



## Standard Practice for Conducting Environmental Baseline Surveys<sup>1</sup>

This standard is issued under the fixed designation D6008; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 *Purpose*—The purpose of this practice is to define good commercial and customary practice in the United States for conducting an environmental baseline survey (EBS) in order to determine certain elements of the environmental condition of federal real property, including excess and surplus property at closing and realigning military installations. This effort is conducted to fulfill certain requirements of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) section 120(h), as amended by the Community Environmental Response Facilitation Act of 1992 (CERFA). As such, this practice is intended to help a user to gather and analyze data and information in order to classify property into seven environmental condition of property area types (in accordance with the Standard Classification of Environmental Condition of Property Area Types). Once documented, the EBS is used to support Findings of Suitability to Transfer (FOSTs), Findings of Suitability to Lease (FOSLs), or uncontaminated property determinations, or a combination thereof, pursuant to the requirements of CERFA. Users of this practice should note that it does not address (except where explicitly noted) requirements for appropriate and timely regulatory consultation or concurrence, or both, during the conduct of the EBS or during the identification and use of the standard environmental condition of property area types.

1.1.1 *Environmental Baseline Survey*—In accordance with the Department of Defense (DoD) policy, an EBS will be prepared or evaluated for its usefulness (and updated if necessary) for any property to be transferred by deed or leased. The EBS will be based on existing environmental information related to storage, release, treatment, or disposal of hazardous substances or petroleum products on the property to determine or discover the obviousness of the presence or likely presence of a release or threatened release of any hazardous substance or petroleum product. In certain cases, additional data, including sampling, if appropriate under the circumstances, may be

needed in the EBS to support the FOST or FOSL. A previously conducted EBS may be updated as necessary and used for making a FOST or FOSL. An EBS also may help to satisfy other environmental requirements (for example, to satisfy the requirements of CERFA or to facilitate the preparation of environmental condition reports). In addition, the EBS provides a useful reference document and assists in compliance with hazard abatement policies related to asbestos and lead-based paint. The EBS process consists of discrete steps. This practice principally addresses EBS-related information gathering and analysis.

1.1.2 *CERCLA Section 120(h) Requirements*—This practice is intended to assist with the identification of installation areas subject to the notification and covenant requirements of CERCLA § 120(h) relating to the deed transfer of contaminated Federal real property (42 USC 9601 *et seq.*).

1.1.3 *CERFA Requirements*—This practice can be used to provide information that can be used to partially fulfill the identification requirements of CERFA [Pub. L. 102-426, 106 Stat. 2174], which amended CERCLA. Property classified as area Type 1, in accordance with Classification **D5746** is eligible for reporting as “uncontaminated” under the provisions of CERFA. Additionally, certain property classified as area Type 2, where evidence indicates that storage occurred for less than one year, may also be identified as uncontaminated. At installations listed on the National Priorities List, Environmental Protection Agency (EPA) concurrence must be obtained for the property to be considered “uncontaminated” and therefore transferable under CERCLA § 120(h)(4). The EPA has stated that there may be instances in which it would be appropriate to concur with the DoD Component that certain property can be identified as uncontaminated under CERCLA § 120(h)(4) although some limited quantity of hazardous substances or petroleum products have been stored, released, or disposed of on the property. If the information available indicates that the storage, release, or disposal was associated with activities that would not be expected to pose a threat to human health or the environment (for example, housing areas, petroleum-stained pavement areas, and areas having undergone routine application of pesticides), such property should be eligible for expeditious reuse.

1.1.4 *Petroleum Products*—Petroleum products and their derivatives are included within the scope of this practice. Areas on which petroleum products or their derivatives were stored

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee E50 on Environmental Assessment, Risk Management and Corrective Action and is the direct responsibility of Subcommittee E50.02 on Real Estate Assessment and Management.

Current edition approved Feb. 1, 2014. Published March 2014. Originally approved in 1937 as PS 37. Last previous edition approved in 2005 as D6008-96(2005). DOI: 10.1520/D6008-96R14.

for one year or more, known to have been released or disposed of [CERCLA§ 120(h)(4)] are not eligible to be reported as “uncontaminated property” under CERFA.

**1.1.5 Other Federal, State, and Local Environmental Laws**—This practice does not address requirements of any federal, state, or local laws other than the applicable provisions of CERCLA identified in **1.1.2** and **1.1.3**. Users are cautioned that federal, state, and local laws may impose additional EBS or other environmental assessment obligations that are beyond the scope of this practice. Users should also be aware that there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered on property that are not addressed in this practice and that may pose risks of civil or criminal sanctions, or both, for noncompliance.

**1.1.6 Other Federal, State, and Local Real Property and Natural and Cultural Resources Laws**—This practice does not address requirements of any federal, state or local real property or natural and cultural resources laws. Users are cautioned that numerous federal, state, and local laws may impose additional environmental and other legal requirements that must be satisfied prior to deed transfer of property that are beyond the scope of this practice.

**1.2 Objectives**—Objectives guiding the development of this practice are (1) to synthesize and put in writing a standard practice for conducting a high quality EBS, (2) to facilitate the development of high quality, standardized environmental condition of property maps to be included in an EBS that can be used to support FOSTs, FOSLs, and other applicable environmental condition reports, (3) to facilitate the use of the standard classification of environmental condition of property area types, and (4) to facilitate the development of a standard guide for preparing and updating EBS reports.

**1.3 Limitations**—Users of this practice should note that, while many of the elements of an EBS are performed in a manner consistent with other “due diligence” functions, an EBS is not prepared to satisfy a purchaser of real property’s duty to conduct an “appropriate inquiry” in order to establish an “innocent landowner defense” to CERCLA § 107 liability. Any such use of any EBS by any party is outside the control of the United States Department of Defense and its components and beyond the scope of any EBS. No warranties or representations are made by the United States Department of Defense, its components, its officers, employees, or contractors that any EBS Report satisfies any such requirement for any party.

**1.4 Organization of This Practice**—This practice has 15 sections. Section **1** is the scope. Section **2** identifies referenced documents. Section **3**, Terminology, includes definitions of terms not unique to this practice, descriptions of terms unique to this practice, and acronyms and abbreviations. Section **4** is the significance and use of this practice. Section **5** describes user’s responsibilities. Sections **6 – 13** are the main body of the data gathering analysis steps of the EBS process. Section **14** briefly describes the EBS Step 3 classification of environmental condition of property area types. Section **15** contains a list of keywords.

**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.*

## 2. Referenced Documents

### 2.1 ASTM Standards:<sup>2</sup>

**E1527 Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process**

**E1528 Practice for Limited Environmental Due Diligence: Transaction Screen Process**

**D5746 Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities**

### 2.2 Department of Defense Policies:<sup>3</sup>

**DoD Policy on the Environmental Review Process to Reach a Finding of Suitability to Lease (FOSL), September 1993**

**DoD Policy on the Environmental Review Process to Reach a Finding of Suitability to Transfer (FOST) for Property Where No Release or Disposal Has Occurred, June 1994**

**DoD Policy on the Environmental Review Process to Reach a Finding of Suitability to Transfer (FOST) for Property Where Release or Disposal Has Occurred, June 1994**

**DoD Policy on the Implementation of the Community Environmental Response Facilitation Act (CERFA), September 1993**

### 2.3 Department of Defense Guidance Document:

**BRAC<sup>3</sup> Cleanup Plan Guidebook, Fall 1993**

### 2.4 Federal Standards:<sup>4</sup>

**Title 40, Code of Federal Regulations (CFR), Part 300, National Oil and Hazardous Substances Pollution Contingency Plan**

**Title 40, Code of Federal Regulations (CFR), Part 302, Designation Reportable Quantities and Notification**

**Title 40, Code of Federal Regulations (CFR), Part 355, Emergency Planning and Notification**

## 3. Terminology

**3.1** This section provides definitions (of terms not unique to this practice), descriptions of terms specific to this practice, and a list of acronyms and abbreviations used herein. The terms are an integral part of this practice and are critical to its understanding and use. Many of these terms are also found in Practice **E1527**.

### 3.2 Definitions:

**3.2.1 asbestos**—six naturally occurring fibrous minerals found in certain types of rock formations. Of the six, the minerals chrysotile, amosite, and crocidolite have been most commonly used in building products. When mined and processed, asbestos is typically separated into very thin fibers.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard’s Document Summary page on the ASTM website.

<sup>3</sup> Available from Department of Defense, Office of Environmental Security, 3400 Defense Pentagon, Washington, DC 20301-3400.

<sup>4</sup> Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

Because asbestos is strong, incombustible, and corrosion-resistant, asbestos was used in many commercial products beginning early in this century and peaking in the period from World War II into the 1970s. When inhaled in sufficient quantities, asbestos fibers can cause serious health problems.

3.2.2 *asbestos-containing material (ACM)*—any material or product that contains more than 1 % asbestos.

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

3.2.4 *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.

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

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

3.2.7 *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.

3.2.8 *ERNS list*—EPA’s Emergency Response Notification System list of reported CERCLA hazardous substance releases or spills in quantities equal to or greater than the reportable quantity, as maintained by the National Response Center. Notification requirements for such releases or spills are codified in 40 CFR Parts 302 and 355.

3.2.9 *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 Code of Federal Regulations (CFR) as well as published in the Federal Register.

3.2.10 *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 § 6921 *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).” Users of this practice should note that certain states may expand this definition to include other substances not meeting the above definition. The user or environmental professional should consider whether the state in which the installation is located has identified such identified substances.

3.2.11 *hazardous waste*—any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress) and so forth.

3.2.12 *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.

3.2.13 *local street directories*—directories published by private (or sometimes government) sources that show ownership, occupancy, or use of sites, or combination thereof, by reference to street addresses. Often local street directories are available at libraries of local governments, colleges or universities, or historical societies.

3.2.14 *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.

3.2.15 *National Contingency Plan (NCP)*—the National Oil and Hazardous substances Pollution Contingency Plan found at 40 CFR § 300, which is the EPA’s regulations for how hazardous substances are to be cleaned up pursuant to CERCLA.

3.2.16 *National Priorities List*—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.

3.2.17 *occupants*—those tenants, subtenants, or other persons or entities using the property or a portion of the property.

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

3.2.19 *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).”

**3.2.20 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 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).”

**3.2.21 Phase I Environmental Site Assessment**—the process described in Practice **E1527**.

**3.2.22 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.

**3.2.23 property**—the real property that is the subject of the EBS described in this practice as well as the real property adjacent to the subject property (which may be privately owned). Real property includes buildings and other fixtures and improvements located on the property and affixed to the land.

**3.2.24 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.

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

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

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

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

**3.2.29 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. (Commonly, 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. See **3.3.33** and **7.2.4**.

**3.2.30 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).

**3.2.31 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.

**3.2.32 solvent**—a chemical compound that is capable of dissolving another substance and 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.

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

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

**3.2.35 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.

**3.2.36 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.

**3.2.37 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 stormwater 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.

### 3.3 Definitions of Terms Specific to This Standard:

**3.3.1 adjacent properties**—those properties contiguous or partially contiguous to the boundaries of the property being surveyed during an EBS or other activity intended to classify the property into a standard environmental condition of property area type, or other properties relatively near the installation that could pose significant environmental impacts.

have a significant impact on the results of an EBS or on the classification of installation property into standard environmental condition of property area types.

**3.3.2 aerial photographs**—photographs, taken from an aerial platform, having sufficient resolution to allow identification of development and activities of areas encompassing the property. Aerial photographs are commonly available from government agencies or private collections unique to a local area.

**3.3.3 all remedial action taken**—for the purposes of this practice, all remedial action, as described in CERCLA § 120(h)(3)(B)(i), has been taken if “the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to the administrator [of EPA] to be operating properly and successfully. The carrying out of long-term pumping and treating, or operation and maintenance, after the remedy has been demonstrated to the administrator to be operating properly and successfully does not preclude the transfer of the property.” [42 USC § 9620(h)(3)]. Alternatively, in circumstances where a remedy has been constructed, but no ongoing treatment or operation and maintenance is required, for example, “clean closure” or excavation of soil with off-site treatment, all remedial action means that all action required to meet applicable state or federal regulatory standards, including, as required, state or federal regulatory approval, has been taken.

**3.3.4 applicable requirements**—those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or State environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstances found at a CERCLA site. Only those state standards that are identified by a state in a timely manner and that are more stringent than federal requirements may be applicable.

**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 instead of radius to include irregularly shaped properties.

**3.3.6 BRAC statutes**—Title II of the Defense Authorization Amendments and Base Closure and Realignment Act of 1988 (Pub. L. 100-526, 10 USC 2687, note.) and the Defense Base Closure and Realignment Act of 1990 (Part A of Title XXIX of Pub. L. 101-510, 10 USC 2687, note.), collectively.

**3.3.7 closing military installation**—installations identified for closure pursuant to BRAC statutes, or installations previously closed under the authority of 10 USC 2687.

**3.3.8 DoD Component**—collectively, the Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the Inspector General of the Department of Defense, the Defense Agencies and the DoD Field Activities.

**3.3.9 disposal**—the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous substances, or

petroleum products or their derivatives into or on any land or water so that such hazardous substances, or petroleum products or their derivatives or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters including ground water.

**3.3.10 due diligence**—the process of inquiring into the environmental characteristics of a parcel of commercial real estate or other conditions, usually in connection with a commercial real estate transaction. The degree and kind of due diligence vary for different properties and differing purposes.

**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 Practices E1527, E1528, or this practice, although an environmental audit may include an EBS or, if prior audits or EBSs are available, may be part of an EBS.

**3.3.12 environmental baseline survey (EBS)**—a survey of federal real property based on all existing environmental information related to storage, release, treatment, or disposal of hazardous substances or petroleum products or derivatives on the property to determine or discover the obviousness of the presence or likely presence of a release or threatened release of any hazardous substance or petroleum product. In certain cases, additional data, including sampling and analysis, may be needed in the EBS to support the classification of the property into one of the standard environmental condition of property area types. Additionally, an EBS may also satisfy the uncontaminated property identification requirements of CERFA. An EBS will consider all sources of available information concerning environmentally significant current and past uses of the real property, and shall, at a minimum, consist of the following:

**3.3.12.1 Detailed search and review of available information and records in the possession of the DoD Components or records made available by the regulatory agencies or other involved federal agencies.** The DoD Components are responsible for requesting and making reasonable inquiry into the existence and availability of relevant information and records to include any additional study information (for example, surveys for radioactive materials, asbestos, radon, lead-based paint, transformers containing PCB, RCRA Facility Assessments and Investigations, Underground Storage Tank Cleanup Program) to determine the environmental condition of the property;

**3.3.12.2 Review of all reasonably obtainable federal, state, and local government records for each adjacent facility where there has been a release or likely release of any hazardous substance or any petroleum product, and which is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product on the federal real property;**

**3.3.12.3 Analysis of aerial photographs that may reflect prior uses of the property, which are in the possession of the federal government or are reasonably obtainable through state or local government agencies;**

**3.3.12.4 Interviews with current or former employees, or both, involved in operations on the real property.**

3.3.12.5 Visual inspections of the real property; any buildings, structures, equipment, pipe, pipeline, or other improvements on the real property; and of properties immediately adjacent to the real property, noting sewer lines, runoff patterns, evidence of environmental impacts (for example, stained soil, stressed vegetation, dead or ill wildlife) and other observations which indicate actual or potential release of hazardous substances or petroleum products;

3.3.12.6 Identification of sources of contamination on the installation and on adjacent properties which could migrate to the parcel during federal government ownership;

3.3.12.7 Ongoing response actions or actions that have been taken at or adjacent to the parcel; and

3.3.12.8 A physical inspection of property adjacent to the real property, to the extent permitted by owners or operators of such property.

3.3.13 *environmental baseline survey (EBS) report*—the written record of an EBS that includes the following:

3.3.13.1 An executive summary briefly stating the areas of real property (or parcels) evaluated and the conclusions of the EBS;

3.3.13.2 The property identification (for example, address, assessor parcel number, legal description);

3.3.13.3 Any relevant information obtained from a detailed search of federal government records pertaining to the property, including available maps;

3.3.13.4 Any relevant information obtained from a review of the recorded chain of title documents regarding the real property. The review should address those prior ownerships/uses that could reasonably have contributed to an environmental concern, and, at a minimum, cover the preceding 60 years;

3.3.13.5 A description of past and current activities, including all past DoD uses to the extent such information is reasonably available, on the property and on adjacent properties;

3.3.13.6 A description of hazardous substances or petroleum products management practices (to include storage, release, treatment, or disposal) at the property and at adjacent properties;

3.3.13.7 Any relevant information obtained from records reviews and visual and physical inspections of adjacent properties;

3.3.13.8 Description of ongoing response actions or actions that have been taken at or adjacent to the property;

3.3.13.9 An evaluation of the environmental suitability of the property for an intended lease or deed transaction, if known, including the basis for the determination of such suitability; and

3.3.13.10 Reference to key documents examined (for example, aerial photographs, spill incident reports, investigation results).

3.3.14 *environmental condition of property area type*—any of the seven standard environmental condition of property area types defined in the Standard Classification of Environmental Condition of Property Area Types.

3.3.15 *environmental condition of property map*—a map, prepared on the basis of all environmental investigation information conducted to date, that shows the environmental

condition of a DoD installation's real property in terms of the seven standard environmental condition of property area types as defined in the standard classification.

3.3.16 *environmental investigation*—any investigation intended to determine the nature and extent of environmental contamination or to determine the environmental condition of property at a BRAC installation. Environmental investigations may include, but are not limited to, environmental site assessments, preliminary assessments, site inspections, remedial investigations, EBSs, RCRA facility assessments, and RCRA facility investigations.

3.3.17 *environmental professional*—a person possessing sufficient training and experience necessary to conduct an EBS including all activities related to this practice, and from the information and data gathered by such activities, having the ability to develop conclusions regarding environmental condition of property and recognized environmental conditions in connection with the property being evaluated. An individual's status as an environmental professional may be limited to the type of EBS to be performed or to specific steps of the EBS for which the professional is responsible. The person may be an independent contractor of an employee of the Department of Defense or its components.

3.3.18 *fill dirt*—dirt, soil, sand, or other earth, that is obtained off-site, 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.

3.3.19 *innocent landowner defense*—that defense to CERCLA liability provided in 42 USC § 9601(35) and 42 USC § 9607(b)(3). One of the requirements to qualify for this defense is that the party make "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.

3.3.20 *installation restoration program (IRP)*—the DoD program, mandated by 10 USC § 2407 to assess and respond to releases of hazardous substances on military property under the control of the military services. Additionally, based upon policy decisions, the IRP serves as an umbrella program for environmental response in all media, including RCRA corrective action, LUST corrective action, as well as CERCLA removals and remedial actions. Generally, where field sampling or intrusive environmental testing is required, the IRP will serve as a vehicle for such testing. The IRP is also known as the Defense Environmental Restoration Program.

3.3.21 *interviews*—sessions with current or former employees involved in operations on the real property, conducted to ascertain if storage, release, treatment, or disposal of hazardous substances, petroleum products or their derivatives occurred or is occurring on the real property.

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. Local government agencies may include the

appropriate, state agencies with local jurisdiction which perform functions commonly performed in other locations by local government agencies.

**3.3.23 migration**—the movement of contaminant(s) away from a source through permeable subsurface media (such as the movement of a ground water plume of contamination), or movement of contaminant(s) by a combination of surficial and subsurface processes.

**3.3.24 obviousness**—the condition of being plain or evident. A condition or fact which could not be ignored or overlooked by a reasonable observer while conducting a records search or while physically or visually observing the property in conjunction with an EBS.

**3.3.25 other historical sources**—any source or sources other than those designated in **7.2.1 – 7.2.4** 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.

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

**3.3.27 practically reviewable**—information that is practically reviewable is information 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 data bases 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. This term has the same meaning as provided in Practice **E1527**.

**3.3.28 preliminary assessment (PA)**—review of existing information and an off-site reconnaissance, if appropriate to determine if a release or potential release may require additional investigation or action. A PA may include an on-site reconnaissance, if appropriate.

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

**3.3.30 reasonably available**—information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable. This term has the same meaning as the term “reasonably ascertainable” as provided in Practice **E1527**.

**3.3.31 reasonably obtainable**—information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable. This term has the same meaning as the term “reasonably ascertain-

able” as provided in Practice **E1527**. Reasonably available and reasonably obtainable are synonyms.

**3.3.32 recognized environmental conditions**—the presence or likely presence of any hazardous substances or petroleum products on any federal real 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 the environment. 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 and that generally would not be the subject of an enforcement action if these conditions were brought to the attention of appropriate governmental agencies. This term is introduced in Practice **E1527**, and is used herein only in conjunction with EBS Steps 1 and 2 (see **6.2**), as an intermediate outcome prior to the Step 3 classification of environmental condition of property area types. A Phase I Site Assessment results in recognized environmental conditions, but not environmental condition of property area types.

**3.3.33 recorded chain of title documents**—this term has the same meaning as recorded land title records.

**3.3.34 records search and/or review**—detailed search and review of available information and records in the possession of the DoD components and records made available by the regulatory agencies or other involved federal agencies, including, but not limited to IRP studies and analyses, surveys for radioactive materials, asbestos, radon, lead-based paint, electrical devices (that is, transformers) containing PCB, RCRA facility assessments and Investigations to determine what, if any, hazardous substances or petroleum products may be present on the property. For the purposes of adjacent facilities, a records search includes the review of all reasonably obtainable federal, state, and local government records for each adjacent facility where there has been a release or likely release of any hazardous substance or any petroleum product, and which is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product on the federal real property.

**3.3.35 release**—any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any hazardous chemical, extremely hazardous substance, or CERCLA hazardous substance.

**3.3.36 relevant and appropriate requirements**— those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or State environmental or facility siting laws that, while not “applicable” to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. The