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Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities¹

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1. Scope

1.1 *Purpose*—The purpose of this classification is to define seven standard environmental condition of property area types for Department of Defense (DoD) 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 to classify property into 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 Recognized Standard Environmental Condition of Property Area Types*—The goal of this classification is to permit DoD components 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 environmental condition of property area type” refers to one of the seven area types defined in this classification. An identification of an area type on an environmental condition of property map means that a DoD component 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 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).

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.

1.1.2 *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). 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 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.

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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 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 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.

2. Referenced Documents

2.1 *ASTM Standards*:²

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

[E1528 Practice for Limited Environmental Due Diligence: Transaction Screen Process](#)

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](#)

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

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

[DoD Policy on the Implementation of the Community Environmental Response Facilitation Act \(CERFA\), September 1993](#)

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

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 *environmental baseline survey (EBS)*—a survey of DoD 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 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; (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 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

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 Services, 5285 Port Royal Road, Springfield, VA 22161.

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.

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

3.2.3 *environmental condition of property map*—a map, prepared on the basis of all environmental investigation information conducted to date, that shows the environmental condition of a DoD installation's real property in terms of the seven standard environmental condition of property area types defined in this classification.

3.2.4 *hazardous substance*—a substance defined as a hazardous substance pursuant to CERCLA 42 USC § 9601(14), as interpreted by EPA regulations and the courts: “(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6921 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean

Air Act (42 USC § 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).”

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

3.2.6 *property*—the real DoD property subject to classification under the classification of environmental condition of property area types.

3.2.7 *recorded land title records*—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.

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

3.2.9 *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.

3.2.10 *remedial actions*—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.

3.2.11 *removal*—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.

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

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

3.2.14 *risk-based criteria*—cleanup levels intended to meet a predetermined level of acceptable risk to human health or the environment.

3.2.15 *site inspection (SI)*—an on-site investigation to determine whether 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.

3.3 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.

3.3.2 *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. Aerial photographs are commonly available from government agencies or private collections unique to a local area.

3.3.3 *all remedial action taken*—for the purposes of this 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)).

3.3.4 *applicable requirements*—those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that specifically

address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstances found at a CERCLA site. Only those state standards that are identified by a state in a timely manner and that are more stringent than federal requirements may be applicable.

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

3.3.6 *BRAC statutes*—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.

3.3.7 *carcinogenic*—a cancer-causing substance.

3.3.8 *chain of title review*—a review of recorded land title records, conducted as part of an EBS.

3.3.9 *chemical-specific*—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.

3.3.10 *closing military installation*—installations identified for closure pursuant to BRAC statutes.

3.3.11 *disposal*—the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous substances, or petroleum products or their derivatives, into or on any land or water so that such hazardous substances, or petroleum products or their derivatives or any constituent thereof, may enter the environment or be emitted into the air or discharged into any waters including groundwater.

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

3.3.13 *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. This is the same meaning as provided in Practice E1527.

3.3.14 *exposure pathway*—the route from a contaminant source to a human or any other environmental receptor.

3.3.15 *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.

3.3.16 *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.