



## Environmental Condition of Property (ECOP) Investigations

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### Technical Information Paper No. 38-001-0312

**PURPOSE.** To provide information on ECOP investigations for Federal real property transactions and military construction (MILCON) projects.

**REFERENCES.** See Appendix A for a list of references and a bibliography.

### FACTS

An ECOP investigation is a general term applied to several types of investigations in which the current environmental condition of a property is determined by examining current and historical uses of the property and adjoining properties.

The potential for environmental contamination of a property from hazardous substances, petroleum products, or other environmental concerns is determined through an ECOP investigation.

The results of an ECOP investigation are used to determine if a property is suitable for acquisition, construction, or divestment.

An ECOP investigation serves to protect the health of occupants of property potentially, currently, or formerly owned by the Army by minimizing the risk for exposure to environmental and safety hazards.

Due diligence is the degree of effort required by regulation or industry standard for inquiry into the environmental characteristics of a property in connection with a real estate transaction.

### REGULATORY FRAMEWORK

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 requires Federal agencies to evaluate the environmental condition of property and to take remedial actions as necessary to protect human health and the environment before transferring property. Section 120(h) of CERCLA establishes a regulatory process for

documenting the suitability of property for transfer. Information regarding storage, release, and disposal of hazardous substances must be disclosed in contracts and deeds prior to transfer of real property (Public Law (PL) 96-510, 1980; 42 U.S. Code (USC) 9620, 1996).

Liability under CERCLA is strict, meaning a potentially responsible party may be liable for environmental contamination based solely on property ownership, and without regard to fault or negligence. The Superfund Amendments and Reauthorization Act (SARA) of 1986 created an "innocent landowner" defense to CERCLA liability through the addition of Section 101(35)(B). The innocent landowner defense applies to those who can demonstrate that they "did not know and had no reason to know" prior to purchasing a property that contamination existed on the property when the purchaser acquired the property. To qualify for innocent landowner liability protection (LLP), the prospective landowner must have conducted "all appropriate inquiries" into the previous ownership and uses of the property consistent with good commercial or customary standards and practices prior to acquisition of the property (42 USC 9601, 1986).

Congress enacted the Community Environmental Response Facilitation Act (CERFA) in 1993, which amended CERCLA 120(h) to allow Federal agencies to identify uncontaminated portions of installations for expedited transfer while remedial action is continued elsewhere (PL 102-426, 1992; Deputy Secretary of Defense, 1996).

The Defense Authorization Act of Fiscal Year 1997 took CERFA a step further by allowing the transfer of Federal property even if contamination remains on the site. The U.S. Environmental Protection Agency (EPA) and the governor of the state where the site is located must make a finding that the site is suitable for the use intended by the new owner, the intended use is consistent with protection of public health and the environment, the public has an opportunity to comment, and the deferral of cleanup and the transfer of property will not substantially delay any necessary response action at the property. The deed to the property must contain assurances that provide for any necessary restrictions on the use of the property (PL 104-201, 1996).

The Small Business Liability Relief and Brownfields Revitalization Act of 2002 (Brownfields Amendments) clarified liability provisions for innocent landowners and added LLPs for bona fide prospective purchasers and contiguous property owners who demonstrate they conducted all appropriate inquiries, among other requirements. Bona fide prospective purchasers LLP enable a purchaser to knowingly acquire contaminated property while limiting future CERCLA liability (PL 107-118, 2002).

The EPA finalized "Standards and Practices for All Appropriate Inquiries," Title 40, Code of Federal Regulations, Part 312 (40 CFR 312) in 2005. The All Appropriate Inquiries (AAI) Rule established specific regulatory requirements and standards for conducting

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AAI. The AAI regulation references ASTM 1527-05 as being in full compliance with the AAI regulation (40 CFR 312, 2005; ASTM, 2005a).

Army Regulation (AR) 200-1 (Chapters 15-5 and 15-6) requires preparation of ECOP documents for Army Federal real property transactions and MILCON actions (AR 200-1, 2007).

Completion of an environmental survey, munitions explosives constituents (MEC) survey, and categorization of the proposed site is part of the MILCON site approval process described in AR 420-1, Subsection 4-16 (AR 420-1, 2009).

## **ACTIONS REQUIRING ECOP INVESTIGATIONS**

### Federal Real Property Transactions

Federal real property transactions include divesting actions and acquisition actions. ECOP investigations are required prior to such transactions to acquire and document information required by CERCLA for disclosure in deeds, and to ensure the Department of Defense (DOD) (or other Federal entity) does not accept legal responsibility for environmental contamination caused by others.

### Acquisition Actions

Acquisition actions obtain ownership or control of real property. These actions include purchasing property; initiating or renewing a lease, license, or permit of property owned by others; terminating another's lease of Federal property; and transferring property between Federal agencies.

### Divesting Actions

Divesting actions release ownership or control of Federal property or property owned by others. These actions include selling or transferring Federal property, granting easements, initiating or renewing a lease or license of Federal property to others, and terminating a lease on property owned by others.

### MILCON Actions

MILCON actions include construction projects in excess of \$750,000.

## TYPES OF ECOP INVESTIGATIONS

To achieve due diligence, ECOP investigations must be conducted in a consistent, repeatable, and legally defensible manner. Good customary and commercial practices for conducting ECOP investigations are defined in ASTM Standards E1527-05, D6008-96(05), E2247-08, D5746-98 (02), and E1903-11 (ASTM 2005a and b, 2008, 2010, and 2011). There are four types of ECOP investigations: Environmental Site Assessments (ESAs), Environmental Baseline Surveys (EBSs), Preconstruction Assessments (PCAs), and Phase II Investigations.

### ESA

The purpose of the ESA is to document the existing environmental condition of the property, including any recognized environmental conditions (RECs), in a manner that demonstrates AAI. A REC is defined as:

*The presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property (ASTM, 2005a).*

An ESA is performed for acquisition actions when the property is not Federally owned. Specific regulatory requirements and standards for conducting AAI are contained in ASTM E1527-05 *Standard Practice for Environmental Site Assessments: Phase 1 Environmental Sites Assessment Process*. For investigations of more than 120 acres of forested or rural property, ASTM E2247-08 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property* may be used (ASTM, 2005a and 2008).

### EBS

An EBS satisfies due diligence and disclosure requirements of AR 200-1 and CERCLA 120(h) when transferring property out of Federal control (Federally owned or leased land) or accepting control of Federal property from another Federal agency. Specific regulatory requirements and standards for conducting the EBS are contained in ASTM D6008-96 (2005) *Standard Practice for Conducting Environmental Baseline Surveys* (ASTM, 2005b).

The purpose of the EBS in a property **disposal** action is to document the condition of the property at time of transfer to ensure:

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- the prospective purchaser is made aware of environmental conditions associated with the property, and
- the Federal Agency is not held liable for contamination caused by actions that occur after the transfer takes place.

The purpose of the EBS in a property **acquisition** action is to document the condition of the land at time of transfer to ensure:

- the Federal agency is aware of the environmental conditions associated with the property prior to taking control of the property,
- the Federal agency accepting control is not held liable for contamination caused by activities that occurred prior to the transfer taking place, and
- the Federal agency accepting control does not incur liability or financial responsibility for contamination caused by another Federal agency.

Information presented in the EBS is used to support findings of suitability to transfer (FOSTs), findings of suitability to lease (FOSLs), and findings of suitability for early transfer (FOSET) in accordance with CERFA.

Based on information collected during the investigation, an ECOP category is assigned to the property, or the property may be divided into parcels and an ECOP category assigned to each parcel. The seven ECOP categories (formalized in ASTM Standard ASTM D5746-98 (2010) *Standard Classification of ECOP Area Types*) (ASTM, 2010) are—

- Area Type 1. Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- Area Type 2. Areas where only release or disposal of petroleum products has occurred.
- Area Type 3. Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.
- Area Type 4. Areas where release, disposal, and/or migration of hazardous substances has occurred and where all remedial actions necessary to protect human health and the environment have been taken.

- Area Type 5. Areas where release, disposal, and/or migration of hazardous substances has occurred and where removal or remedial actions are under way, but where all required remedial actions have not yet been taken.
- Area Type 6. Areas where release, disposal, and/or migration of hazardous substances has occurred, but where required actions have not yet been implemented.
- Area Type 7. Areas that have not been evaluated or require additional evaluation.

Parcels classified as ECOP Area Types 1 through 4 are suitable with respect to CERCLA Section 120(h) requirements for transfer to non-Federal recipients.

### PCA

According to AR 200-1 and AR 420-1, a PCA is required prior to all MILCON projects to identify potential sources of MEC, chemical warfare agents, hazardous substances, and petroleum products. The purpose of the PCA is to minimize risks to builders and future occupants of military facilities and to avoid unforeseen cleanup costs and delays by identifying (and possibly remediating) contamination prior to construction.

Procedures for performing a PCA are contained in *Procedures Manual for the Environmental Survey and Clearance of a Construction Site* (U.S. Army Environmental Center, 1999). The PCA is also conducted in general conformance with ASTM D6008-96(05), with the exception that the seven ECOP categories are not used. The following three categories are used instead:

- Category I—There is no reason to suspect contamination will be encountered during construction.
- Category II—There is no known contamination, but there remains some potential that contamination may be encountered during construction.
- Category III—The site is known to be contaminated or there is a strong suspicion contamination will be encountered during construction.

### Phase II Investigations

Phase I ECOP investigations (described in the previous paragraphs) may indicate a need for additional investigation. Additional investigation may be required to evaluate:

- RECs identified in an ESA.
- Environmental conditions identified in an EBS in property or parcels categorized as ECOP Area Types 5, 6, or 7,
- Environmental conditions identified in a PCA in property or parcels designated Category II or III.

The purpose of a Phase II assessment is to obtain a better understanding of the potential environmental concerns associated with a property. Environmental and/or geophysical sampling is conducted to determine the absence or presence, or assess the extent, of suspected contaminants identified during a Phase I assessment.

ASTM E1903-97 (11) *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process* (ASTM, 2011) provides a framework for employing good commercial and customary practices in conducting a Phase II assessment on a property with respect to the potential presence of a range of contaminants within the scope of CERCLA as well as petroleum products.

## SELECTION OF AN APPROPRIATE ECOP INVESTIGATION

As previously discussed, ECOP investigations are performed in a variety of applications with different purposes. A comparison of the four ECOP investigations is provided in the Table. Although most property transfer and MILCON actions are addressed in the Table, site-specific conditions may exist that require consultation with the customer and professional judgment to determine the appropriate investigation for the proposed action.

**Table 1. Summary Comparison of ECOP Investigations**

	<b>EBS</b>	<b>ESA</b>	<b>PCA</b>	<b>Phase II Site Investigations</b>
<b>ASTM Standard(s)</b>	D6008-96 (2005) D5746-98	E1527-05	D6008-96 (05)	E1903-97 (11)
<b>Application</b>	Acquisition or disposal of Federal property	Acquisition of non-Federal property	Performed prior to any MILCON action	Performed when any Phase I investigation indicates a need for additional investigation
<b>Purpose</b>	Satisfy due diligence and disclosure requirements; support FOST, FOSL, or FOSET	Conduct AAI to qualify potential landowner for LLP	Ensure property is suitable for construction	Obtain a better understanding of the potential environmental concerns associated with a property
<b>Focus</b>	Assign ECOP Area Type(s)	Determine existence of RECs	Assign site clearance categories	Conduct environmental and/or geophysical sampling to determine the absence or presence, or assess the extent, of suspected contaminants

## **QUALIFICATIONS REQUIRED TO CONDUCT ECOP INVESTIGATIONS**

Qualifications required of an Environmental Professional to assess a property are defined in the EPA's AAI Rule (40 CFR 312.10, 2005).

An Environmental Professional is defined as—

*A person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases (see 40 CFR Part 312.1(c)) on, at, in, or to a property, sufficient to meet the objectives and performance factors in 40 CFR Parts 312.20(e) and (f).*

Such a person must—

- *Hold a current Professional Engineer's or Professional Geologist's license or registration from a State, Tribe, or US territory (or the Commonwealth of Puerto Rico) and have the equivalent of three (3) years of full-time relevant experience; or*
- *Be licensed or certified by the Federal Government, a State, Tribe, or US territory (or the Commonwealth of Puerto Rico) to perform environmental inquiries as defined in 40 CFR Part 312.21 and have the equivalent of three (3) years of full-time relevant experience; or*
- *Have a Baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or science and the equivalent of five (5) years of full-time relevant experience; or*
- *Have the equivalent of ten (10) years of full-time relevant experience.*

**APPENDIX A**  
**REFERENCES AND BIBLIOGRAPHY**

**Section I**  
**References**

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