

Designation: D6008 - 22

Standard Practice for Determining the Environmental Condition of Federal Property¹

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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 for assessing the environmental condition of property (ECP) of federal real *property*. This practice applies to *property* under consideration for lease, excess and surplus property at closing and realigning military installations, claims reverting to federal ownership such as abandoned mines, and other federallyowned property. The steps in this practice are conducted to fulfill certain requirements of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CER-CLA) section 120(h), as amended by the Community Environmental Response Facilitation Act of 1992 (CERFA) and the federal real property disposal regulations codified in 41 CFR Subpart C (41 CFR 102-75). As such, this practice is intended to help a user to gather and analyze data and information in order to classify property into the applicable environmental condition of property area types (in accordance with the ASTM D5746, Standard Classification of Environmental Condition of Property Area Types, (see Appendix X1). Once documented, the ECP report 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 and CERCLA § 120(h). 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 ECP or during the identification and use of the standard environmental condition of property area types.

1.1.1 Environmental Condition of Property—In accordance with the federal landholding agency policies and General Services Administration's (GSA) federal real property management regulations, an ECP will be prepared or evaluated for its usefulness (and updated if necessary) for any federally-owned

property to be transferred by deed or leased. The ECP will be based on existing environmental information related to storage, release, treatment, or disposal of hazardous substances, munitions, 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 ECP to support the FOST or FOSL. A previously conducted ECP may be updated as necessary and used for making a FOST or FOSL. An ECP 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 ECP provides a useful reference document and assists in compliance with hazard abatement policies related to asbestos and lead-based paint. The ECP process consists of discrete steps. This practice principally addresses ECP-related information gathering and analysis.

1.1.1.1 *Discussion*—Prior versions of this practice referred to environmental baseline surveys (EBS). The 2018 Department of Defense 4165.66M Base Redevelopment and Realignment Manual changed the focus to *ECP*. Appendix 3 of DODM 4165.66M provides direction on the preparation of FOST and FOSL documentation. Section C2.4.2.3 of DODM 4165.66M provides direction for Department of Defense *property* proposed for *disposal* and redevelopment.

1.1.2 CERCLA Section 120(h) Requirements—This practice is intended to assist with the identification of federal real property and DoD 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.), (see Appendix X2). Examples of other federal landholding agencies that must comply with CERCLA §120(h) requirements include the Bureau of Land Management, the Federal Aviation Administration, and U.S. Forest Service.

1.1.3 CERFA Requirements—This practice provides information 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 and the Federal

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Management Regulations, Real Property Disposal rules codified in 41 CFR 102-75. 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 and federal property 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 federal landholding agency 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 (see EPA Office of Enforcement and Compliance Assurance, May 2019). 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.

Note 1—Confirmed releases of *emerging chemicals of environmental concern* may require additional consideration (see Office of the Undersecretary of Defense. Policy Memorandum for Clarifications and Upcoming Changes to Department of Defense Instruction 4715.18 in Response to Department of Defense Office of Inspector General Findings, April 2022).

- 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 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. These applicable or relevant and appropriate requirements (ARARs) may have a bearing upon the ultimate disposition of the federal property. Users are cautioned that federal, state, and local laws may impose additional ECP 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.

Note 2—The General Services Administration's Excess Real Property Due Diligence Checklist for Federal Landholding Agency Customers, November 2017, provides additional detail on federal *ARARs*.

- 1.1.7 *Non-Federal Property*—This standard may also be used by state and local agencies to assess the environmental condition of non-federal *property*.
- 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 *ECP*, (2) to facilitate the development of high quality, standardized *environmental condition of property maps* to be included in an *ECP* 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* (see Classification D5746), (4) to facilitate the development of a standard guide for preparing and updating *ECP reports*, and (5) comply with the Federal Real Property Disposal regulations codified in 41 CFR 102-75.
- 1.3 Limitations—Users of this practice should note that, while many of the elements of an ECP are performed in a manner consistent with other "due diligence" functions, an ECP is not prepared to satisfy a purchaser of real property's duty to conduct "all appropriate inquiries", as defined in 40 CFR 312, to establish an "innocent landowner defense" to CERCLA § 107 liability. Any such use of any ECP by any party is outside the control of the federal agencies and beyond the scope of any ECP. No warranties or representations are made by any federal agency, its employees, or contractors that any ECP 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 ECP process. Section 14 briefly describes the ECP Step 3 classification of environmental condition of property area types. Section 15 contains a list of keywords. The seven appendices are non-binding and non-mandatory; they provide background, guidance, and examples.
- 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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.
- 1.6 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

- 2.1 ASTM Standards:²
- D5746 Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities
- E1527 Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process
- E2107 Practice for Environmental Regulatory Compliance Audits
- E2247 Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property
- E2365 Guide for Environmental Compliance Performance Assessment
- 2.2 Federal Landholding Agency Documents:³
- Department of the Navy Base Realignment and Closure Implementation Guidance, March 2007
- U.S. Army Regulation 200-1, Environmental Protection and Enhancement, December 2007
- Department of Defense Manual 4715.20, Defense Environmental Restoration Program (DERP) Management, August 2018
- Department of Defense 4165.66M, Base Redevelopment and Realignment Manual, August 2018
- Department of Defense Instruction 4715.18, Emerging Chemicals (ECs) of Environmental Concern, September 4, 2019
- Department of the Air Force Instruction 32-7020, Environmental Restoration Program, December 2020
- Office of the Undersecretary of Defense, Policy Memorandum for Clarifications and Upcoming Changes to Department of Defense Instruction 4715.18 in Response to Department of Defense Office of Inspector General Findings, April 2022
- 2.3 Federal Regulations: 4 at alog/standards/sist/0ba3b4f6
- Title 32, Code of Federal Regulations (CFR), Part 179, Munitions Response Site Prioritization Protocol (MRSPP)
- 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 312, Innocent Landowners, Standards for Conducting All Appropriate Inquiries
- Title 40, Code of Federal Regulations (CFR), Part 355, Emergency Planning and Notification
- Title 40, Code of Federal Regulations (CFR) Part 373, Reporting Hazardous Substance Activity When Selling or Transferring Federal Real Property
- ² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.
- 3 Available from Department of Defense, Office of Environmental Security, 3400 Defense Pentagon, Washington, DC 20301-3400.
- ⁴ Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

- Title 41, Code of Federal Regulations (CFR) Part 102-75 Federal Management Regulations, Subchapter C, Real Property Disposal
- 2.4 US EPA References and Databases:⁵
- RCRA 40 CFR Part 264, Subpart X Permit Writers Technical Resource Document. EPA, Office of Solid Waste, Washington, DC. June 1997
- OLEM Directive 9200.2-187, Best Practice Process for Identifying and Determining State Applicable or Relevant and Appropriate Requirements Status Pilot, October 2017
- EPA Office of Enforcement and Compliance Assurance, Transmittal of Revised Policy Towards Landowners and Transferees of Federal Facilities to Encourage Cleanup and Reuse at Federal Facilities on the National Priorities List (NPL), May 2019
- Envirofacts A single point of access to select U.S. EPA environmental data. This website provides access to several EPA databases to provide the user with information about environmental activities that may affect air, water, and land anywhere in the United States (https://enviro.epa.gov/)
- FEDFacts Information about the Federal Electronic Docket Facilities regarding contaminated federal facility sites in specific communities, technical fact sheets and tools and resources to help government agencies and their contractors fulfill cleanup obligations (https://www.epa.gov/fedfac)
- Superfund Enterprise Management System (https://www.epa.gov/enviro/sems-search)

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.
 - 3.2 Definitions:
- 3.2.1 aqueous film forming foam (AFFF), n—a fire suppressant used to extinguish flammable liquid fires such as fuel fires.
- 3.2.1.1 *Discussion—AFFF* is often used in facility fire suppression systems, fire fighting vehicles, and at fire training facilities.
- 3.2.2 asbestos, n—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.
- 3.2.2.1 *Discussion*—Because *asbestos* is strong, incombustible, and corrosion-resistant, *asbestos* was used in many commercial products beginning early in the 20th century and peaking in the period from World War II into the 1970s.
- 3.2.3 asbestos-containing material (ACM), n—any material or product that contains more than 1 % asbestos.
- 3.2.4 *contaminated public wells, n*—public wells used for drinking water that have been designated by a government

⁵ Available from United States Environmental Protection Agency (EPA), William Jefferson Clinton Bldg., 1200 Pennsylvania Ave., NW, Washington, DC 20460, http://www.epa.gov.

entity as contaminated by toxic substances (for example, chlorinated *solvents*), or as having water unsafe to drink without treatment.

- 3.2.5 drum, n—as defined by the U.S. Department of Transportation, a flat-ended or convex-ended cylindrical packaging made of metal, fiberboard, plastic, plywood, or other suitable materials; this definition does not include cylinders, jerricans, wooden barrels or bulk containers.
- 3.2.5.1 *Discussion*—A metal or plastic 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*, *n*—structure or portion thereof used for residential habitation.
- 3.2.7 environmental lien, n—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 emerging chemicals of environmental concern, n—as defined in DoDI 4715.18, chemicals relevant to the DoD that are characterized by a perceived or real threat to human health or the environment and that have new or changing toxicity values or new or changing human health or environmental regulatory standards.
- 3.2.8.1 Discussion—These chemicals are defined as emerging contaminants in Practice E1527. Per- and polyfluoroalkyl substances (PFAS) are examples of emerging chemicals of environmental concern at federally-owned property. Although PFAS are not currently regulated as hazardous substances under CERCLA, some states have begun regulating the disposal or remediation of PFAS-impacted soil, sediment, surface water, and groundwater. For federal *property* where firefighting activities, including training, were conducted with aqueous film-forming foam (AFFF) and properties where electroplating operations were conducted, the user may refer to Appendix X4 for guidance addressing emerging chemicals of environmental concern. See also the Policy Memorandum for Clarifications and Upcoming Changes to Department of Defense Instruction 4715.18 in Response to Department of Defense Office of Inspector General Findings, April 2022.
- 3.2.9 *ERNS list, n*—the Emergency Response Notification System (ERNS) is a database used to store information on notifications of oil discharges and *hazardous substances* releases.
- 3.2.9.1 *Discussion*—EPA's Emergency Response Notification System is a 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.
- 3.2.10 *hazardous substance*, *n*—means that group of substances defined as hazardous under CERCLA §101(14), and that appear at 40 CFR §302.4.

- 3.2.11 hazardous waste, n—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).
- 3.2.11.1 *Discussion*—Some state waste management programs regulate additional solid wastes as *hazardous waste*.
- 3.2.12 *landfill*, *n*—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.
- 3.2.12.1 *Discussion*—The *user* is cautioned that not all garbage dumps and trash dumps have permits issued by either the state or local regulatory agency.
- 3.2.13 *local street directories, n*—directories published by private (or sometimes government) sources that list the occupant(s) of a specific address at the time the occupant data was collected, typically within in a year of the publication date of the directory.
- 3.2.13.1 *Discussion—Local street directories* may not be available for federally-owned *property*.
- 3.2.14 munitions and explosives of concern, *n*—distinguishes specific categories of military munitions that may pose unique explosives safety risks, such as unexploded ordnance, as defined in 10 U.S.C. §101(e)(5); discarded military munitions, as defined in 10 U.S.C. §2710(e)(2); or munitions constituents (for example, TNT, RDX), as defined in 10 U.S.C. §2710(e)(3), present in high enough concentrations to pose an explosive hazard.
- 3.2.15 National Contingency Plan (NCP), n—the National Oil and Hazardous Substances Pollution Contingency Plan found at 40 CFR § 300, which is the EPA's regulations for how releases of hazardous substances are to be cleaned up pursuant to CERCLA.
- 3.2.16 *National Priorities List, n*—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*, *n*—those tenants, subtenants, or other persons or entities using the *property* or a portion of the *property*.
- 3.2.18 *per- and polyfluoroalkyl substances (PFAS)*, *n*—a group of manufactured chemicals consisting of polymeric chains of carbon bonded to fluorine atoms, usually with a polar functional group at the head.
- 3.2.18.1 *Discussion—PFAS* are fluorinated substances with a carbon chain structure. In perfluoroalkyl substances (PFAAs), each carbon atom in the chain is fully saturated with fluorine (carbon-fluorine bonds only), whereas the carbon chain in polyfluoroalkyl substances is mostly saturated with fluorine (carbon-fluorine bonds), but also contains carbon-hydrogen bonds.
- 3.2.19 *Phase I Environmental Site Assessment, n*—the process described in Practice E1527 and Practice E2247.

- 3.2.20 pits, ponds, or lagoons, n—man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing hazardous substances or petroleum products.
- 3.2.20.1 *Discussion*—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.
- 3.2.21 *property*, *n*—real *property*, including buildings, fixtures, and other improvements located on and affixed to the land.
- 3.2.22 property tax files, n—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.
- 3.2.23 *RCRA generators, n*—those persons or entities that generate *hazardous wastes*, as defined and regulated by RCRA and have submitted EPA form 8700-12 to the EPA.
- 3.2.24 *RCRA generators list, n*—list kept by EPA of those persons or entities that have notified EPA that they generate *hazardous wastes*, as defined and regulated by RCRA.
- 3.2.25 RCRA TSD facilities, n—those facilities on which treatment, storage, or disposal, or a combination thereof, of hazardous wastes takes place, subject to regulation and permitting under RCRA or a delegated state's hazardous waste management program; these facilities have submitted EPA Form 8700-23 to the EPA.
- 3.2.26 RCRA TSD facilities list, n—list kept by EPA of those facilities that have submitted EPA Form 8700-23 to the agency.
- 3.2.27 recorded land title records, n—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 (see 3.2.32 and 7.2.4, and 40 CFR §312.24(a)).
- 3.2.28 records of emergency release notifications (SARA§ 304), n—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.
- 3.2.28.1 *Discussion*—Records of such notifications are "records of emergency release notifications" (SARA § 304) and may be found in the ERNS database.
- 3.2.29 *safety data sheet (SDS), n*—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.
- 3.2.30 *solid waste disposal site*, *n*—a place, location, tract of land, area, or premises used for the *disposal* of solid wastes as defined by state solid waste regulations.
 - 3.2.30.1 Discussion—The term is synonymous with the

- term *landfill* and is also known as a garbage dump, trash dump, or similar term. Historic *solid waste disposal sites* at federallyowned *properties* may not have operated under a permit.
- 3.2.31 *solvent, n*—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 dry cleaning, the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in industrial settings.
- 3.2.31.1 *Discussion—Solvents* are routinely use for parts washing and the preparation of metal surfaces for plating.
- 3.2.32 *State registered USTs*, *n*—State lists of underground *storage* tanks required to be registered under Subtitle I, Section 9002 of RCRA.
- 3.2.33 *sump*, *n*—a pit, cesspool, or similar receptacle where liquids drain, collect, or are stored.
- 3.2.34 Superfund Enterprise Management System (SEMS), n—the official repository for site and non site-specific Superfund data in support of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). It contains information on hazardous waste site assessment and remediation.
- 3.2.34.1 *Discussion—SEMS* contains information on *hazardous waste* site assessment and remediation including PAs, remedial investigations and feasibility studies, chemicals of concern, and 5-year review reports.
- 3.2.35 underground storage tank (UST), n—any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more beneath the surface of the ground.
- 3.2.35.1 Discussion—for the purposes of this practice, regulated substances include hazardous substances, and petroleum and materials subject to regulation under 40 CFR Part 280.
- 3.2.36 USGS 7.5 Minute Topographic Map, n—the phrase "USGS topographic map" refers to maps that cover a quadrangle that measures 7.5 minutes of longitude and latitude on all sides, so these are also referred to as 7.5-minute maps, quadrangle maps, or "quad" maps with a wide range of scales, but the scale used for all modern USGS topographic maps is 1:24,000.
- 3.2.37 *wastewater*, *n*—water that (*I*) means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product or (2) conveys or has conveyed sewage.
- 3.2.37.1 Discussion—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. Wastewater includes washdown water that flows to a floor drain, *sump*, or drywell.
 - 3.3 Definitions of Terms Specific to This Standard:

- 3.3.1 *adjoining properties, n*—any real *property* or *properties* the border of which is (are) shared in part or in whole with that of the federally-owned *property*, or that would be shared in part or in whole with that of the federally-owned *property* but for a street, road, or other public thoroughfare separating the *properties*.
- 3.3.2 aerial photographs, n—photographs, taken from an aerial platform, having sufficient resolution to allow identification of development and activities of areas encompassing the property.
- 3.3.2.1 *Discussion—Aerial photographs* are commonly available from government agencies or private collections unique to a local area.
- 3.3.3 all required remedial action, n—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)].
- 3.3.3.1 Discussion—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 (see section 12.2). Land use restrictions may be components of required remedial action.
- 3.3.4 applicable or relevant and appropriate requirements (ARARs), n—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 (see EPA OLEM 9200.1-187).
- 3.3.4.1 *Discussion*—Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate.
- 3.3.5 approximate minimum search distance, n—the area for which agency records must be obtained and reviewed pursuant to Section 7 subject to the limitations provided in that section.
- 3.3.5.1 *Discussion*—This may include areas outside the federally-owned *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 *area in question, n*—that portion of federal real *property* that is the subject of the *ECP*.
- 3.3.6.1 *Discussion*—The *area in question* may be a subset of a larger piece of federal *property* or may be *property* that has

- been transferred to federal control through Congressional action. The FOSL or FOST may be limited to an *area in question* as opposed to a larger federally-owned *property*.
- 3.3.7 *BRAC statutes*, *n*—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.
- 3.3.7.1 *Discussion*—The 2005 Round (P.L. 107-107); amended the Defense Base Closure and Realignment Act of 1990 (P.L. 101- 510). No new *BRAC* activities have been authorized by Congress since 2016.
- 3.3.8 *DoD component, n*—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, v—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*, *n*—the process, in accordance with 41 CFR §102.75-115 through §102-75.130, of inquiring into the environmental characteristics of a federal *property* scheduled for transfer, sale, or *disposal*.
- 3.3.11 *environmental compliance audit, n*—the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations (see E2107 and E2365).
- 3.3.12 environmental condition of property (ECP), n—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.
- 3.3.12.1 *Discussion*—In certain cases, additional data, including sampling and analysis, may be needed in the *ECP* to support the classification of the *property* into one of the *standard environmental condition of property area types*. Additionally, an *ECP* may also satisfy the uncontaminated *property* identification requirements of CERFA. An *ECP* 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 steps identified in Section 6.
- 3.3.13 environmental condition of property (ECP) report, n—the written record of an ECP; see Appendix X5 for a recommended report format.
- 3.3.13.1 *Discussion*—The *ECP report* is the documentation for the *Standard Classification* in accordance with D5746.
- 3.3.14 environmental condition of property area type, n—any of the seven standard environmental condition of



property area types defined in D5746, Standard Classification of Environmental Condition of Property Area Types (see Appendix X1).

- 3.3.15 environmental condition of property map, n—a map, prepared on the basis of all environmental investigation information conducted to date, that shows the environmental condition of a DoD installation's or federal agency's real property in terms of the seven standard environmental condition of property area types as defined in the standard classification D5746.
- 3.3.16 *environmental investigation*, *n*—any investigation intended to determine the nature and extent of environmental contamination or to determine the environmental condition of *property* at a DoD installation or other federally-owned *property*.
- 3.3.16.1 Discussion—Environmental investigations may include, but are not limited to, environmental site assessments, preliminary assessments (PAs), site inspections, remedial investigations, ECPs, RCRA facility assessments, and RCRA facility investigations. The results of some environmental investigations can be found in SEMS.
- 3.3.17 environmental professional, n—a person possessing sufficient training and experience necessary to conduct an ECP 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.
- 3.3.17.1 *Discussion*—This individual may be an employee or independent contractor of the *user*. An individual's status as an *environmental professional* may be limited to the type of *ECP* to be performed or to specific steps of the *ECP* for which the professional is responsible. The person may be an independent contractor or an employee of the federal government. This definition is different than the definition of an *environmental professional* in the EPA's All Appropriate Inquiries Rule (40 CFR §312.10).
- 3.3.18 *fill dirt*, *n*—dirt, soil, sand, or other earth taken from a different location, 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.
- 3.3.18.1 *Discussion*—The potential for *fill dirt* to be contaminated with *hazardous substances* should be considered, and if appropriate, the material should be tested and analyzed for chemicals of concern.
- 3.3.19 hazardous substance activity, v—defined as (1) the known release of hazardous substances in quantities equal to or greater than the reportable quantity found in 40 CFR § 302.4; (2) the disposal of a hazardous substance at the subject facility; or (3) the storage for one year or more of a hazardous substance in quantities of 1000 kilograms or more, or the reportable quantity found in 40 CFR § 302.4, whichever is greater.
- 3.3.19.1 Discussion—Hazardous substance activity includes storage in quantities greater than or equal to one

kilogram if the substances are listed under 40 CFR § 261.30 as acutely *hazardous substances*.

- 3.3.20 *innocent landowner defense*, *n*—that defense to CERCLA liability provided in 42 USC § 9601(35) and 42 USC § 9607(b)(3) (see also 40 CFR Part 312).
- 3.3.20.1 *Discussion*—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." (see 40 CFR §312).
- 3.3.21 installation restoration program (IRP), n—the DoD program, mandated by 10 USC § 2701-2710 to assess and respond to releases of *hazardous substances* on military *property* under the control of the military services.
- 3.3.21.1 *Discussion*—Tthe *IRP* is one of two programs established under the Defense Environmental Restoration Program (DERP) to identify, investigate and clean up hazardous substances, pollutants, and contaminants that pose environmental health and safety risks at active military installations and formerly used defense sites (FUDS). In 2001, DoD established the Military Munitions Response Program (MMRP) to address sites, referred to munitions response sites or (MRSs) known or suspected to contain unexploded ordnance, discarded military munitions, or munitions constituents. Through the IRP and MMRP, DoD complies with environmental cleanup laws, such as CERCLA (see 32 CFR 179, Munitions Response Site Prioritization Protocol). 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 (see DoDM 4715.20).
- 3.3.22 interviews, n—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.
- 3.3.23 *local government agencies, n*—those agencies of municipal or county government having jurisdiction over the *property*.
- 3.3.23.1 *Discussion*—Municipal and county government agencies include, but are not limited to, cities, parishes, townships, and similar entities. *Local government agencies* may also include, where appropriate, state agencies with local jurisdiction which perform functions commonly performed in other locations by *local government agencies*.
- 3.3.24 *migration*, *v*—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; vapor intrusion is an example of *migration*.
- 3.3.25 *obviousness*, *n*—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 ECP.

- 3.3.26 *open burning/open detonation*, *n*—open detonation and open burn operations are used to destroy excess, obsolete, or unserviceable munitions, explosives, propellants, and pyrotechnics.
- 3.3.26.1 *Discussion*—In open burning, materials such as rocket fuel are destroyed by self-sustained combustion after being ignited. In general, electric initiation systems are preferable because they provide better control. In open detonation, explosives and munitions are destroyed by a detonation of added explosive charges. Historically, these operations occurred at land surface or in pits, (see EPA 1997).
- 3.3.27 physical setting sources, n—sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a property.
- 3.3.28 practically reviewable, adj—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.
- 3.3.28.1 Discussion—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.
- 3.3.29 preliminary assessment (PA), n—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.
- 3.3.30 *publicly available, adj*—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, n*—information that is (1) *publicly available* (2) obtainable from a source within reasonable time and cost constraints, and (3) *practically reviewable*.
- 3.3.32 recognized environmental conditions, n—(1) the presence of hazardous substances or petroleum products in, on, or at the federally-owned property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on or at the federally-owned property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on or at the federally-owned property under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.
- 3.3.32.1 *Discussion*—The term includes *hazardous sub-stances* or petroleum products even under conditions in com-

pliance 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 ECP 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 Environmental Site Assessment results in recognized environmental conditions, but not environmental condition of property area types.

- 3.3.33 recorded chain of title documents, n—this term has the same meaning as recorded land title records.
- 3.3.34 records search and/or review, v—detailed search and review of available information and records in the possession of the DoD components, the federal landholding agency 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, asbestos-containing materials, 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.
- 3.3.34.1 *Discussion*—For the purposes of *adjoining properties*, a records search includes the review of 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, v—as defined in CERCLA §101(22), 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 remedial actions, n—as defined in CERCLA §101(22), those actions consistent with a permanent remedy taken instead of, or in addition to, removal action in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment.
- 3.3.37 removal, v—remove or removal means the cleanup or removal of released hazardous substances from the environment; such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment; such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances; the disposal of removed material; or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare of the United

States or to the environment, which may otherwise result from a *release* or threat of *release*.

- 3.3.37.1 *Discussion*—The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under section 104(b) of CERCLA, post-*removal* site control, where appropriate, and any emergency assistance which may be provided under the Disaster Relief Act of 1974.
- 3.3.38 required remedial actions, n—remedial actions determined necessary to comply with the requirements of CER-CLA § 120(h)(3)(B)(i).
- 3.3.38.1 *Discussion*—"Remedial" means actions consistent with permanent remedy taken instead of, or in addition to, *removal* actions.
- 3.3.39 required response actions, n—removal and/or remedial actions determined necessary to comply with the requirements of CERCLA § 120(h)(3)(B)(i).
- 3.3.39.1 *Discussion*—For federal landholding agencies, these actions may include the imposition and maintenance of land use controls as an enforceable clause in the FOSL or FOST.
- 3.3.40 significant and significance, adj—in this practice, significant and significance connote the opposite of trivial or de minimis.
- 3.3.40.1 Discussion—An event or condition is considered significant if it has the potential to present a nontrivial risk to human health and the environment, using the risk range established by the NCP. A probability is considered significant when an environmental professional estimates the probability as nontrivial. For example, in the hypothetical case of an underground tank that was installed and removed prior to the existence of regulatory requirements for tank closure, the environmental professional must evaluate the possibility of release from the tank in the absence of soil testing results. If such an evaluation, based upon observed site conditions and documented soil corrosivity characteristics were to conclude that the probability of release is trivial or very close to zero, then no soil testing would be undertaken in the absence of a specific regulatory requirement for such testing.
- 3.3.41 *site inspection (SI)*, *n*—a systematic examination of the subject *property* to determine whether there is a *release* or potential *release* and the nature of the associated threats.
- 3.3.41.1 *Discussion*—The objective of the *visual inspection* is to perform those parts of Steps 1 and 2 of the *ECP* process pertaining to visually obtaining information indicating the likelihood of *recognized environmental conditions* in connection with the *property*, so that *environmental condition of property area type* determinations can be made.
- 3.3.42 *standard classification*, *n*—the Standard Classification of Environmental Condition of Property Area Types (see D5746).
- 3.3.43 standard environmental condition of property area type, n—one of the seven environmental condition of property area types defined in the Standard Classification D5746.

- 3.3.44 *standard practice, n*—an accepted procedure for the performance of one or more operations or functions.
- 3.3.45 *storage*, *v*—the holding of *hazardous substances* for a temporary period, at the end of which the *hazardous substance* is either used, neutralized, *disposed* of, or stored elsewhere.
- 3.3.45.1 *Discussion—Storage* of RCRA-regulated waste for a period that exceeds 90-days may require a permit issued by the US EPA or a state with delegated authority to enforce RCRA regulations.
- 3.3.46 *user*, *n*—the party seeking to use this practice to perform an *ECP* of the *property*. A *user* may include, without limitation, a *DoD component* (acting as owner of the *property*) or any federal landholding agency.
- 3.3.47 *visual and/or physical inspection, v*—actions taken during an *ECP* to include observations made by vision while walking through or otherwise traversing a *property* and structures located on it and observations made by the sense of smell, particularly observations of noxious or foul odors.
- 3.3.47.1 *Discussion*—Due to the remoteness of some of the *properties* covered by this practice, the term visually and/or physically observed also includes aerial photography, aerial imagery, and/or aerial flyovers. These techniques may be used in conjunction with, or in lieu of, walking through areas (such as clearings/disturbed soil, mounds, trenches, structures, and so forth) to identify the *storage*, use, or *release* of *hazardous substances* or petroleum.
 - 3.4 Acronyms and Abbreviations:
- 3.4.1 *AFFF*—aqueous film-forming foam
- 3.4.2 ARARs—applicable or relevant and appropriate requirements
 - 3.4.3 BETX—benzene, ethylbenzene, toluene, xylene
- 3.4.4 *BRAC*—base realignment and closure
- 3.4.5 *CERCLA*—Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 USC 9620 *et seq.*)
- 3.4.6 *CERFA*—Community Environmental Response Facilitation Act of 1992 (102 Pub. L. 426, 106 Stat. 2174)
 - 3.4.7 CFR—Code of Federal Regulations
 - 3.4.8 DEA—diethylamine
 - 3.4.9 DIPA—diisopropanolamine
 - 3.4.10 *DMM*—discarded military munitions
 - 3.4.11 DoD—Department of Defense
 - 3.4.12 *ECP*—environmental condition of *property*
- 3.4.13 *EPA*—United States Environmental Protection Agency
- 3.4.14 *EPCRA*—Emergency Planning and Community Right to Know Act, 42 USC
 - 3.4.15 *ERNS*—Emergency Response Notification System
 - 3.4.16 ESA—environmental site assessment
- 3.4.17 *FOSL*—Finding of Suitability to Lease as described in applicable DoD Policy



- 3.4.18 *FOST*—Finding of Suitability to Transfer as described in applicable DoD Policy
 - 3.4.19 GSA—U.S. General Services Administration
 - 3.4.20 IRP—Installation Restoration Program
 - 3.4.21 LUST—leaking underground storage tank
 - 3.4.22 MEA—monoethanolamine
 - 3.4.23 *MEC*—munitions and explosives of concern
- 3.4.24 NCP—National Contingency Plan (40 CFR Part 300)
 - 3.4.25 NORM—naturally occurring radioactive material
 - 3.4.26 PA—preliminary assessment
 - 3.4.27 PAHs—polycyclic aromatic hydrocarbons
 - 3.4.28 *PCBs*—polychlorinated biphenyls
- 3.4.29 *RCRA*—The Resource Conservation and Recovery Act, as amended, 42 USC 6901 *et seq*.
- 3.4.30 SARA—Superfund Amendments and Reauthorization Act of 1986
 - 3.4.31 SDS—safety data sheet
 - 3.4.32 SEMS—Superfund Enterprise Management Systems
 - 3.4.33 SI—site inspection
 - 3.4.34 TSD-treatment, storage, and disposal
 - 3.4.35 *TPH*—total petroleum hydrocarbons
 - 3.4.36 USC—United States Code
 - 3.4.37 USGS—United States Geological Survey
 - 3.4.38 UST—underground storage tank
 - 3.4.39 *UXO*—unexploded ordnance **JOCUMENT**
 - 3.4.40 WWTP—wastewater treatment plant

4. Significance and Use

4.1 Uses—This practice is intended for use by federal agencies, and environmental professionals in order to facilitate ECP efforts. It is also intended for use by preparers and reviewers of environmental condition of property maps and ECP reports used to support CERFA uncontaminated property identifications and property suitable for transfer by lease or by deed. GSA regulations addressing the disposal of federal property (41 CFR §105-72), require the landholding agency to assert either that (a) there is no evidence of hazardous substance activity, or (b) there is evidence of hazardous substance activity that occurred on the property. If there is evidence that hazardous substance activity occurred on the property, the landholding agency has a "due diligence" obligation to provide detailed, accurate information on all "reportable quantities" of hazardous substances stored, released, or disposed of on property that it reports to GSA for disposal. The specific substances that must be reported under CERCLA and their reporting limits are described in 40 CFR §302.4 and 40 CFR §373. If the landholding agency discloses that hazardous substance activity took place on the property, then the landholding agency must assert whether or not all required remedial action necessary to protect human health and the environment has been taken with respect to those hazardous substances.

- 4.1.1 The *ECP reports* prepared in accordance with this practice may be used to achieve compliance with the federal Management Regulations, Real Property Disposal rules codified in 41 CFR §102-75.
 - 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 (see 40 CFR §373, 41 CFR §102-75 and Section 208 of the Federal Land Policy and Management Act, Public Law 94-579).
- 4.2.2 Residential Tenants/Purchasers and Others—No implication is intended that it is currently customary practice for residential tenants of multifamily residential buildings, tenants of single-family homes or other residential real estate, or purchasers of dwellings for one's own residential use, to conduct an ECP in connection with these transactions. Thus, these transactions are not included in the term commercial real estate transactions. Thus, although such property may be included within the scope of an ECP, their occupants shall not be treated as key site personnel with regard to the housing occupied for the purpose of conducting an ECP.
- 4.2.3 Site-Specific—This practice is site-specific in that it relates to assessment of environmental conditions of federal real 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 off-site environmental liabilities.
 - 4.3 Related Practices—See Practices E1527 and E2247.
- 4.4 Principles—The following principles are an integral part of this practice and all related practices 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 ECP or in judging whether a user or environmental professional has conducted appropriate inquiry or has otherwise conducted an adequate ECP.
- 4.4.1 *Uncertainty Not Eliminated*—No *ECP* can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a *property*. Performance of this practice is intended to reduce uncertainty regarding the potential for *recognized environmental conditions* in connection with a *property* to the minimum practicable level, but not eliminate such uncertainty altogether, as well as to recognize reasonable limits of time and cost for *property* information.
- 4.4.2 Level of Inquiry is Variable—Not every federal property will warrant the same level of ECP effort. Consistent with good practice, the appropriate level of ECP will be guided by the type of property subject to ECP and the information developed in its conduct.
- 4.4.3 Comparison with Subsequent Inquiry—It should not be concluded or assumed that an inquiry was not an appropriate inquiry merely because the inquiry did not identify recognized environmental conditions in connection with a property. The

ECPs must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent ECPs should not be considered valid standards to judge the appropriateness of any prior ECP based on hindsight, new information, use of developing technology or analytical techniques, or other factors.

- 4.5 Continued Viability of Environmental Baseline Survey—An ECP meeting or exceeding this practice and completed less than 180 days prior to the date of a subsequent use is presumed to be valid for that use. An ECP not meeting or exceeding this practice or completed more than 180 days previously may be used to the extent allowed by 4.6 4.6.5.
- 4.6 Prior ECP Usage—This practice recognizes that ECPs performed in accordance with this practice or otherwise containing information which was reasonably accurate at the time prepared will include information that subsequent users may want to use to avoid undertaking duplicative ECP procedures. Therefore, this practice describes procedures to be followed to assist users in determining the appropriateness of using information in ECPs performed previously. The system of prior ECP usage is based on the following principles that should be adhered to in addition to the specific procedures set forth elsewhere in this practice:
- 4.6.1 Use of Prior Information—Subject to 4.6.4, users and environmental professionals may use information in prior ECPs provided such information was generated as a result of procedures that meet or exceed the requirements of this practice or accurately state the limitations of the information presented. When using information from an ECP which, as a whole, fails to meet or exceed the requirements of this practice, the use shall be limited to those portions of the ECP which, based upon the limitations and methodology of the ECP report, the environmental professional finds to be reasonably accurate.

Note 3—Earlier versions of this practice required the review and analysis of a significantly smaller set of records.

- 4.6.2 *Prior ECP Meets or Exceeds*—Subject to 4.6.4, a prior *ECP* may be used in its entirety, without regard to the specific procedures set forth in these practices if, in the reasonable judgment of the *user*, the prior *ECP* meets or exceeds the requirements of this practice and the conditions at the *property* likely to affect *environmental condition of property area types* in connection with the *property* are not likely to have changed materially since the prior *ECP* was conducted. In making this judgment, the *user* should consider the type of *property* subject to the *ECP* and the conditions in the area surrounding the *property*.
- 4.6.3 Current Investigation—Except as specifically provided in 4.6.2, prior ECPs should not be used without current investigation of conditions likely to affect the environmental condition of property in connection with the property that may have changed materially since the prior ECP was conducted. For an ECP to be consistent with this practice, a new visual inspection, interviews, an update of the records review, and other appropriate activities may have to be performed.
- 4.6.4 Actual Knowledge Exception—If the user or environmental professional(s) conducting an ECP has actual knowl-

edge that the information being used from a prior *ECP* is not accurate or if it is obvious, based on other information obtained by means of the *ECP* or known to the person conducting the *ECP*, that the information being used is not accurate, such information from a prior *ECP* may not be used.

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

5. User's Responsibilities

- 5.1 *Scope*—This section is limited to the responsibilities of *users* of this practice. *Users* may be either employees of federal landholding agencies or *environmental professionals* contractually engaged to perform *ECPs*. *Users* of this practice should be familiar with its entire contents before conducting or documenting an *ECP*, and to use best professional judgment regarding its applicability to a particular situation.
- 5.1.1 DoD Component Staff—DoD component staff who have both the requisite specialized knowledge and experience and appropriate training can use this practice as a starting point for conducting or updating ECPs. Although this practice has been designed to help DoD components meet certain legal and policy requirements, it should not be used as a substitute for meeting environmental, BRAC statute, or health and safety legal requirements that exist under various laws, regulations, and DoD and DoD component policies and guidance. Other federal landholding agencies may have agency-specific policies and procedures that the user should consult during the ECP process.
- 5.1.1.1 *Discussion*—Department of Defense 4165.66M Base Redevelopment and Realignment Manual and Department of Defense Manual 4715.20, Defense Environmental Restoration Program (DERP) Management, establish consistent procedures to be used by all *DoD components*. The *user* should determine if *DoD component*-specific guidance or procedures are applicable to the *ECP*.
- (1) U.S. Army installations should determine if U.S. Army Regulation 200-1, Environmental Quality Environmental Protection and Enhancement, applies to the *ECP*.
- (2) U.S. Air Force installations should determine if Department of the Air Force Instruction 32-7020, applies to the ECP.
- (3) U.S. Navy and Marine installations should determine is Department of the Navy Base Realignment and Closure Implementation Guidance applies to the *ECP*.
- 5.1.2 Environmental Professionals—Environmental professionals who have both the requisite specialized knowledge and experience, and appropriate training can use this practice as a starting point for conducting or updating ECPs. This practice has been designed to help staff environmental professionals, as well as environmental professionals contractually engaged by federal agencies, including DoD components, to conduct ECPs, in accordance with applicable legal and policy requirements. This practice should not be used as a substitute for meeting environmental, BRAC statute, or health and safety legal requirements that exist under various laws, regulations,

and DoD and *DoD component* policies and guidance. Contractually engaged *environmental professionals* should not use this practice to perform tasks that are inherently governmental functions.

5.2 Specialized Knowledge or Experience of the User—Users of this practice are expected to have the requisite environmental and health and safety training necessary to conduct the tasks identified in this practice. The federal agencies, including DoD components are responsible for identifying appropriate staff for conducting these functions, and are also responsible for contractually ensuring that environmental professionals engaged to perform ECPs have appropriate qualifications. These qualifications should be identified in the contract or scope of work.

6. Environmental Condition of Property Determination Process

- 6.1 Objective—In accordance with the policies of federal landholding agencies and federal real propertydisposal regulations, the purpose of the ECP is to identify property on which any hazardous substance or petroleum product was stored for one year or more (at quantities above the reportable quantity listed in 40 CFR 302.4); to document the obviousness of the presence or likely presence of a release or threatened release of any hazardous substance or petroleum product on the federal property; and use this information to classify the property in accordance with D5746.
- 6.1.1 Department of Defense Form 2993, in Appendix X3 may be used to record some of the information required under this Practice, if federal landholding agency or *DoD component*-specific forms do not exist.
- 6.2 *Five Steps*—Within the limitations described in 6.1, it is anticipated that the *ECP* process will commonly consist of at least four and possibly five discrete steps (see Fig. 1). These are summarized as follows:
- 6.2.1 ECP Step 1—Gathering of data and information in accordance with the process described in the applicable DoD policy referenced in 2.2 the federal real property disposal regulations, and as further elaborated in Sections 7-13 of this practice.
- 6.2.2 ECP Step 2—Analysis of data and information in accordance with the process described in Sections 7 13 of this practice.

- 6.2.3 ECP Step 3—Determination of the environmental condition of property area type for the real property being evaluated by the ECP, in accordance with the process described in this practice, Classification D5746, and federal real property disposal regulations.
- 6.2.4 *ECP Step 4*—Preparation of an *ECP report* in accordance with the format described in the applicable DoD policy or the federal real *property disposal* regulations.
- 6.2.5 ECP Step 5—Updating and enhancing, as necessary, an ECP report to support property transfer transactions (for example, FOSLs, FOSTs, or environmental condition reports). This process may require repeating Steps 1 through 3 to incorporate additional information or data, or both, generated between the time an initial ECP report is issued and the time an updated version is used to support a property transfer transaction. Guidance on FOSLs and FOST can be found in Appendix 3 of DODM 4165.66M.
- 6.3 Additional Explanation of ECP Steps 1 and 2—Steps 1 and 2 of the ECP process 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 eight components, as described in overview as follows (more detailed descriptions of each component are found in Sections 7 13):
- 6.3.1 Records Search and Review Scope-Detailed search and review of available information and records in the possession of the DoD components or the federal agency responsible for the *property*, or records made available by the regulatory agencies or other involved federal agencies. Department of Defense (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, asbestos-containing materials, radon, lead-based paint, drinking water quality, indoor air quality, transformers containing PCBs, emerging chemicals of environmental concern, RCRA Facility Assessments and Investigations, PAs, SDS, and Underground Storage Tank Cleanup Program,) to help support the determination of the environmental condition of property area types.

Note 4—Records related to *State registered USTs* should be reviewed. 6.3.2 *Adjoining Facility Records Search and Review Scope*—Review of all reasonably obtainable federal, state, and

Is the property owned by the federal government AND is it slated for sale, transfer or lease?

If yes, CERCLA 120(h) and 41 CFR 102-75 apply

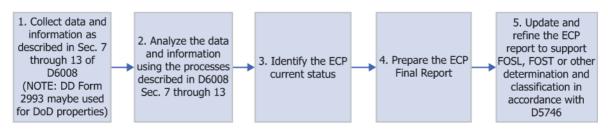


FIG. 1 The Process to Determine the Environmental Condition of Property

local government records for each adjoining facility or *property* 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 real *property*.

Note 5—Property tax records may be useful in determining past uses of adjoining property.

- 6.3.3 Aerial Photography Analysis—Analysis of aerial photographs that are in the possession of the federal government or are reasonably obtainable through state or local government agencies that may reflect prior uses of the property.
- 6.3.4 *Interviews—Interviews* with key current or former employees, or both, involved in operations on the real *property*.
- 6.3.5 Visual Inspections—Nonintrusive visual inspections of the real property; any buildings, structures, equipment, pipe, pipeline, or other improvements on the real property; and of properties adjoining the federally-owned 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.
- 6.3.6 Contamination Source Identification—Identification of sources of contamination on the federally-owned property and on adjoining properties which could migrate to the real property.
- 6.3.7 Ongoing Response Actions—Ongoing response actions or actions that have been taken at or adjacent to the federally-owned *property* will be identified and documented.
- 6.3.8 Physical and Visual Inspection of Adjoining Property—A physical inspection of property adjacent to the federally-owned property, to the extent permitted by owners or operators of such property. A visual inspection will be accomplished from areas of public access if a physical inspection is not authorized by the owners or operators of such adjoining property.

7. Records Search and Review

- 7.1 Introduction—Reasonable prudence, CERFA requirements (in the case of an ECP performed to support the identification of uncontaminated property), DoD guidance, and regulations concerning federal real propertydisposal mandate that the federal real property be evaluated in order to support real property transactions. One component of this evaluation is the review of all reasonably ascertainable federal, state, and local government records to determine where, on the federal property, there has been storage for one year or more, 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 real property.
- 7.1.1 *Objective*—The objective of the *records review* is to perform those parts of Steps 1 and 2 of the *ECP* process pertaining to obtaining and reviewing adequate and complete records that will help the *user* or *environmental professional* make an *environmental condition of property area type* determination regarding the federal real *property*.

- 7.1.2 Accuracy and Completeness—Accuracy and completeness of record information varies among information sources, including governmental sources. Record information is often inaccurate or incomplete. The user or environmental professional is not obligated to identify mistakes or insufficiencies in information provided. However, the environmental professional reviewing the 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.
- 7.1.3 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.
- 7.1.4 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.
- 7.1.5 Sources of Standard Source Information—Standard source information or other record information from government agencies may be obtained directly from appropriate government agencies (see Envirofacts) or from commercial services. Government information obtained from nongovernmental sources may be considered current if the source updates the information at least every 90 days or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public.
- 7.1.6 Documentation of Sources Checked—The ECP report shall document each source that was used, even if a source revealed no findings. Sources shall be sufficiently described, 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 7.1.3) so as to facilitate reconstruction of the research at a later date.
- 7.1.7 Significance—If a standard environmental record source (or other sources in the course of conducting the ECP) identifies the property or another site within the approximate minimum search distance, the ECP 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 this section, 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 ECP Step 1: Records Gathering—In accordance with 6.2.1, this section specifies the general level of effort required to complete ECP Step 1 tasks associated with records gathering. At a minimum, records to be gathered and reviewed when an ECP is initially conducted include the following:

- 7.2.1 Background and Physical Setting Records.
- 7.2.1.1 Physical Setting Sources—A current USGS 7.5 Minute Topographic Map showing the area on which the federallyowned property is located shall be reviewed, provided it is reasonably obtainable. If a current USGS 7.5 Minute Topographic Map is not readily obtainable, a current 15 Minute Topographic Map showing the area on which the federallyowned property is located shall be reviewed, provided it is reasonably obtainable. 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 obtainable). One or more additional physical setting sources may be obtained in the discretion of the environmental professional. Because such provide information about the 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 federally-owned property or from or within the federallyowned property into the ground water or soil and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map is generally obtained.

Standard Physical Setting Source: Current *USGS 7.5 Minute Topographic Map*

If this map is unavailable, obtain the USGS 15 Minute Map, if available. If neither the *USGS 7.5 Minute Topographic Map* nor the 15 Minute Map are available, a larger scale (for example, 1:250 000) USGS topographic map should be considered. Where appropriate, a comparable topographic map, prepared by the Defense Mapping Agency, may be used instead of the *USGS 7.5 Minute Topographic Map*.

Other Physical Setting Sources:

The following sources may also be utilized if requested:

- USGS and/or State Geological Survey—Groundwater Maps
- USGS and/or State Geological Survey—Bedrock Geology Maps
- USGS and/or State Geological Survey—Surficial Geology Maps
 - Soil Conservation Service—Soil Maps
- Other physical setting sources that are reasonably credible (as well as reasonably ascertainable)
- 7.2.2 Department of Defense (DoD) Component or the federal agency currently responsible for the *property* records maintained on the *property* or elsewhere, but reasonably obtainable, which are relevant to classification of *environmental condition of property area types*, including, but not limited to records of:
- 7.2.2.1 Ongoing and completed site remediation and environmental response activities, including *IRP* activities, corrective action programs, LUST responses, and similar activities. This includes all relevant records in the Administrative Record maintained under CERCLA, such as PAs, remedial investigations/feasibility studies, 5-year reviews.
- Note 6—Records related to corrective actions under RCRA and 40 CFR 761.61 should be reviewed.
- 7.2.2.2 Records of reported spills of *hazardous substances* and responses (see 40 CFR 355).

- 7.2.2.3 Records of *hazardous waste* accumulation, *storage*, treatment, or *disposal*, including satellite accumulation records, manifests, and records maintained in connection with permitted *hazardous waste* activities.
- 7.2.2.4 Records of *hazardous substance* and petroleum usage and/or *storage* and SDS for *hazardous substances*.
- 7.2.2.5 Records of potential hazard surveys, including, but not limited to *asbestos* surveys, *asbestos-containing materials* surveys, lead-based paint surveys, radioactive materials surveys, mercury surveys, PCB surveys, *emerging chemicals of environmental concern*, and radon surveys.
- 7.2.2.6 Environmental compliance records not specifically included in other required records. This includes, but is not limited to Safe Drinking Water Act reports, Clean Water Act permits and discharge reports, Clean Air Act permits and discharge and emission reports, EPCRA reports, *hazardous waste* minimization plans and reports, and pollution prevention plans and reports.
- 7.2.2.7 Additional records to include planning maps, base historian records, the base comprehensive plan or base master plan, military construction records, real *property* records, fire department records, historical photographs, records associated with oil and natural gas exploration and production activities, and facility and utility records.
 - 7.2.3 Federal, state, and local agency records.
 - 7.2.4 Recorded chain of title documents.
- 7.3 ECP Step 2: Records Analysis—Upon review of the required records gathered to complete ECP Step 1, the user or environmental professional shall indicate in the ECP report whether or not the search revealed any of the following on the property:
- 7.3.1 Spills of *hazardous substances* or petroleum products, or both,
- 7.3.2 Leaks of *hazardous substances* or petroleum products, or both, 2-ba8a-144d8ab016ba/astm-d6008-22
- 7.3.3 Discharges of *hazardous substances* or petroleum products, or both,
- 7.3.4 Leaching of *hazardous substances* or petroleum products, or both,
- 7.3.5 Injection of *hazardous substances* or petroleum products, or both,
- 7.3.6 Dumping of *hazardous substances* or petroleum products, or both,
 - 7.3.7 Abandoned or discarded barrels, containers, or other,
- 7.3.8 Receptacles containing *hazardous substances* or petroleum products,
 - 7.3.9 Automotive batteries,
 - 7.3.10 Industrial batteries,
- 7.3.11 Pesticides in containers, cartons, sacks, *storage* bins, canisters,
- 7.3.12 Paints in containers, cartons, sacks, *storage* bins, canisters,
- 7.3.13 *Drums* containing *hazardous substances* or petroleum products, or both,
- 7.3.14 Tanks containing *hazardous substances* or petroleum products, or both,
 - 7.3.15 Fill dirt from a contaminated site,
 - 7.3.16 Fill pipes for underground storage tanks,

- 7.3.17 PCBs in transformers or capacitors,
- 7.3.18 Heavy industrial equipment, including hydraulic equipment in *storage* or use,
 - 7.3.19 Ditches subject to contaminated runoff or discharges,
 - 7.3.20 Railroad loading/unloading areas,
 - 7.3.21 Medical/biohazardous waste,
 - 7.3.22 Radioactive materials and mixed wastes,
 - 7.3.23 Mercury, for example, seals,
- 7.3.24 Surface or underground mining operations (sand, gravel, hard rock),
 - 7.3.25 Missile silos and missile launch facilities,
- 7.3.26 Firefighting training facilities and firefighting training activities,
 - 7.3.27 Munitions and Explosives of Concern,
- 7.3.28 Small arms firing ranges (potential heavy metal contamination),
 - 7.3.29 Wastewater treatment plants,
- 7.3.30 *Open burning/open detonation* of MEC, propellants, explosives, or pyrotechnics,
- 7.3.31 Oil or natural gas exploration or production wells and associated infrastructure (see Appendix X6 and Appendix X7), or
 - 7.3.32 Chemical warfare agents.
- 7.4 The findings and results of the *records review* shall be documented in the *ECP report*.

8. Adjoining Facility Records Search and Review

- 8.1 Introduction—Reasonable prudence, CERFA requirements (in the case of an ECP performed to support the identification of uncontaminated property), DoD guidance, and federal real property disposal regulations mandate that the federal real property be evaluated in order to categorize real property into applicable environmental condition of property area types. One component of this evaluation is the review of all reasonably obtainable federal, state, and local government records for each adjoining 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 real property or which might migrate to the federal real property. In this connection, adjoining has the meaning provided in 3.3.1 and includes those properties near enough to the federal real property to present a reasonable probability of affecting the environmental condition of property on the federally-owned property.
- 8.1.1 *Objective*—The objective of the adjoining facility *records search and review* is to perform those parts of Steps 1 and 2 of the *ECP* process pertaining to identifying, obtaining, and reviewing those reasonably available Federal, State, and local agency records that might disclose information which would affect the *environmental condition of property area type* determination regarding the federal real *property*.
- 8.1.2 Approximate Minimum Search Distance—Adjoining facility records pertain not only to facilities adjoining to the federal real property, but also pertain to properties within an additional approximate minimum search distance in order to help assess the likelihood of problems from migrating hazardous substances or petroleum products. When the term approxi-

mate 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 instead of radius in order to include irregularly shaped properties.

- 8.1.2.1 Reduction of Approximate Minimum Search Distance—When allowed by 8.2.1.1, the approximate minimum search distance for a particular record may be reduced at the discretion of the environmental professional.
 - 8.1.3 Accuracy and Completeness—See 7.1.2.
 - 8.1.4 Reasonably Obtainable/Standard Sources:
 - 8.1.4.1 Publicly Available.
 - 8.1.4.2 Reasonable Time and Cost.
 - 8.1.4.3 Practically Reviewable.
 - 8.1.5 Alternatives to Standard Sources—See 7.1.3.
 - 8.1.6 Coordination—See 7.1.4.
 - 8.1.7 *Sources of Standard Source Information*—See 7.1.5.
 - 8.1.8 Documentation of Sources Checked—See 7.1.6.
 - 8.1.9 Significance—See 7.1.7.
- 8.2 ECP Step 1: Adjoining Property Records Gathering—In accordance with 6.2.1, this section specifies the level of effort required to complete ECP Step 1 tasks associated with adjacent adjoining property facility records gathering. At a minimum, the following records are to be searched:
- 8.2.1 Standard Environmental Sources—The following standard environmental record sources shall be reviewed, subject to the conditions of 7.1.1 7.1.7:
- 8.2.1.1 Standard Environmental Record Sources: Federal and State—The approximate minimum search distance should be established for each federally-owned property or portion of a federally-owned *property*, based on the physical setting and surrounding land use. Table 1 includes recommended approximate minimum search distances. An 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; and (3) other reasonable factors. The justification for each reduction and the approximate minimum search distance actually used for any particular record should be explained in the ECP report.
- 8.2.2 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 in Table 1. 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. To the extent additional state sources or local sources are used to supplement the same record types listed in Table 1, approximate minimum search