

**25 APRIL 1994**

**Civil Engineer**



**ENVIRONMENTAL BASELINE SURVEYS IN  
REAL ESTATE TRANSACTIONS**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements Air Force Policy Directive (AFPD) 32-70, *Environmental Quality*, by spelling out responsibilities and procedures for an Environmental Baseline Survey (EBS) in a real property transaction. This instruction also covers additional procedures for transactions involving unremediated real property and for the termination or expiration of temporary interests in real property.

This instruction complements AFI 32-9001, *Acquisition of Real Property*; AFI 32-9003, *Out-grant of Real Property*; AFI 32-9004, *Disposal of Real Property*; AFI 32-7020, *The Environmental Restoration Program*, and AFI 63-701, *Industrial Facilities*. See **Attachment 1** for an explanation of abbreviations, acronyms, and terms in this instruction.

**SUMMARY OF REVISIONS**

This is the initial publication of AFI 32-7066.

## Chapter 1

### HOW TO USE THIS INSTRUCTION

#### 1.1. Background. Use the procedures in this instruction to:

- Document the nature, magnitude, and extent any environmental contamination of or interests in real property considered for acquisition, out-grant or disposal.
- Identify potential environmental contamination liabilities associated with a transaction. Establish environmental due diligence.
- Develop enough information to assess health and safety risks.
- Protect human health and the environment.
- Determine possible effects of contamination on property valuation.
- Serve as the basis for notice of environmental condition when required under Section 120[h][1] of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) as amended (42 U.S.C. 9620[h][1]) or any applicable state or local real property disclosure requirements.

#### 1.2. Concept:

1.2.1. In conducting environmental surveys of real property, follow the most protective Federal, state, and local requirements. This instruction does not duplicate these requirements, but it provides a framework on the way we do business to comply with these requirements according to AFD 32-70.

1.2.2. Major commands (MAJCOM) provide additional implementing guidance in supplemental publications to this instruction. The MAJCOM must identify the specific "actors" who have implementing responsibility and include any "how to" implementing guidance needed to comply with this instruction.

#### 1.3. Responsibilities:

1.3.1. The Assistant Secretary of the Air Force for Manpower, Reserve Affairs, Installations, and Environment (SAF/MI) promulgates and oversees policy for Environmental Baseline Surveys (EBS) in real property transactions.

1.3.2. The Civil Engineer (HQ USAF/CE) formulates policy, allocates resources, and oversees the execution of the requirements in this instruction throughout the Air Force.

1.3.3. MAJCOMs provide execution guidance and oversee implementation of this instruction at their installations. All references to MAJCOMs in this instruction include the Air National Guard Readiness Center (ANGRC) and other components HQ USAF designates as "MAJCOM equivalent."

#### 1.4. Applicability. This instruction applies to all real property within the United States, its territories, and its possessions that have been identified for acquisition, out-grant or disposal by the Air Force.

#### 1.5. Waivers:

1.5.1. The chairperson of the host Environmental Protection Committee (see AFI 32-7005) may waive an EBS requirement in this instruction under the provisions in this section. A waiver must be

in writing and document why the transaction qualifies for a waiver. The written waiver becomes part of the real estate transaction administrative record.

1.5.2. Unless statutorily precluded, a waiver is possible when an initial records review, interviews, and site inspections indicate there are no potential sources of contamination and when examination of the proposed use determines the following criteria are met:

- The condition of the property will not create health and safety risks when used as intended.
- The allowable activities will not introduce hazardous materials or petroleum products on the property.
- No material alteration or change in the physical condition of the property will occur if the property is held by the Air Force, such that the Air Force could be deemed an owner or operator of the facility under CERCLA.

1.5.3. Examples of transactions eligible for waiver from the EBS requirement include, but are not be limited to:

- Renewing a temporary interest in real property if no change in leased, licensed, or permitted premises or in allowable use will occur.
- Leasing, licensing, or permitting of administrative space in an existing building having no known asbestos, lead or radon.
- Acquiring Explosive-Quantity Distance easements.
- Issuing entry rights for surveys, inspections, and tests where there will be no introduction of hazardous materials or petroleum products on the property.
- Acquiring Air Installation Compatible Use Zone easements.

## Chapter 2

### REQUIREMENTS

**2.1. Conducting Phase I of the EBS.** You usually find contaminants in soil and subsoil, ground and surface water, soil gas and vapor, leachate, sludge and sediment. Common sources of contaminants are hazardous material and waste, solid waste, polychlorinated biphenyls (PCB), leakage from aboveground and underground storage tanks (including oil water separators and pipelines), asbestos, petroleum products, water and wastewater treatment discharges, pesticides, radon, explosive ordnance disposal residues, lead, biomedical wastes, radioactivity and photochemicals.

**2.1.1. Investigation.** Determine the potential for present and past site contamination by hazardous substances, petroleum products and derivatives as well as the substances listed in paragraph 2.1.4. If you find contamination, characterize types, quantities and times when storage, release into the environment or structures, or disposal took place on the property, to the extent such information is available. At a minimum, this phase includes a comprehensive records search, interviews and visual site inspection:

2.1.1.1. Make a reasonable search for and review available Air Force, Federal, regulatory agency, state and local government studies and records. Make a reasonable inquiry into the existence and availability of relevant information and records to include all:

- Complete or partial surveys, inspection reports, or other relevant records. Examples of such records include maps showing storage tank locations, results of storage tank leak testing, hazardous waste management plans, spill plans, base comprehensive plans, utility drawings, environmental impact analysis documents, bioenvironmental engineering case files, environmental incident reports, supply records and surveys related to drinking water surveillance, *Environmental Compliance Assessment and Management Program*, asbestos, PCBs, radon, and lead-based paint.
- Installation Restoration Program (IRP) studies or other documents produced under CERCLA or *the Solid Waste Disposal Act*.
- Applicable regulatory agency reports, notices of violation or noncompliance, environmental incident reports or other similar records.
- Current and discontinued permits pertaining to environmentally regulated activities such as air emissions, wastewater discharges, and hazardous waste management.
- Title, deed, other real property records or uses that could reasonably have contributed to an environmental concern. Information on Force land use may be available from the Historian's Office. In the case of disposal by deed, the review should, at a minimum, cover the preceding 60 years.

2.1.1.2. Review all reasonably obtainable Federal, state, and local government records for adjacent property if the following conditions apply:

- There has been a release of any hazardous substance, petroleum product or petroleum on the adjacent property.
- The release is likely to cause or contribute to a release of any hazardous substance or any petroleum product on the subject property.

2.1.1.3. Collect samples as appropriate. If no record exists, collect samples to determine:

- Drinking water quality.
- Quality of water supply sources (surface water and groundwater) on the subject property
- Radon levels in high occupancy facilities as defined in the *Air Force Radon Assessment and Mitigation Program*.
- The presence of PCBs or PCB-containing equipment for property subject to disposal or out-grant.
- The presence of lead-based paint when it potentially exists in housing units.

2.1.1.4. Analyze aerial photographs from the Federal government or from state or local governments, that may reflect prior uses of the property.

2.1.1.5. Interview current and former employees involved in operations on the subject property.

2.1.1.6. Inspect:

- The interior and exterior of the subject property including buildings, structures, equipment, pipes, pipelines or other improvements on the subject property.
- Adjacent properties, noting sewer lines, runoff patterns, evidence of environmental impacts, and anything else which indicates actual or probable release of hazardous or petroleum products.
- Pay attention to current and past use(s) of property; hazardous substances and petroleum products associated with known uses; above and underground storage tanks; odors; pools of liquid; drums; hazardous substance and petroleum product containers; potential asbestos-containing materials; PCB-containing electrical equipment; condition of painted surfaces; stains and corrosion; drains and sumps; pits, ponds, and lagoons; stained soil or pavement; stressed vegetation; solid waste; wastewater; wells; septic systems; and dead or diseased wildlife. Document barriers or limits to the inspection.

2.1.1.7. Identify the sources of contamination on the installation and on adjacent properties which could migrate to the subject property during or after the transaction.

2.1.1.8. Identify any actions taken in response to actual or possible contamination on the subject property or adjacent to it.

2.1.1.9. Inspect adjacent property as extensively as the owners or operators permit.

2.1.1.10. Note that you can find additional guidelines for conducting an EBS in the American Society for Testing and Materials (ASTM) standards: *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM Designation 1527-93 and *Standard Practice for Environmental Site Assessments: Transaction Screen Process*, ASTM Designation 1528-93.

2.1.1.11. Prepare an EBS report at the end of Phase I investigation. See **Attachment 2** for the report format. Specify any media, contaminants, or issues listed in the format that do not apply to the transaction.

**2.1.2. Conclusions.** Based on the findings, the EBS report categorizes the presence of hazardous substances or petroleum products or their derivatives for each property or area:

2.1.2.1. Category 1- No storage, release or disposal has occurred. Property where no hazardous substances or petroleum products or their derivatives were stored, released into the environment or structures, or disposed on the subject property and where no migration from adjacent areas has occurred.

2.1.2.2. Category 2- Only storage has occurred. Property where hazardous or petroleum products or their derivatives were stored, but no release, disposal or migration from adjacent areas occurred.

2.1.2.3. Category 3- Contamination below level that require any action. Property where contamination is present but falls below established action levels. For Air Force controlled property, base this conclusion on a characterization pursuant to the IRP. For non-Air Force controlled property, base this conclusion on an equivalent level of evaluation that includes sampling and laboratory analysis.

2.1.2.4. Category 4- Remedial action required and taken. Property where contamination above action levels existed but all remedial actions necessary to protect human health and the environment have been taken to meet the provisions of CERCLA Section 120 (h) (3).

2.1.2.5. Category 5- Remedial or other action underway. Property is undergoing remedial action for known contamination. Remedial systems are partially or entirely in-place, but have not been fully demonstrated.

2.1.2.6. Category 6- Required response action not implemented. Property contains known contamination and required remedial systems or other actions have not been selected or implemented.

2.1.2.7. Category 7- Further evaluation required. If the existence of contamination or potential for a release of hazardous substances into the environment or structures is indicated, but not well characterized then further evaluation is required. Property which is not well characterized includes Air Force controlled property which has not yet been further characterized pursuant to the IRP. Conduct further evaluation before making a recommendation on whether to proceed with the transaction. (See section 2.2. for procedures for further evaluation).

**2.1.3. Recommendations Related to Hazardous Substances and Petroleum Products and Their Derivatives.** Any disposal by deed of property owned by the Federal government on which any hazardous substance was stored for one year or more, known to have been released, or disposed of is subject to the requirements of Section 120(h)(3) of CERCLA. Make the following types of recommendations in the EBS report based on the conclusions related to the presence of hazardous substances or petroleum products or their derivatives:

2.1.3.1. Proceed with any planned transaction if the property falls in Categories 1 - 4.

2.1.3.2. Proceed with any planned transaction excluding those portions of the property falling in Categories 5 - 7.

2.1.3.3. Do not proceed with a disposal or other disposition by deed if property falls in Categories 5 - 6. Advise whether the Air Force should proceed with a transaction involving a temporary interest. The procedures in section 2.3. apply to such transactions.

2.1.3.4. Do not proceed with acquisition of a permanent interest if property falls in Categories 5 - 6 unless Air Force remedial action necessitates the transaction or other unusual circumstances

exist. Advise whether the Air Force should proceed with a transaction involving a temporary interest in the property. The procedures in section 2.3. apply to such transactions.

2.1.3.5. Do not proceed with any planned transaction if property falls in Category 7. Advise that the property cannot be classified into one of the other categories without further evaluation. Include a cost and time estimate for conducting further evaluation.

**2.1.4. Recommendations Related to Other Substances.** In the case of an out-grant or disposal, the report:

- Advises that the presence of any lead and copper in drinking water, asbestos-containing materials, PCBs, radon, or lead-based paint should be disclosed to property recipients.
- Identifies any abatement measures necessary to bring property within established action levels.
- Incorporates any restrictive provisions based on compliance issues into the recommendations.

**2.1.5. Certifications.** The EBS report must contain a certification regarding the accuracy of the EBS. See **Attachment 3** for sample certifications. Include a certification of PCB clearance for Air Force-controlled property. The report may contain a certification regarding the presence of hazardous substances. Such certifications can serve as notice when required under Section 120 (h) (1) of CERCLA.

**2.2. Conducting Phase II of an EBS.** Conduct this phase if the property requires further evaluation. Such property falls in Category 7 as defined in section 2.1.

2.2.1. Consistent with general procedures of the Air Force IRP, conduct additional investigation as appropriate, to include surface, subsurface, and aquifer sampling to identify:

- Contaminants or sources of contaminants in structures or soil.
- The presence of surface or ground water contamination.
- The type, concentration, and extent of the contamination.

2.2.2. Prepare an addendum to the Phase I survey report containing the findings, conclusions, recommendations and certifications of the Phase II investigation. (See paragraph 2.1. for the conclusions and recommendations associated with each category and for the certification requirements.)

2.2.3. Determine whether contaminated property should be included under the IRP or is subject to an existing Federal or state regulatory agreement for the property itself or the installation.

**2.3. Procedures for Unremediated Property.** If the subject property is contaminated, but the appropriate remedial action has not yet been taken, then the property falls in Category 5 or 6 as defined in paragraph 2.1. For such property, take the following additional actions before proceeding with any acquisition, interagency transfer or out-grant of such property:

2.3.1. Appropriate health, safety, and environmental protection experts analyze the results of all sampling, investigations and other available data, including any site or remedial investigations, to determine if any health, occupational, or safety risks are associated with the intended use of the property. Advise in the EBS report that the presence of such contaminants must be disclosed in the transaction documents.

2.3.2. Analyze restrictive provisions in the transaction to:

- Mitigate the effects of contamination to reduce any environmental, health, occupational or safety risks associated with the use of property.
- Prevent interference with compliance activities.

2.3.2.1. Identify such measures as part of the recommendation in the EBS report.

**2.4. Termination or Expiration of Temporary Interests.** At the termination or expiration of a temporary interest, document any environmental changes in a supplement to the EBS report or the statement of waiver, or redo the EBS report if appropriate. This documentation becomes part of the real estate transaction administrative record.

2.4.1. In documenting the environmental changes, review these additional documents where applicable:

- Federal or state audits or inspections conducted during the term of the temporary interest.
- Documents submitted by the holder of the property interest to Federal, state, and local environmental regulatory agencies.
- Occupational, health or safety incident reports involving the property filed during the term of the temporary interest.

2.4.2. Document all hazardous substances used or stored at the property during the term of the temporary interest.

2.4.3. Document all hazardous waste generated on the property during the term of the temporary interest, and its disposition.

JAMES E. McCARTHY,, Maj General, USAF  
The Civil Engineer

## Attachment 1

### ABBREVIATIONS, ACRONYMS, AND TERMS

#### *Abbreviations and Acronyms*

**AFCEE**—Air Force Center For Environmental Excellence

**AFLSA**—Air Force Legal Services Agency

**AFMOA**—Air Force Medical Operations Agency

**AFMC**—Air Force Materiel Command

**ANG**—Air National Guard

**CERCLA**—Comprehensive Environmental Response, Compensation, and Liability Act

**EBS**—Environmental Baseline Survey

**EF**—Environmental Function

**IRP**—Installation Restoration Program

**NGB**—National Guard Bureau

**PCB**—Polychlorinated biphenyl

**SAF**—Office of the Secretary of the Air Force

#### *Terms*

**Acquisition**—Any authorized method of obtaining Air Force control of and responsibility for real property. An acquisition may be a temporary or permanent interest in real property. Includes interagency transfers of real property accountability from other Federal government agencies. Methods include purchase, condemnation, donation, exchange, leasing, licenses, permits, revestment and recapture.

**Adjacent Properties**—Not only those properties contiguous to the boundaries of the installation or subject property, but also those properties relatively nearby that could pose significant environmental impact or concern on the installation or subject property.

**Disposal**—Any authorized method of permanently divesting the Air Force of control of and responsibility for real property. Includes fee conveyance and interagency transfers or other disposition.

**Disposal by Deed**—A conveyance of fee or any easement interest in real property.

**Hazardous Substance**—In addition to the meaning provided in CERCLA, 42 U.S.C. 9601(14), this term shall specifically include petroleum, petroleum products, oil, and lubricants (POL).

**Interagency Transfer**—Transfer of Federal government property accountability to or from other Federal government agencies.

**Outgrant**—A temporary grant of an interest in or right to use Air Force controlled real property by means of either a lease, license or permit.

**Storage**—The holding of hazardous substances for a temporary period prior to the hazardous substances being either used, treated, transported, or disposed of.

**Temporary Interest**—A grant of interest in or use of real property which expires at the end of a stated term or which can be terminated. Instruments include leases, licenses and permits.

**Real Property**—Land and fixtures and other improvements affixed thereto.

**Release**—This term shall have the meaning provided in CERCLA, 42 U.S.C. 9601(22).

## **Attachment 2**

### **FORMAT FOR THE EBS REPORT**

Executive Summary

Section 1.0 Purpose of the Environmental Baseline Survey

1.1 Boundaries of the Property and Survey Area (include map)

Section 2.0 Survey Methodology

2.1 Approach and Rationale

2.1.1 Description of Documents Reviewed

2.1.2 Property Inspections

2.1.3 Personal Interviews

2.1.4 Sampling

Section 3.0 Findings For Subject Property

3.1 History and Current Use (including chain of title)

3.2 Environmental Setting

3.3 Hazardous Substances

3.3.1 Hazardous Materials and Petroleum Products

3.3.2 Hazardous and Petroleum Waste

3.4 Installation Restoration Program Contamination

3.5 Storage Tanks

3.5.1 Aboveground Storage Tanks

3.5.2 Underground Storage Tanks

3.5.3 Pipelines, Hydrant Fueling, and Transfer Systems

3.6 Oil/Water Separators

3.7 Pesticides

3.8 Medical or Biohazardous Waste

3.9 Ordnance

3.10 Radioactive Wastes

3.11 Solid Waste

3.12 Ground Water

- 3.13 Wastewater Treatment, Collection and Discharge
- 3.14 Drinking Water Quality
- 3.15 Asbestos
- 3.16 Polychlorinated Biphenyls
- 3.17 Radon
- 3.18 Lead-Based Paint

#### Section 4.0 Findings For Adjacent Properties

- 4.1 Land Uses
- 4.2 Surveyed properties

#### Section 5.0 Applicable Regulatory Compliance Issues

- 5.1 List of Compliance Issues
- 5.2 Description of Corrective Actions
- 5.3 Estimates of Various Alternatives

#### Section 6.0 Conclusions

- 6.1 Facility Matrix
- 6.2 Property Categories Map (if more than one category)
- 6.3 Resources Map
- 6.4 Data Gaps

#### Section 7.0 Recommendations

#### Section 8.0 Certifications

Appendix A: Terms

Appendix B: Maps

Appendix C: Aerial and Site Photos

Appendix D: References

Appendix E: Interviews

### Attachment 3

#### SAMPLE CERTIFICATIONS

##### A3.1. Certification of the Environmental Baseline Survey

The (preparer) has conducted this Environmental Baseline Survey on behalf of the Air Force. The (preparer) has reviewed all appropriate records made available, and conducted visual site inspections of the selected facilities following an analysis of information during the record search. The information contained within the survey report is based on records made available and, to the best of the (preparer's) knowledge, is correct and current as of (date).

Certified by: (signature of preparer) Date:

(Title Block)

Approved by: (signature of Head of Responsible EF) Date:

(Title Block)

##### A3.2. Certification of PCB Clearance\*

1. **This Real Property is in compliance with 40 CFR 761 as outlined below:**
  - a. **An inventory has been prepared and is being maintained of all PCB Real Property Installed Equipment and Real Property PCB Items per Section 761.45.**
  - b. **All in-service and stored serviceable PCB and PCB contaminated Real Property Installed Equipment and Real Property PCB Items have been inspected, repaired and are being maintained to prevent leakage, and, therefore can be distributed per Section 761.30.**
  - c. **PCB Real Property Installed Equipment and Real Property PCB Items have been stored, decontaminated, and labeled per Sections 761.42, 761.43, and 761.44.**
  - d. **There is no known PCB contaminated soil, wastes, or unserviceable equipment remaining on the existing property.**
2. **A records search and an on-site inspection indicate that this property has not been exposed to PCB materials or equipment.**

\* Certify to either paragraph 1 or 2.

Certified by: (signature of preparer) Date:

(Title Block)

Approved by: (signature of Head of Responsible EF) Date:

(Title Block)

### A3.3. Certification of No Contamination

This excess real property contains no known hazardous substances as that term is defined in the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601), as amended, or other contamination as specified by the Resource Conservation and Recovery Act of 1976, the implementing Environmental Protection Agency regulations (40 CFR Parts 261, 262, 263, and 761), and the Federal Property Management Regulations (41 CFR Part 101-47). A complete search of agency files revealed that no hazardous substance has been stored for more than one year, known to have been released, or disposed of on the Air Force-controlled real property described below.

Certified by: (signature of preparer) Date:

(Title Block)

Approved by: (signature of Head of Responsible EF) Date:

(Title Block)

### A3.4. Certification of Contamination

A complete search of agency files has revealed that hazardous substance (s) as that term is defined in the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601) as amended, were stored for one year or more, known to have been released, or were disposed of on the excess Air Force controlled real property described below.

- i. **The following notice provides the available information discovered as a result of a complete search of agency files pertaining to hazardous substances known to have been stored, released, or disposed of on the excess real property:**
  - a. **Identify the type and name of the hazardous substance:**
  - b. **the Chemical Abstract Services Registry Number (CASRN), where applicable; the regulatory synonym for the hazardous substance as listed in 40 CFR 302.4, where applicable; or the RCRA hazardous waste number specified in 40 CFR 261.30, where applicable)**
  - c. **Identify the quantity in kilograms and pounds of the hazardous substance(s) stored, disposed or released on the excess property:**
  - d. **Identify the date(s) and the period of time that such storage, release or disposal took place:**
  - e. **Describe the remedial action taken with regard to the hazardous substance on the excess property:**

**ii. The following information, based on agency files or other available information, addresses the period prior to**

(date of deed) . This information is the best available, and is believed to be correct, but no guarantee as to accuracy can be provided.

(Repeat information requested in I(a) and I(b) above).

**CERTIFICATION**

The Air Force has taken all remedial action necessary to protect human health and the environment with respect to any hazardous substance(s) released, disposed of, or stored on the real property described below which is identified as excess to Air Force requirements and proposed for disposal.

Certified by: (signature of preparer) Date:

(Title Block)

Description/Name of area being exceeded: