



Designation: ~~D5746~~—23 D5746 – 24

## Standard Classification of Environmental Condition of Property Area Types, Including Explosives Safety for Federally-Owned Real Property<sup>1</sup>

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 reappraisal. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reappraisal.

### 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.

## Document Preview

### 1. Scope

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1.1 *Purpose*—The purpose of this classification is to define eight *standard environmental condition of property area types* for federally-owned real *property* 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 federal landholding agency to classify *property* into eight 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 *Eight Recognized Standard Environmental Condition of Property Area Types*—The goal of this classification is to permit federal landholding agencies to classify properties in order to support determinations of which properties are suitable and unsuitable for transfer by lease or by deed. The term “*standard environmental condition of property area type*” refers to one of the eight area types defined in this classification. An identification of an area type on an environmental condition of *property* map means that a 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 eight area types:

<sup>1</sup> 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 Sept. 1, 2023/Jan. 1, 2024. Published November 2023/April 2024. Originally approved in 1995. Last previous edition approved in 2016/2023 D5746 – 98/D5746 – 23, (2016). DOI: 10.1520/D5746-98R16:10.1520/D5746-24.

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 *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 *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 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.

1.1.5 *Munitions Response, Munitions Response Areas, and Munitions and Explosives of Concern* are included within the scope this classification. Discarded Military Munitions (DMM) and Unexploded Ordnance (UXO) may be encountered at Department of Defense properties and at formerly used defense sites (FUDS). Section 7.1 describes the steps the *environmental professional* should follow to determine if DMM and UXO are present or have been present on the subject property and any response actions

taken at address DMM and UXO. Based upon this assessment, one of the seven explosive safety condition of property types described in 7.2 through 7.8 can be assigned to the property.

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:<sup>2</sup>

[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](#)

[E2247 Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property](#)

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

[U.S. Army Regulation 200-1 Environmental Protection and Enhancement, December 2007](#)

[Department of Defense Manual 4715.20, Defense Environmental Restoration Program \(DERP\) Management March 9, 2012](#)

[Department of Defense, Defense Explosives Safety Regulation DESR 6055.09, January 2019](#)

[U.S. Navy. OPNAV Instruction 8020.14b, U.S. Navy Explosives Safety Management Program Policy Manual. July 2022](#)

[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:<sup>4</sup>

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

[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:<sup>5,6</sup>

[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.

### 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.

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

<sup>3</sup> Available from National Technical Information Service (NTIS), 5301 Shawnee Rd., Alexandria, VA 22312, <http://www.ntis.gov>.

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

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

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

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.<sup>7</sup> 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*—

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 condition of property (ECOP), 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

<sup>7</sup> 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.

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 (see Practice D6008).

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 condition of property (ECOP) report, *n*—the written record of an ECP.

3.2.8.1 Discussion—

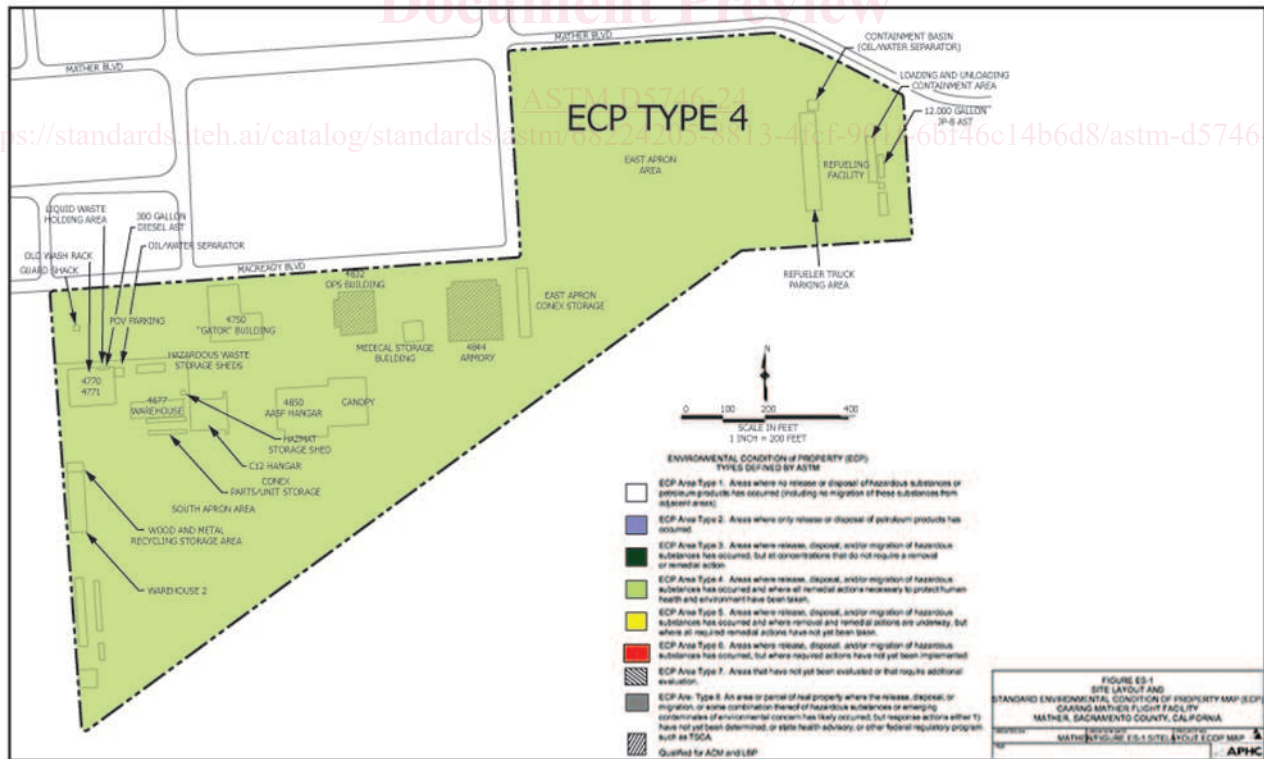
The ECOP Report is the documentation for the Standard Classification in accordance with this classification.

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

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).



Source: AlaskaCalifornia Army National Guard EBS Report (public domain)Mather EBS 2019

FIG. 1 Example of an Environmental Condition of Property Map

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 *military munitions, n*—means all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the Department of Defense, the Coast Guard, the Department 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.