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Standard Practice for Determining the Environmental Condition of Federal Property[1]

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 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 federally-owned *property*. The steps in this practice are 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) 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.*

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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]

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

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

[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.

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

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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.

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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 federally-owned *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 (*1*) 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 Practice*:

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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*

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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

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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 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 *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

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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 CERCLA § 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

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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

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* that the

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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 knowledge 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,

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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

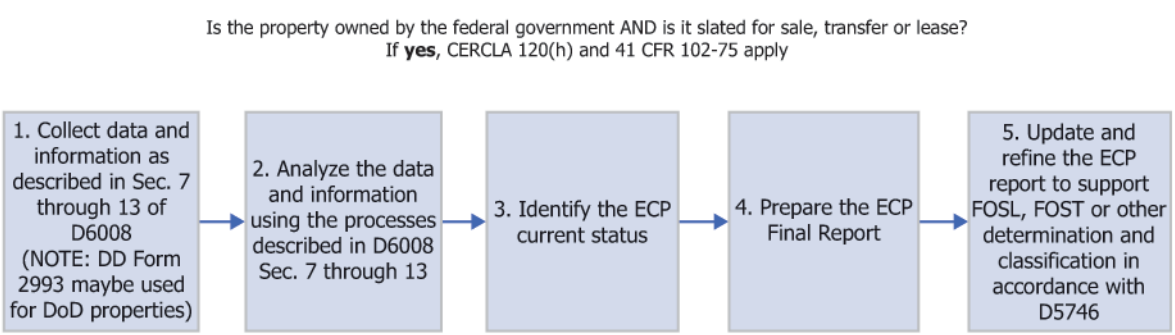

FIG. 1 The Process to Determine the Environmental Condition of Property

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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:

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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 federally-owned *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 federally-owned *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 sources provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a site, discretionary *physical setting sources* shall be sought when: *(1)* conditions have been identified in which *hazardous substances* or petroleum products are likely to migrate to the federally-owned *property* or from or within the federally-owned *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,

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,

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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 *approximate minimum search distance* includes areas outside the *property*, it shall be measured from the nearest *property* boundary. The term *approximate minimum search distance* is used 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

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TABLE 1 Recommended Approximate Minimum Search Distances

Standard Environmental Record Sources (where available)	Common Sources for Government Records	Approximate Minimum Search Distance miles (kilometers)
Lists of Federal NPL (Superfund) sites	U.S. EPA Website and available EPA databases listing currently listed sites	1.0 (1.6)
Lists of Federal Delisted NPL sites	U.S. EPA Website and available EPA databases listing delisted NPL sites	0.5 (0.8)
Lists of Federal sites subject to CERCLA removals and CERCLA orders[A]	U.S. EPA Websites (HQs and Regions)	0.5 (0.8)
Lists of Federal CERCLA sites with NFRAP[B]	U.S. EPA Websites (HQs and Regions)	0.5 (0.8)
Lists of Federal RCRA facilities undergoing Corrective Action	U.S. EPA Website and EPA databases listing RCRA permitted or interim status facilities undergoing corrective action	1.0 (1.6)
Lists of Federal *RCRA TSD facilities*[A]	U.S. EPA Website and available EPA databases listing RCRA permitted and interim status facilities	0.5 (0.8)
Lists of Federal *RCRA generators*	U.S. EPA Website and available EPA databases listing *RCRA Generators* of *hazardous waste*	subject *property* and *adjoining properties*
Lists of Federal institutional control/engineering control sites	U.S. EPA Website and available EPA data bases listing response actions at CERCLA sites; RCRA sites with ICs/ECs, etc.	subject *property* only
Federal *ERNS list*	EPA and US Coast Guard websites and data bases;	subject *property* only
Lists of state and tribal "Superfund" equivalent sites[A]	Varies by state / tribe	1.0 (1.6)
Lists of state and tribal *hazardous waste* facilities	Varies by state / tribe	0.5 (0.8)
Lists of state and tribal *landfills* and solid waste *disposal* facilities	Varies by state / tribe	0.5 (0.8)
Lists of state and tribal leaking *storage* tanks[A]	Varies by state / tribe	0.5 (0.8)
Lists of state and tribal registered *storage* tanks	Varies by state / tribe	subject *property* and *adjoining properties*
Lists of state and tribal institutional control/ engineering control sites	Varies by state / tribe	subject *property* only
Lists of state and tribal voluntary cleanup sites[A]	Varies by state / tribe	0.5 (0.8)
Lists of state and tribal brownfield sites	Varies by state / tribe	0.5 (0.8)

[A] Records should be researched for both currently active and formerly active sites.
[B] Sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action. This should not be interpreted as there being no contamination at the site or that other regulatory agencies, such as at the State level, have not required further action. Such sites may be found on other environmental record sources.

distances should not be less than those specified (adjusted as provided in 8.1.2.1 and 8.2.1.1). Some types of records and sources that may be useful include:

8.2.2.1 Types of Local Records

(1) Lists of *Landfill/Solid Waste Disposal Sites*

(2) Lists of *Hazardous Waste*/Contaminated Sites

(3) Lists of Registered Underground Storage Tanks

(4) Records of Emergency Release Reports (SARA Part 304)

(5) Records of *Contaminated Public Wells*

8.2.2.2 Local Sources

(1) Department of Health/Environmental Division

(2) Fire Department

(a) Discussion—The local fire department may have information regarding the use of *AFFF* at the federal *property*.

(3) Planning Department

(4) Building Permit/Inspection Department

(5) Local/Regional Pollution Control Agency

(6) Local/Regional Water Quality Agency

(7) Local Electric Utility Companies, Districts, Cooperatives, Departments (for records relating to PCBs in the dielectric fluid in transformers and chlorinated *solvents* in liquid-filled, high-voltage insulators)

8.3 *ECP Step 2: Adjoining Property Records Analysis*—Upon review of adjoining *property* records listed in 8.2, the *environmental professional* shall indicate in the *ECP report* whether or not the search revealed any of the following on the *property*:

8.3.1 Potential or actual *migration* of *hazardous substances* or petroleum products, or both, from the *area in question* sources of these substances on the adjoining *property* to the federally-owned *property*.

8.3.2 The presence of actual sources of *hazardous substances* or petroleum products, or both, on adjoining *property* and facilities with suspected *migration* that has not been evaluated or characterized.

8.3.3 Uncontrolled *migration* of *hazardous substances* or petroleum products, or both, in the immediate vicinity of a boundary of the *area in question*.

8.4 The findings and results of the *records review* shall be documented in the report.

9. Aerial Photography Analysis

9.1 *Introduction*—Analysis of aerial photography can provide an extremely useful source of supplemental information regarding both land use and the *environmental condition of property area type*. This analysis may encompass both the federal real *property* and the *adjoining properties*. Analysis of aerial photography should be focused on patterns of land use and human activities as well as direct and indirect evidence of the potential existence of a recognized environmental condition.

9.1.1 *Objective*—The objective of the aerial photography analysis is to perform those parts of Steps 1 and 2 of the *ECP* process pertaining to assembling, if reasonably available, an adequately complete set of imagery. The imagery should

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include *adjoining properties* encompassing both the federal real *property* and the adjoining facilities. The *environmental professional* interprets those photographs for patterns of land use and human activities as well as direct and indirect evidence of the potential existence of a recognized environmental condition, and thereafter, incorporating that information into the overall *environmental condition of property area type*. *Aerial photographs* will be sought for the period encompassing the 1940's or the earliest record of federal ownership of the *property*.

NOTE 7—If the *property* was developed prior to 1940's and prior to federal ownership, imagery, including oblique and panoramic photographs, going back to the earliest point of development should be interpreted. Federal *property* on which mining activities have been conducted may have been developed anytime after the passage of the Mining Act of 1872. For these, and other *properties* developed prior to the 1940's, oblique and panoramic photographs may be used to identify prior uses of *hazardous substances* and petroleum products.

9.2 *ECP Step 1: Aerial Photography Gathering*—In accordance with 6.2.1, this section specifies the level of effort required to complete *ECP* Step 1 tasks associated with identifying and gathering *adjoining properties*. At a minimum, the following sources are to be searched:

9.2.1 *Standard Sources: Aerial Photographs—Aerial photographs* are commonly available from government agencies or private collections unique to a local area, and may also be obtained from universities, colleges, and history museums.

9.2.2 *Optional Sources*—Other sources of similar information, including, but not limited to satellite reconnaissance may be sought where the *environmental professional* feels that these records would be reasonably available and would materially enhance the analysis required in this section. Where permitted, photographic or video imagery captured by drones may be available and useful.

9.3 *ECP Step 2: Aerial Photography Analysis*—The *environmental professional* shall perform the analysis of photographs using an accepted photo interpretation land use and land cover classification system. Analyzed photographs should preferably be at a 1:24 000 scale or smaller scale (that is, more magnified) to reveal adequate surface detail and necessary spatial coverage. (Imagery from the U.S. Department of Agriculture's Soil Surveys may be of significantly higher resolution.) Upon review of *adjoining properties* in accordance with the previously stated guidelines, the *environmental professional* shall specify the analysis method used in the *ECP report* and also indicate whether any of the following were identified on the *property*:

9.3.1 Evidence of excavation activities of unknown type, or of industrial operations.

9.3.2 Evidence of dumping or disposing of waste materials.

9.3.3 Evidence of *significantstorage* activities involving *drums*, other containers, tanks, or pipelines containing *hazardous substances* or petroleum products.

9.3.4 Evidence of staining associated with industrial activities or activities of unknown origin or type.

9.3.5 Evidence of surface impoundments, surface mining, *landfills*, oil or gas wells.

9.4 The findings and results of the aerial photography analysis shall be documented in the *ECP report*.

10. Interviews

10.1 *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 are *interviews* of current or former *occupants*, or both, involved in operations on the *property* that are conducted to aid in identifying a recognized environmental condition on the federal real *property* and other information necessary to determine *standard environmental condition of property area types*. *Interviews* of current or former personnel, or both, on the federal real *property* and *interviews* of appropriate local government officials supplement documented information and may also provide keys to effective interpretation of such information. Where available information indicates the presence of *recognized environmental conditions*, it may be necessary to conduct *interviews* relating to those portions of the DoD installation or federally-owned *property* that have been, or are currently being, actively investigated under the *IRP* or similar investigation effort.

10.1.1 *Objective*—The objective of conducting *interviews* is to perform those parts of Steps 1 and 2 of the *ECP* process pertaining to obtaining information indicating *recognized environmental conditions* in connection with the federally-owned *property*, so that *environmental condition of property area type* determinations can be made.

10.2 *ECP Step 1: Interviews with Site Personnel*—In accordance with 6.2.1, this section specifies the level of effort required to complete *ECP* Step 1 tasks associated with interviewing current or former personnel, or both, and appropriate local governmental officials. At a minimum, the following should be incorporated into this process:

10.2.1 *Content—Interviews* with site personnel consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall attempt to obtain information about uses and conditions as described in Section 9, as well as the information described in Sections 11 – 13.

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

10.2.3 *Timing*—Except as specified in 10.2.8 and 10.2.9, it is at the discretion of the *environmental professional* whether to ask questions before, during, or after the site visit described in Section 11, or in some combination thereof.

10.2.4 *Who Should be Interviewed:*

10.2.4.1 *Key Site Manager*—Prior to the site visit, the federal *property* manager can be asked to identify a person with good knowledge of the uses and physical characteristics of the *property* (the key site manager). For DoD installations the key site manager will be the installation or base commander, base civil engineer, public works commander or other *property* manager, chief physical plant supervisor or head maintenance person. For other federal agencies, the key site manager may be working at another site or facility. (If the *user* is the current federal *property* manager, the user has an

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obligation to identify a key site manager, even if it is the *user* himself or herself.) If a key site manager is identified, the person conducting the site visit shall make at least one reasonable attempt (in writing or by telephone) to arrange a mutually convenient appointment for the site visit when the key site manager agrees to be there. If the attempt is successful, the key site manager shall be interviewed in conjunction with the site visit. If such an attempt is unsuccessful, when conducting the site visit, the *environmental professional* shall inquire whether an identified key site manager (if any) or if a person with good knowledge of the uses and physical characteristics of the *property* is available to be interviewed at that time; if so, that person shall be interviewed. In any case, it is within the discretion of the *environmental professional* to decide which questions to ask before, during, or after the site visit or in some combination thereof.

10.2.4.2 *Occupants, Including Current and Former Employees*—A reasonable attempt shall be made to interview a reasonable number of *occupants* of, if any, and current employees involved in operations on the *property*.

(1) Residential Properties—For residential *properties*, residential *occupants* do not need to be interviewed, but if the *property* has nonresidential uses, *interviews* can be held with the nonresidential *occupants* based on criteria specified in 10.2.4.2.

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

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

(4) Occupant Identification—The *ECP report* shall identify the *occupants* interviewed and the duration of their occupancy.

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

(1) Local fire department that serves the *property*,

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

(3) Local agency or local/regional office of state agency having jurisdiction over *hazardous wastedisposal* or other environmental matters in the area in which the *property* is located.

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

10.2.6 *Quality Of Answers*—The person(s) interviewed should be asked to be as specific as reasonably feasible in answering questions. The person(s) interviewed should be asked to answer in good faith and to the extent of their knowledge.

10.2.7 *Incomplete Answers*—In accordance with 10.2.7.1 and 10.2.7.2, the person conducting the interview(s) has an obligation to ask questions, in certain instances the persons to whom the questions are addressed may not have an obligation to answer them (for example, due to national security concerns).

NOTE 8—If the person to whom questions are addressed claims or asserts that the answer(s) involve confidential business information, the person conducting the interview shall duly note that response in the *ECP report*.

10.2.7.1 *User/DoD Component Personnel*—If the person to be interviewed is the *user* (an employee of a *DoD component* or federal agency on whose behalf the *ECP* is being conducted), the *user* has an obligation to answer all questions posed by the person conducting the interview, in good faith, to the extent of his or her actual knowledge, or to designate a key site manager to do so. If answers to questions are unknown or partially unknown to the *user* or such key site manager, this interview section of the *ECP* shall not thereby be deemed incomplete.

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

10.2.8 *Questions About Helpful Documents*—Prior to the site visit, the *property* owner, key site manager (if any is identified), and *user* (if different from the *property* owner) shall be asked if they know whether any of the documents listed in 10.2.8.1 exist and, if so, whether copies can and will be provided to the *environmental professional* within reasonable time and cost constraints. Even partial information provided may be useful. If so, the *environmental professional* conducting the site visit shall review the available documents prior to or at the beginning of the site visit.

10.2.8.1 *Helpful Documents:*

(1) Environment site assessment reports, including *PA*, *SI*, or other similar reports.

(2) Environment audit reports.

(3) Environmental permits (for example, solid waste *disposal* permits, *hazardous wastedisposal* permits, *wastewater* permits, air discharge permits, NPDES permits).

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