



Designation: ~~D5746 – 98 (Reapproved 2016)~~ D5746 – 23

Standard Classification of Environmental Condition of Property Area Types for ~~Defense Base Closure and Realignment Facilities Types,~~ Including Explosives Safety for Federally-Owned Real Property¹

This standard is issued under the fixed designation D5746; 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.

INTRODUCTION

Section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended, requires that federal landholding agencies determine and disclose the environmental classification of real property slated for sale, lease, or transfer. The disclosure and classification process developed in the 1990s does not adequately address the rare situations where property under the jurisdiction of the Department of Defense, including formerly used defense sites (FUDS) and other federal landholding agencies, at which DoD military munitions (that is, unexploded ordnance [UXO], discarded military munitions [DMM]) may remain present on the surface or in the subsurface is transferred to another federal landholding agency, state agency, or non-governmental organization. Additionally, CERCLA §120(h) does not address situations in which commercial explosives (for example, dynamite, fireworks) may have been abandoned or stored pending final disposition on other Federally-owned property. To address this deficiency, eight explosive safety classifications have been developed to augment the classification and notification requirements of 40 CFR 373.

ASTM D5746-23

1. Scope <https://standards.iteh.ai/catalog/standards/sist/9ae15f72-3880-47d2-bebb-e261628ba795/astm-d5746-23>

1.1 *Purpose*—The purpose of this classification is to define ~~seventy-eight~~ seven *standard environmental condition of property area types for Department of Defense (DoD) federally-owned real property at a closing military installation* with respect to the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 Section 120(h), as amended by the Community Environmental Response Facilitation Act (CERFA) of 1992, and Section 331 of the National Defense Authorization Act for Fiscal Year 1997. As such, this classification is intended to permit a ~~DoD component~~ federal landholding agency to classify *property* into ~~seventy-eight~~ seven area types, in order to facilitate and support findings of suitability to transfer (FOSTs), findings of suitability to lease (FOSLs), and uncontaminated parcel determinations pursuant to the requirements of CERFA. *Users of this classification should note that it does not address (except where noted explicitly) requirements for appropriate and timely regulatory consultation or concurrence, or both, during the identification and use of these environmental condition of property area types.*

1.1.1 *Seven* Eight *Recognized Standard Environmental Condition of Property Area Types*—The goal of this classification is to permit ~~DoD components~~ federal landholding agencies to classify properties ~~on closing DoD installations~~ in order to support determinations of which properties are suitable and unsuitable for transfer by lease or by deed. The term “~~standard~~” standard

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

Current edition approved Dec. 1, 2016; Sept. 1, 2023. Published December 2016; November 2023. Originally approved in 1995. Last previous edition approved in 2010; 2016 D5746 - 98(2010); (2016). DOI: 10.1520/D5746-98R16.

environmental condition of property area type “*type*” refers to one of the ~~seven~~eight area types defined in this classification. An identification of an area type on an environmental condition of *property* map means that a ~~DoD~~component federal landholding agency federally-owned has conducted sufficient studies to make a determination of the *recognized environmental conditions of installation real property* or has complied with the identification requirements of uncontaminated *property* under CERFA, or both, and has categorized the *property* into one of the following ~~seven~~eight area types:

1.1.1.1 *Standard Environmental Condition of Property Area Type 1*—An area or parcel of real *property* where no release, or *disposal* of hazardous substances or *petroleum products* or their derivatives has occurred (including no *migration* of these substances from ~~adjacent properties~~adjoining properties).

1.1.1.2 *Standard Environmental Condition of Property Area Type 2*—An area or parcel of real *property* where only the release or *disposal* of *petroleum products* or their derivatives has occurred.

1.1.1.3 *Standard Environmental Condition of Property Area Type 3*—An area or parcel of real *property* where release, *disposal*, or *migration*, or some combination thereof, of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.

1.1.1.4 *Standard Environmental Condition of Property Area Type 4*—An area or parcel of real *property* where release, *disposal*, or *migration*, or some combination thereof, of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.

1.1.1.5 *Standard Environmental Condition of Property Area Type 5*—An area or parcel of real *property* where release, *disposal*, or *migration*, or some combination thereof, of hazardous substances has occurred and removal or remedial actions, or both, are under way, but all required actions have not yet been taken.

1.1.1.6 *Standard Environmental Condition of Property Area Type 6*—An area or parcel of real *property* where release, *disposal*, or *migration*, or some combination thereof, of hazardous substances has occurred, but *required response actions* have not yet been initiated.

1.1.1.7 *Standard Environmental Condition of Property Area Type 7*—An area or parcel of real *property* that is *unevaluated* or requires additional evaluation.

1.1.1.8 *Standard Environmental Condition of Property Area Type 8*—An area or parcel of real *property* where the release, *disposal*, or *migration*, or some combination thereof of hazardous substances or emerging contaminants of environmental concern has likely occurred, but response actions either (1) have not yet been determined, or (2) are being managed under the auspices of an ARAR, such as a federal or state health advisory, or other federal regulatory program such as the Toxic Substances Control Act (TSCA).

1.1.2 *CERCLA Section 120(h) Requirements*—This classification of environmental condition of *property* area types is consistent with CERCLA § 120(h) requirements relating to the transfer of contaminated federal real *property* (42 USC 9601 ~~and following~~et seq.). Areas classified as Area Types 1 through 4, as defined in this classification, are suitable, with respect to CERCLA § 120(h) requirements, for deed transfer to a non-federal recipient.

1.1.3 *CERFA Requirements*—This classification of environmental condition of *property* area types can be used in conjunction with the reporting requirements of CERFA, which amended CERCLA (Public Law 102-426, 106 Statute 2174). As defined in this classification, areas classified as Type 1 areas are eligible for reporting as “uncontaminated property” under the provisions of CERFA. At federal installations listed on the national priorities list, Environmental Protection Agency (EPA) concurrence must be obtained for a parcel to be considered uncontaminated and therefore transferable under CERCLA § 120(h)(4). EPA has stated as a matter of policy that there may be instances in which it would be appropriate to concur with the military service that certain parcels 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 parcel. 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 parcels should be eligible for expeditious reuse.

1.1.4 *Petroleum Products*—Petroleum products and their derivatives are included within the scope of this classification. Under ~~DoD~~existing agency-specific and US EPA policy, areas on which *petroleum products* and their derivatives have been released or disposed of may not be suitable for deed transfer until a response action has been completed.

1.2 *Objectives*—The objectives guiding the development of this classification are as follows: (1) to synthesize and put in writing a standard classification of environmental condition of *property* area types; (2) to facilitate the development of high-quality, standardized environmental condition of *property* maps that can be used to support FOSTs and FOSLs; (3) to facilitate the development of a standard practice for conducting environmental baseline surveys; and (4) to facilitate the development of a standard guide for preparing environmental baseline survey reports.

1.3 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

[D6008 Practice for Determining the Environmental Condition of Federal Property](#)

[E1527 Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process](#)

[E1689 Guide for Developing Conceptual Site Models for Contaminated Sites](#)

[E2081 Guide for Risk-Based Corrective Action](#)

[E2091 Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls](#)

[E2205 Guide for Risk-Based Corrective Action for Protection of Ecological Resources](#)

~~[E1528](#)~~~~[E2247 Practice for Limited Environmental Due Diligence: Transaction Screen Process](#)~~[Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property](#)

2.2 *Department of Defense Policies:*³

~~[DoD Policy on the Environmental Review Process to Reach a Finding of Suitability to Lease \(FOSL\), September 1993](#)~~[U.S. Army Regulation 200-1 Environmental Protection and Enhancement, December 2007](#)

~~[DoD Policy on the Environmental Review Process to Reach a Finding of Suitability to Transfer \(FOST\) for Property Where No Release or Disposal Has Occurred, June 1994](#)~~[Department of Defense Manual 4715.20, Defense Environmental Restoration Program \(DERP\) Management March 9, 2012](#)

~~[DoD Policy on the Environmental Review Process to Reach a Finding of Suitability to Transfer \(FOST\) for Property Where Release or Disposal Has Occurred, June 1994](#)~~[Department of Defense, Defense Explosives Safety Regulation DESR 6055.09, January 2019](#)

~~[DoD Policy on the Implementation of the Community Environmental Response Facilitation Act \(CERFA\), September 1993](#)~~[U.S. Navy. OPNAV Instruction 8020.14b, U.S. Navy Explosives Safety Management Program Policy Manual. July 2022](#)

~~[DoD Clarification of “Uncontaminated” Environmental Condition of Property at Base Realignment and Closure \(BRAC\) Installations, October 1996](#)~~[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 Standards:*⁴

[Title 32, Code of Federal Regulations \(CFR\), Part 179, Munitions Response Site Prioritization Protocol \(MRSPP\)](#)

[Title 40, Code of Federal Regulations \(CFR\) Part 373, Reporting Hazardous Substance Activity When Selling or Transferring Federal Real Property](#)

2.4 *US EPA and Bureau of Land Management References:*^{5,6}

[EPA Munitions Response Guidelines, OSWER Directive 9200.1-101, July 2010](#)

[Best Practice Process for Identifying and Determining State Applicable or Relevant and Appropriate Requirements Status Pilot, OLEM Directive 9200.2-187, October 2017](#)

[Bureau of Land Management Explosives of Concern: A Handbook for Federal Land Managers, with. Emphasis on Unexploded Ordnance. BLM Handbook H-1703-2](#)

3. Terminology

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

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 National Technical Information Service (NTIS), 5301 Shawnee Rd., Alexandria, VA 22312, <http://www.ntis.gov>.

⁴ Available from DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5094, <http://quicksearch.dla.mil>.

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

⁶ Available from Bureau of Land Management, 1849 C Street NW Washington, DC 20240, <https://www.blm.gov>.

3.2 Definitions:

3.2.1 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.

3.2.2 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)].

3.2.2.1 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 Practice D6008 Section 12.2). Land use restrictions may be components of required remedial action.

3.2.3 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).

3.2.3.1 Discussion—

Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate.

3.2.4 chemical agent (CA), n—a chemical compound (to include experimental compounds) that, through its chemical properties produces lethal or other damaging effects on human beings, is intended for use in military operations to kill, seriously injure, or incapacitate persons through its physiologic effects.

3.2.4.1 Discussion—

Excluded are research, development, testing, evaluation (RDT&E) solutions; riot control agents; chemical defoliants and herbicides; smoke and other obscuration materials; and industrial chemicals. (50 U.S.C. §1521(p)(1)).

3.2.5 chemical warfare material (CWM), n—Is defined in 32 CFR 179.3 as items generally configured as a munitions containing a chemical compound that is intended to kill, seriously injure, or incapacitate a person through its physiological effects.

3.2.5.1 Discussion—

CWM includes V- and G- series (lewisite) blister agents in other than munitions configurations; and certain industrial chemicals (for example hydrogen cyanide (AC), cyanogen chloride (CK), or carbonyl dichloride (called phosgene or CG)) configured as a military munitions. Due to their hazards, prevalence, and military unique application, chemical agent identification sets (CAIS) are also considered CWM.⁷ CWM does not include riot control devices; chemical defoliants and herbicides; industrial chemicals (for example, AC, CK, or CG) not configured as a munition; smoke and other obscuration producing items; flame and incendiary producing items; or soil, water debris, or other media contaminated with low concentrations or chemical agents where no CA hazards exist. Subcategories include:

(1) CWM, explosively configured are all munitions that contain a CA fill and any explosive component. Examples are M55 rockets with CA, the M23 VX mine, and the M360 105 mm GB artillery cartridge.

(2) CMW, non-explosively configured are all munitions that contain a CA fill, but that do not contain any explosive components. Examples are any chemical munition that does not contain explosive components and chemical agent spray canisters.

(3) CWM, bulk container are all non-munitions configured containers of CA (for example, a ton container).

(4) CAIS are military training aids containing small quantities of various CA and other chemicals.

3.2.6 discarded military munitions (DMM), n—military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal.

3.2.6.1 Discussion—

⁷ Although CAIS are managed as CWM during a munitions or CWM response, CAIS that do not contain neat agent or diluted nerve agent, may be dispositioned as hazardous waste at a TSDF.

The term does not include *unexploded ordnance, military munitions* that are being held for future use or planned *disposal*, or *military munitions* that have been properly disposed of consistent with applicable environmental laws and regulations. (10 U.S.C 2710(e)(2)).

3.2.7 environmental baseline survey (EBS)—condition of property (ECOP), n—a survey of ~~DoD~~ federal real property based on all existing environmental information related to the storage, release, treatment, or disposal of hazardous substances or petroleum products or derivatives on the property to determine or discover the obviousness of the presence or likely presence of a release or threatened release of any hazardous substance or petroleum product. In certain cases, additional data, including sampling and analysis, may be needed in the EBS to support classification of the property into one of the standard environmental condition of property area types. Additionally, an EBS may also satisfy the uncontaminated property identification requirements of CERFA. An EBS will consider all sources of available information concerning environmentally significant current and past uses of the real property and shall, at a minimum, consist of the following: ~~(1) a~~ *hazardous* a substance detailed search and review of available information and records in the possession of the DoD components or records made available by the regulatory agencies or other involved Federal agencies. DoD components are responsible for requesting and making reasonable inquiry into the existence and availability of relevant information and records to include any additional study information (for example, surveys for radioactive materials, asbestos, radon, lead-based paint, transformers containing PCB, Resource Conservation and Recovery Act Facility Assessments and Investigations (RFA and RFI), and underground storage tank cleanup program) to determine the environmental condition of the property; ~~(or 2)~~ a review of all reasonably obtainable Federal, state, and local government records for each adjacent facility where there has been a release or likely release of any hazardous substance or any petroleum product, and that is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product on the petroleum product (see Practice **D6008** DoD real property; ~~(~~ 3) an analysis of aerial photographs that may reflect prior uses of the property, which are in the possession of the Federal government or are reasonably obtainable through state or local government agencies; (4) interviews with current or former employees, or both, involved in operations on the real property; (5) visual inspections of the real property; any buildings, structures, equipment, pipe, pipeline, or other improvements on the real property; and of properties immediately adjacent to the real property, noting sewer lines, runoff patterns, evidence of environmental impacts (for example, stained soil, stressed vegetation, and dead or ill wildlife), and other observations that indicate the actual or potential release of hazardous substances or petroleum products; (6) the identification of sources of contamination on the installation and on adjacent properties that could migrate to the parcel during Federal government ownership; (7) ongoing response actions or actions that have been taken at or adjacent to the parcel; and (8) physical inspection of the property adjacent to the real property, to the extent permitted by owners or operators of such property.

3.2.7.1 Discussion—

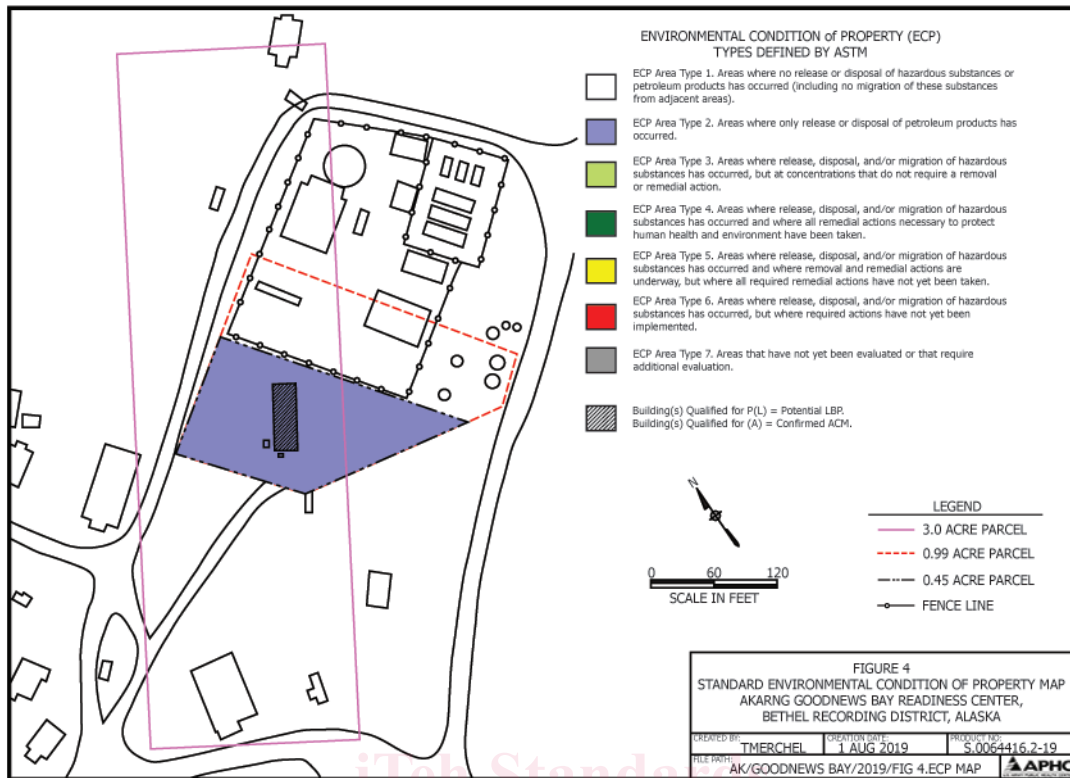
The ECOP is required prior to the sale, lease or transfer of federally-owned property by a federal landholding agency (see CERCLA §120(h)).

3.2.8 environmental baseline survey (EBS) report—condition of property (ECOP) report, n—the written record of an EBS that includes the following: ~~(ECP.1)~~ an executive summary briefly stating the areas of real property (or parcels) evaluated and the conclusions of the EBS; (2) the property identification (for example, the address, assessor parcel number, or legal description); (3) any relevant information obtained from a detailed search of Federal government records pertaining to the property, including available maps; (4) any relevant information obtained from a review of the recorded chain of title documents regarding the real property. The review should address those prior ownerships and uses that could reasonably have contributed to an environmental concern, and, at a minimum, cover the preceding 60 years; (5) a description of past and current activities, including all past DoD uses to the extent such information is reasonably available, on the property and on adjacent properties; (6) a description of hazardous substances or petroleum products management practices (to include storage, release, treatment, or disposal) at the property and adjacent properties; (7) any relevant information obtained from records reviews and visual and physical inspections of adjacent properties; (8) a description of ongoing response actions or actions that have been taken at or adjacent to the property; (9) an evaluation of the environmental suitability of the property for an intended lease or deed transaction, if known, including the basis for determination of such suitability; and (10) references to key documents examined (for example, aerial photographs, spill incident reports, and investigation results).

3.2.8.1 Discussion—

The ECOP Report is the documentation for the Standard Classification in accordance with this classification.

3.2.9 environmental condition of property map—map, n—a map, to scale drawing, prepared on the basis of all environmental investigation information conducted to date, that shows the environmental condition of a ~~DoD~~ federal landholding agency installation's real property in terms of the ~~seven~~ eight standard environmental condition of property area types defined in Section 6 ~~this classification~~ of this classification (see [Fig. 1](#)).



Source: Alaska Army National Guard EBS Report (public domain)

FIG. 1 Example of an *Environmental Condition of Property Map*

3.2.10 environmental professional, n—a person possessing sufficient training and experience necessary to conduct an *environmental condition of property* assessment in accordance with Practice **D6008**, and from the information and data gathered by such activities, having the ability to develop conclusions regarding environmental classification of *property* and *recognized environmental conditions* in connection with the *property* being evaluated.

3.2.10.1 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 *environmental condition of property* to be performed or to specific steps 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).

3.2.11 explosives safety, n—A condition where operational capability and readiness, people, *property*, and the environment are protected from the unacceptable effects or risks of potential mishaps involving DoD *military munitions* or other encumbering explosives or munitions.

3.2.11.1 Discussion—

As defined in DESR 6055.0 and OPNAVINST 8020.14B, members of the public and public *property* are protected from the unacceptable effects or risk posed by commercial explosives.

3.2.12 explosive safety condition of property map, n—a map, prepared on the basis of relevant explosive safety information collected to date, that shows the explosive safety condition of a federal landholding agency’s real *property* in terms of the eight *standard explosive safety condition of property area* types defined in this classification (see DESR and BLM H-1703-2).

3.2.13 formerly used defense sites (FUDS), n—properties that were formerly owned by, leased to, or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense prior to October 1986.

3.2.13.1 Discussion—

The U.S. Army is the executive agent for the environmental restoration program and the U.S. Army Corps of Engineers manages and directs the program’s administration.

3.2.14 hazardous substance, n—means that group of substances defined as hazardous under CERCLA §101(14), and that appear at 40 CFR §302.4.

3.2.14.1 Discussion—

The term includes hazardous substances, *military munitions* and commercial explosives, or *petroleum products* even under conditions in compliance with laws.

3.2.15 land use control (LUC), n—Any type of engineering or institutional mechanism that restricts the use of or limits access to real *property* to prevent or reduce risks to human health and environment (see Guide E2091, Volume 7, Enclosure 4 of DESR 6055.09, OPNAVINST 8020.14B and OSWER Directive 9200.1-101).

3.2.15.1 Discussion—

Engineering controls are physical remedies to contain or reduce contamination and physical barriers to limit access to *property*, such as fences or signs. Institutional controls include restrictive covenants, negative easements, equitable servitudes, and deed notices as well as notices, adopted local land use plans and ordinances, construction permitting, or other land use management systems to ensure compliance with use restrictions.

3.2.16 hazardous substance—military munitions, n—a substance defined as a hazardous substance pursuant to CERCLA 42 USC § 9601(14), as interpreted by EPA regulations and the courts: “(means all ammunition products and components produced for A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (or used by C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6921) the armed forces for national defense and security, including ammunition products or components under the control et seq.) has been suspended by Act of Congress), (of D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 USC § 7412), and (the Department F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (of Defense, the Coast Guard, the Department A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).” of Energy, and the National Guard.

3.2.16.1 Discussion—

The term includes confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives, and chemical warfare agents; chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, SAA, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges; and devices and components thereof. The term does not include wholly inert items; improvised explosive devices; and nuclear weapons, nuclear devices, and nuclear components, other than nonnuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 *et seq.*) have been completed. (10 U.S.C. 101(e)(4)(A) through (C)). The term does not include commercial explosives such as dynamite.

3.2.17 munitions constituents, n—materials originating from *unexploded ordnance (UXO)*, *discarded military munitions (DMM)*, or other *military munitions*, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions. (10 U.S.C. 2710(e)(3)).

3.2.18 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.

3.2.19 munitions response, n—actions, including investigation, removal actions and remedial actions to address the *explosives safety*, human health, or environmental risks presented by *unexploded ordnance (UXO)*, *discarded military munitions (DMM)*, or *munitions constituents (MC)* or to support a determination that no removal or remedial action is required.

3.2.20 munitions response area (MRA), n—Any portion of real *property* on a Department of Defense owned *property* that is known or suspected to contain UXO, DMM, or MC.

3.2.20.1 Discussion—

Examples include former ranges and munitions burial areas. A munitions response area is comprised of one or more munitions response sites.

3.2.21 munitions response site (MRS)—A discrete location within an MRA that is known to require a munitions response.

3.2.22 petroleum products—products, n—those substances included within the meaning of the petroleum exclusion to CERCLA 42 USC § 9601(14) as interpreted by the courts and EPA, that is: “petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).”

3.2.23 property—the real DoD property subject to federally-owned land, including buildings, fixtures, and other improvements located on and affixed to the land subject to evaluation classification under the classification of environmental condition of property area types:types (see Practice D6008).

3.2.24 recorded land title records—records, n—records to be searched during a chain of title search, including 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 recorded, by law or custom, for the local jurisdiction in which the property is located. (Such records are commonly kept by a municipal or county recorder or clerk.) Such records may be obtained from title companies or from the local government agency directly located (see 40 CFR 312.24(a)).

3.2.25 release—release, n—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.

3.2.9 relevant and appropriate requirements—those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that, while not “applicable” to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate.

3.2.26 remedial actions—actions, n—as defined in CERCLA §101(22), those actions consistent with a permanent remedy taken instead of, or in addition to, removal of 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 the present or future public health or welfare or the environment.

3.2.27 removal—removal, v—the cleanup or removal of released hazardous substances from the environment; such actions as may be necessary to take 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 or to the environment, which may otherwise result from a release or threat of release.

3.2.27.1 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 (P.L. 93-288).

3.2.28 required remedial actions—actions, n—remedial actions determined necessary to comply with the requirements of CERCLA § 120(h)(3)(B)(i).

3.2.28.1 Discussion—

“remedial” means actions consistent with permanent remedy taken instead of, or in addition to, removal actions.

3.2.29 *required response actions—actions, n—*removal or remedial actions, or both, determined necessary to comply with the requirements of CERCLA § 120(h)(3)(B)(i).

3.2.29.1 *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.

3.2.30 *risk-based criteria—criteria, n—*cleanup levels intended to meet a predetermined level of acceptable risk to human health or the environment. (see Guide E2081 and Guide E2205).

3.2.31 *site inspection (SI)—(SI), n—*~~an on-site investigation~~ a systematic examination of the subject *property* to determine whether there is a release or potential release exists and the nature of the associated threats. ~~The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine whether further action or investigation is appropriate.~~

3.2.31.1 *Discussion—*

the objective of the *visual inspection* is to perform those parts of Steps 1 and 2 of the ECOP process, as described in Section 11 of Practice D6008, 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.

3.2.32 *small arms ammunition (SAA), n—*ammunition, without projectiles that contain explosives other than tracers), that is .50 caliber or smaller, or for shotguns.

3.2.33 *unexploded ordnance, n—*as defined in 10 USC § 101(e)(5) are *military munitions* that:

- (1) Have been primed, fused, armed, or otherwise prepared for action;
- (2) Have been fired, dropped, launched, projected, or placed in such a manner as field data to constitute a hazard to operations, installations, personnel or material; and
- (3) Remain unexploded, determine whether by malfunction, design, or any other cause.

3.3 *Definitions of Terms Specific to This Standard:*

3.3.1 *adjacent properties—*those properties contiguous or partially contiguous to the boundaries of the property being surveyed during an EBS or other activity intended to classify the property into a standard environmental condition of property area type; or other properties relatively near the installation that could pose significant environmental concern or have a significant impact on the results of an EBS or on the classification of installation property into standard environmental condition of property area types, or both.

3.3.1 *aerial photographs—*photographs taken from an airplane or helicopter (from a low enough altitude to allow the identification of development and activities) of areas encompassing the *property*. ~~property~~ Aerial photographs are commonly available from government agencies or private collections unique to a local area and high resolution satellite and drone imagery.

3.3.1.1 *Discussion—*

Aerial photographs are commonly available from government agencies or private collections unique to a local area. Satellite imagery may be available from government and commercial sources.

3.3.2 *all remedial action taken—taken, n—*for the purposes of this classification, 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)).

3.3.2.1 *Discussion—*

~~The continuation 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)).

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

3.3.3 *biased field sampling*—*sampling, n*—by any technique, field sampling of environmental media, which aids in the delineation of *standard environmental condition of property area types*.

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

3.3.4.1 *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.

3.3.5 *carcinogenic*—*carcinogenic, n*—a cancer-causing substance.

3.3.6 *chain of title review*—*review, v*—a review of *recorded land title records*, conducted as part of an *EBS-ECO*.

3.3.7 *chemical-specific*—*chemical-specific, n*—associated with the definition of applicable, or relevant and appropriate, requirements (ARARs), chemical-specific ARARs are those that may define acceptable exposure levels and can therefore be used in establishing primary remediation goals.

3.3.8 *closing military installation*—*installation, n*—Department of Defense installations identified for closure pursuant to *BRAC statutes*.

3.3.9 *disposal*—*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 groundwater.

3.3.10 *environmental investigation*—*investigation, n*—any investigation intended to determine the nature and extent of environmental contamination or to determine the *environmental condition of property* at a BRAC installation. ~~Environmental investigations may include, DoD installation or other federally-owned but property are not limited to, environmental site assessments, preliminary assessments, site inspections, remedial investigations, EBSs, Resource Conservation and Recovery Act (RCRA) facility assessments, and RCRA facility investigations.~~

3.3.10.1 *Discussion*—

Environmental investigations may include, but are not limited to, *environmental site assessments, preliminary assessments, site inspections, remedial investigations, ECOP assessments, RCRA facility assessments, and RCRA facility investigations.*

3.3.11 *environmental site assessment*—the process by which a person or entity seeks to determine whether a particular parcel of real *property* (including improvements) is subject to *recognized environmental conditions: conditions* ~~This is the same meaning as provided in (see Practice E1527; and Practice E2247).~~

3.3.12 *exposure pathway*—the route from a contaminant source to a human or any other environmental ~~receptor: receptor~~ (see [E1689](#)).

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

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

3.3.15 *MILCON, n*—Military construction includes major and minor construction projects funded by Military Construction, Army (MCA); Military Construction, Army Reserve (MCAR); Military Construction, National Guard (MCNG); Army Family Housing (AFH); Defense MILCON; and Tenant Service MILCON.

3.3.15.1 *Discussion*—