

## CHAPTER 13. HAZARDOUS MATERIALS

## 1. INTRODUCTION AND DEFINITIONS.

a. **General.** Federal, State, and local laws regulate hazardous materials use, storage, transport, or disposal. These laws may extend to past and future landowners of properties containing these materials. In addition, disrupting sites containing hazardous materials or contaminants may cause significant impacts to soil, surface water, groundwater, air quality and the organisms using these resources. Therefore, airport sponsors purchasing or developing land for airport purposes may encounter hazardous materials contamination. The environmental document should disclose and analyze information about hazardous materials.

b. **Terms and definitions.** Generally, the terms "hazardous materials," "hazardous waste," and "hazardous substances" are associated with industrial wastes, petroleum products, dangerous goods or other contaminants. But these terms have very precise and technical meanings that are used for consistency and legal purposes

(1) **Hazardous wastes.** Regulations developed pursuant to the Resource Conservation and Recovery Act (RCRA) at 40 CFR Part 261, Subpart C, define this term. Hazardous wastes are solid wastes that are ignitable, corrosive, reactive, or toxic (sometimes called "characteristic wastes"). In addition, Subpart D contains a list of specific types of solid wastes that the EPA has deemed hazardous (sometimes called "listed wastes").

(2) **Hazardous substances.** Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. § 9601(14)) defines this term broadly. It includes hazardous waste, hazardous air pollutants, hazardous substances designated as such pursuant to the Clean Water Act and the Toxic Substances Control Act and elements, compounds, mixtures, solutions, or substances listed in 40 CFR Part 302 that pose substantial harm to human health or environmental resources. It should be noted that, pursuant to CERCLA, hazardous substances do not include any petroleum or natural gas substances and materials.

(3) **Hazardous materials.** According to 49 CFR Part 172, Table 172.101, these are any substances or materials commercially transported that pose unreasonable risk to public health, safety, and property. They include hazardous wastes and hazardous substances as well as petroleum and natural gas substances and materials. As a result, the term "hazardous materials" represents hazardous wastes and substances in this Desk Reference.

c. **Environmental Due Diligence Audit (EDDA).** An EDDA is a systematic investigation of real property to determine if activities involving hazardous materials have occurred at a site or resulted in environmental contamination. An EDDA is also a form of pre-acquisition protection against CERCLA/RCRA liability and a defense in lawsuits addressing contaminated lands. If the Phase I EDDA indicates that the land is, was, or has the potential for such activities or occurrences, a Phase II EDDA attempts to verify and identify the existence of the materials. If necessary, a Phase III EDDA will delineate the amounts or

limits of hazardous materials or contamination and provide preliminary clean-up plans and cost estimates, if applicable. Personnel specializing in performing EDDAs should conduct the investigations due to the potential liabilities and risks associated with these assessments. FAA Order 1050.19, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions*, provides more information on EDDAs. .

**2. APPLICABLE STATUTES AND IMPLEMENTING REGULATIONS.**

The statutory framework related to hazardous materials in Federal Aviation Administration (FAA) actions, projects, and decisions is mainly contained in the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), and the Community Environmental Response Facilitation Act (CERFA). This table summarizes these laws.

APPLICABLE STATUTES AND IMPLEMENTING REGULATIONS	SUMMARY DESCRIPTION	OVERSIGHT AGENCY
CERCLA, 42 USC Section 9601, <i>et. seq.</i> In particular, see Sections 101, 102, 103, 105, 107, 120.	Defines hazardous substances. Requires notifying the public about hazardous substance releases exceeding reportable quantities. Establishes criteria for recovery, clean-up, and response plans. Defines individual and joint liabilities of potentially responsible parties. Limits liability under the "innocent landowner" and "due diligence" provisions if a landowner: <ul style="list-style-type: none"> <li>• has not contributed to the contamination of a property;</li> <li>• uses the property in accordance with good commercial or customary practices; and</li> <li>• has conducted all appropriate inquiry into the previous ownership.</li> </ul> Requires Federal agencies to comply with CERCLA at facilities they own.	U.S. Environmental Protection Agency (EPA)
CERFA [P.L. 102-426](amended portions of CERCLA)	As conditions of a sale, release, or transfer of Federal lands or facilities used to store hazardous materials or where a release or disposal of hazardous materials has occurred, Federal agencies must: <ul style="list-style-type: none"> <li>• identify those lands or facilities; and</li> <li>• complete waste or contaminate clean-up of these lands or facilities.</li> </ul>	FAA
Oil Pollution Act of 1990, 33 USC, Section 2701 <i>et seq.</i>	Provides for recoupment of removal costs and damages for discharges of oil and other petroleum products.	EPA
RCRA, 42 USC Section 6901 <i>et seq.</i> , [P.L. 94-580] Sections 3001, 3010	Defines hazardous wastes. Establishes procedures hazardous materials manufacturers must follow regarding hazardous material production, use, and disposal. These are called the "cradle to grave" provisions.	EPA
Toxic Substances Control Act (TSCA) [15 USC, Sections 2601-2692]	The Act regulates the introduction of new chemicals or those that already exist. Subchapters 2 through 4 address asbestos, indoor radon, and lead exposure. 15 USC Section 2605 addresses polychlorinated biphenyls (PCBs)	EPA

APPLICABLE STATUTES AND IMPLEMENTING REGULATIONS	SUMMARY DESCRIPTION	OVERSIGHT AGENCY
40 CFR Part 761	This CFR section addresses the use and disposal of PCB products and items containing that chemical.	EPA

### 3. APPLICABILITY TO AIRPORT DEVELOPMENT ACTIONS.

**a. General.** Federal actions funded under the Airport Improvement Program (AIP) or any airport project subject to FAA approval has the potential to involve or affect hazardous materials. Typical actions which could incur impacts include: airside/landside expansion (new or expanded terminal and hangar facilities, new or extended runways and taxiways, navigational aids [NAVAIDS], etc.); land acquisition for aviation-related use, new or relocated access roadways, remote parking facilities, and rental car lots; and significant changes in aircraft operations or construction activity.

**b. RCRA and CERCLA.** The passage of RCRA and CERCLA generally focused attention on the use, storage, and disposal of hazardous materials and the environmental threats caused by mishandling these materials. At times, hazardous materials may be used or stored on an airport. As a result, an airport may be included in the universe of facilities to which RCRA and CERCLA apply. However, for environmental analysis purposes, the primary objectives are to identify and evaluate sites, facilities, or properties where hazardous materials (including environmental contamination) could hinder or affect an airport project. Doing so allows FAA to disclose compliance with RCRA, CERCLA, and other related laws and regulations.

**c. Airport sponsor responsibilities.** An airport sponsor should, to the extent possible, avoid hazardous waste sites and environmentally contaminated property. If avoidance isn't possible, the sponsor should minimize the use of contaminated property as much as possible. Doing so avoids or lessens the potentially excessive clean-up costs and legal liabilities. To help protect the sponsor from the costs or the liability associated with hazardous materials or contamination, the sponsor should hire a competent specialist to complete an EDDA *before* acquiring any land for airport purposes. FAA Advisory Circular (AC) 150/5100-17, *Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects*, and FAA Order 1050.19, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions*, provide FAA guidance on this.

**d. FAA responsibilities.** Before authorizing any airport development action involving land disturbance or land ownership changes, FAA should ensure the airport sponsor has completed the appropriate level EDDA or other similar investigation. This helps to verify if the action would involve a hazardous waste site or contaminated property. Operators at FAA facilities must also comply with all applicable regulations pertaining to the use, storage and disposal of hazardous materials as outlined in FAA Order 1050.10B, *Prevention, Control and Abatement of Environmental Pollution at FAA Facilities*; 1050.14A, *Polychlorinated Biphenyls (PCB) in the National Airspace System*; Order 1050.15A, *Underground Storage Tanks at FAA Facilities*; Order 1050.18, *Chlorofluorocarbons and Halon Use at FAA Facilities*; and AC 150/5320-15, *Management of Airport Industrial Wastes*.

**4. PERMITS, CERTIFICATIONS, AND APPROVALS.** The environmental document prepared for an airport project should disclose required CERCLA or RCRA permits, certifications, or regulatory approvals as appropriate. This information helps to inform the decision maker and public about possible construction concerns, the extent of analyses needed, or the types of necessary mitigation. Examples of that information include all or some of the following items:

**a. Requirements.** A description of the applicable requirements and a summary of the regulatory processes applicable to the project.

**b. Conflicts.** Issues that may cause potential conflicts or that may delay the regulatory processes noted in section 4.a. of this chapter.

**c. Timeframes for obtaining approvals needed to develop sites containing hazardous materials or contamination.** These times should include authorizations, prerequisites, and permits for disturbing, transporting, or processing hazardous materials and other regulated substances.

**d. Commitment.** A statement from the sponsor verifying that it commits to addressing hazardous material issues in accordance with applicable Federal and state requirements.

#### **5. ENVIRONMENTAL COMPLIANCE PROCEDURES – ENVIRONMENTAL ANALYSIS.**

**a. Required consultation.** A number of Federal and state agencies is involved in regulating hazardous materials and contamination. Early consultation with these agencies during the NEPA process aids in collecting necessary data and promotes compliance with applicable laws.

**(1) EPA.** Regional EPA offices have information on hazardous substances. EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) is a computer database. It identifies sites on the National Priority List (NPL) and other areas used to, store, transport, or dispose hazardous materials. Other EPA-managed databases include the Resource Conservation and Recovery Information System (RCRIS) and the Emergency Response Notification System (ERNS).

**(2) United States Coast Guard (USCG).** The USCG operates the National Response Center (NRC) to help in or conduct hazardous spill clean-ups throughout the United States. In being the nation's single reporting point for all spills, the NRC maintains a comprehensive list of those mishaps.

**(3) United States Geological Survey (USGS).** The USGS has aerial photographs that may be helpful in determining past land uses that occurred at a particular site.

**(4) United States Department of Agriculture (USDA).** The USDA has extensively mapped and gathered data on the nation's regional geological features and soil types. This information is useful in determining soil types, soil characteristics, or past land uses.

**(5) State agencies.** RCRA encourages individual states to manage hazardous wastes within their borders. To promote this, EPA has delegated hazardous waste-related management responsibilities to EPA-certified state and local governments. FAA urges airport sponsors and operators planning land purchases or transfers to contact the appropriate state agency early in the planning process to determine the extent of state requirements that must be met regarding hazardous materials and/or environmental contamination.

**(6) Local government agencies.** Information at the local level is valuable when tracing past uses of real property. Local soil conservation offices may provide historical photographs and information on soil types at a desired site. Local fire departments or fire districts often have data on hazardous materials that have been used at a specific location.

## 6. DETERMINING IMPACTS.

**a. General.** The environmental evaluation should include the level of analysis needed to disclose the likely use of hazardous materials or contamination associated with the action. This information is useful in evaluating potential conflicts between the proposed airport action and these laws. In this way, applicable permits, certifications, and approvals are identified, the necessary clean-up and remediation measures are noted, and unresolved problems or issues are disclosed.

Determining an impact can be done by using information contained in available FAA publications, collected by trained and experienced personnel following standard investigatory procedures, or revealed in EDDAs and similar examinations of the project site.

**b. FAA publications and materials.** FAA has issued useful information to help airport sponsors and others address hazardous materials issues.

**(1) To identify and characterize airport projects likely to involve the use of hazardous materials and other regulated substances see:**

**(a)** FAA Order 1050.10B, *Prevention, Control and Abatement of Environmental Pollution at FAA Facilities*; or

**(b)** FAA Advisory Circular (AC) 150/5320-15, *Management of Airport Industrial Wastes*.

**(2) To assess real property for signs of hazardous materials and contamination see:**

**(a)** FAA Order 1050.19, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions*; or

**(b)** FAA AC 150/5100-17, *Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects*.

**c. Site investigation.** Due to dangers of exposure, liability issues, and other factors, personnel trained and experienced in evaluating hazardous material or contaminated sites

should conduct this investigation. These specialists can determine if hazardous materials or contamination exists or has existed on the proposed site. At a minimum, these evaluations should consist of a review of the following information sources concerning a property's current and previous uses:

(1) a detailed search of Federal, State, and local records addressing the use, storage, disposal, or discharge of hazardous materials, petroleum products, or other regulated substances on the property or any adjacent properties;

(2) aerial photographs, maps, and other current or historic documents that could reveal earlier uses on the subject property or adjacent facilities;

(3) visual, on-site inspections of the property, including any buildings, structures, or equipment and a similar visual inspection of adjacent properties;

(4) interviews of owners, employees, tenants, and other individuals knowledgeable about the current and former uses of the property;

(5) reviews and evaluations of contamination assessments, remedial action plans, sampling and test results of physical or environmental media (i.e., soil, surface water, ground water, building materials), and any other environmental investigations that the owners, operators, or regulatory agencies have conducted.

**d. Contents of environmental documents.** NEPA documents prepared for an airport action requiring FAA approval and/or AIP funding and that would occupy hazardous sites or use hazardous materials and generate hazardous wastes should include the following information. The amount of emphasis placed on each topic should be commensurate with the proposed action's scope.

**(1) If a contaminated site is adjacent to or on the proposed airport site.** Identify known, suspected, or potential contaminated sites on or adjacent to the proposed action.

(a) provide the name, location, and owner/operator of the site or facility;

(b) provide the type and extent of contamination at the location(s);

(c) provide the distance and direction of the contaminated site from the proposed action;

(d) provide the regulatory status of the project site including the contamination assessment process and clean-up activities; or

(e) if the planned airport action would occupy a contaminated site, describe the impact and the resolution of the problem or conflict. Indicate how the corrective actions comply with applicable Federal, State, and local regulations.

**(2) If a proposed project would involve hazardous materials.** Airport sponsors and their contractors are responsible for the appropriate management and use of hazardous

materials and wastes. Environmental documents that involve airport actions that may use these materials should include the following sponsor provisions:

(a) users and those who handle hazardous materials will do so according to applicable regulations; and

(b) the person or entity responsible for handling the hazardous material will take immediate corrective action, including notifying the National Response Center, if there is an accidental release or other incident that can endanger people or environmental resources.

(3) **Dealing with potential spills.** If the proposed action would involve hazardous materials, briefly describe the methods that would be used to ensure compliance with RCRA, CERCLA, and other applicable Federal and State regulations. If needed, describe the methods that would be employed to control spills and other unauthorized releases of hazardous materials during construction and operational of the proposed action. As necessary, see FAA AC 150/5320-15, *Management of Airport Industrial Wastes* for detailed information on dealing with hazardous wastes and industrial chemicals typically used on airports.

**7. DETERMINING IMPACT SIGNIFICANCE.**

a. **General.** After completing the investigations, evaluations, and analyses noted earlier, and after considering the use of hazardous materials or contamination associated with the project, use the following guidelines to determine the level and significance of impact.

ORDER 1050.1E THRESHOLD	FACTORS TO CONSIDER
<p>The action involves a property on or eligible for the National Priority List (NPL).</p> <p>The sponsor would have difficulty meeting applicable local, state, or Federal laws and regulations on hazardous materials.</p> <p>There is an unresolved issue regarding hazardous materials.</p>	<p>Not all property within an NPL site is contaminated. Therefore, there may be areas within the NPL's boundaries that are "clean."</p> <p>The project requires extraordinary measures (i.e., connection to new water supplies, relocation of residents, etc.) to mitigate project-related disturbances of contaminants that would endanger the health and/or safety of citizens or their air and/or water supply(ies).</p> <p>The action would affect a site known or suspected to be contaminated. Consequently, the impacts of that contamination may not be fully revealed and necessary corrective actions may be needed.</p>

From: Table 7-1, FAA Order 5050.4B

**b. Mitigation.** During the environmental review process, agencies having special expertise on hazardous materials in the airport-affected area may provide letters addressing those materials or their effects. Often, those letters include recommended measures to mitigate the effects. An appendix to the environmental document should include copies of those letters. The environmental document should summarize the most important information in those letters and accurately cross-reference the appendix and pages in that appendix for further information. If FAA or the sponsor does not adopt any recommended mitigation, the environmental document should clearly explain why the recommendation was not adopted. If feasible, the environmental document should include an estimated schedule for undertaking accepted mitigation.

(1) The EA or EIS should describe the measures, the benefits and requirements, the responsible parties, the process for implementing and enforcing required measures, and a schedule for carrying out those measures. Those measures may include spill response plans, clean-up and remedial actions, pollution prevention initiatives, and any other activities that are intended or designed to meet the requirements of Federal and state laws.

(2) The environmental document should include a provision that all necessary corrective actions and reporting requirements will be fulfilled if previously unknown contaminants are discovered during construction or a spill occurs during construction.

## **8. ENVIRONMENTAL IMPACT STATEMENT CONTENT.**

**a. General.** Section 7 of this chapter describes the conditions and criteria by which an airport development action involving hazardous materials or environmental contamination may cause a significant impact. When FAA determines that a significant impact is likely, it must prepare an EIS further addressing the potential impacts associated with the proposed action.

**b. EIS content.** The EIS should contain the following information in addition to the materials developed and presented in other sections of this Chapter:

(1) the results of interagency consultations undertaken to more precisely define any unresolved issues and the necessary steps, analyses, and/or actions required to address them.

(2) the results of additional investigations, clean-up, or remedial actions or other initiatives required to insure that the action is implemented, constructed, and/or operated in compliance with Federal and state regulations.

(3) evidence verifying the airport sponsor has undertaken all necessary actions and precautions needed to obtain regulatory approval of the action; and

(4) evidence that the airport sponsor commits to implement all necessary actions and precautions noted in section 8.b.(3) of this chapter.

**c. Mitigation.** Any mitigation measures agencies having special expertise on hazardous materials in the airport-affected area should be discussed. FAA or the sponsor

should fully consider the mitigation and balance its benefits against those of the proposed action.

NEPA requires a Federal agency preparing an EIS to discuss mitigation in sufficient detail to disclose that environmental consequences have been fairly evaluated (*Robertson vs. Methow Valley*, 490 U.S. 332 (1989)). In addition, under 49 USC Section 47106(c)(1)(B), FAA may not approve a Federal funding for major airport development projects, unless the agency determines that no possible and prudent alternative to the project exists and that every reasonable step has been taken to minimize the adverse effect. Major airport development projects are those that involve the location of a runway, new airport, or major runway extension. For more information about the mitigation required, see FAA Order 5050.4B, paragraph 1203(b)(4). In accordance with NEPA and 49 USC Section 47106(c)(1)(B), an EIS must discuss and adopt mitigation measures recommended by agencies having special expertise on hazardous materials in the airport-affected area.

If feasible, provide an estimated schedule for undertaking accepted mitigation.