date (mo/day/yr)

Impaired Streams:

Impaired Stream Segments	List (303d, 305b, 319)	Type

Outstanding Resource Waters/Municipal Watersheds:

Stream Segment	Management Restrictions

BMP Record:

Stream Segment	Violation(s)	Current Status

Conclusions:

Comments:

Interviews:

Person Interviewed	Date (mo/day/yr)	Time (a.m./p.m.)

Inspected by:

Date:

Reviewed by:

Date:

Note: See attached site map for locations of findings.