

## CHAPTER 19. SOLID WASTE

## 1. INTRODUCTION AND DEFINITIONS.

**a. General.** Construction, renovation, or demolition of most airside projects produces debris (e.g., dirt, concrete, asphalt) that must be properly disposed. In addition, new or renovated terminal, cargo, or maintenance facilities may involve construction, renovation, or demolition that produces other types of solid waste (bricks, steel, wood, gypsum, glass). Therefore, airport sponsors should follow Federal, state, or local regulations that address solid waste. Doing so reduces the environmental effects of airport-related construction or operation. This chapter provides information on how alternatives under consideration could increase solid waste in an area. It also discusses how to address the effects of any increased waste volume and ways to mitigate those effects.

**b. Solid waste defined.** The Solid Waste Disposal Act notes the term “solid waste” includes garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or an air pollution control facility (42 USC Section 6903(27)). According to that Act, solid waste also includes solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, agricultural, or community activities. See 42 USC Section 6903 for more detailed information. When using this Desk Reference, notice the term, “solid waste” does not include hazardous waste. Please see Chapter 13 of this Desk Reference for information on addressing hazardous waste or materials.

## 2. APPLICABLE STATUTES AND IMPLEMENTING REGULATIONS.

APPLICABLE STATUTES AND IMPLEMENTING REGULATIONS	SUMMARY DESCRIPTION	OVERSIGHT AGENCY
The Solid Waste Disposal Act (SWDA) of 1965 (42 USC Sections 6901 <i>et Seq.</i> ) (now stated in subtitle D of the Resource Conservation and Recovery Act (RCRA))	Section 6901(b)(2) states the disposal of solid waste in or on the land without careful planning and management can present a danger to human health and to the environment. The Act provides safeguards to reduce that danger.	State or local agencies responsible for managing solid waste.
40 CFR, Part 258.10, Solid Wastes - Airport Safety	Addresses restrictions on municipal solid waste landfills (MSWLF) relative to airports.	EPA
FAA AC 150/5200-33, <i>Hazardous Wildlife Attractants on or near Airports</i>	Declares that a sanitary landfill located within 10,000 feet of a runway serving turbo-powered aircraft or within 5,000 feet of a runway serving piston-powered aircraft is incompatible with airports.	FAA

**3. APPLICABILITY TO AIRPORT DEVELOPMENT ACTIONS.** Airside development (e.g., building or rehabilitating runways, taxiways, and their associated items) typically produces construction debris. Terminal development often produces similar streams. Refuse can also result from construction workers, passengers, and airport workers using the terminal building. Personnel and activities in air cargo facilities may produce solid waste as well. In addition, solid waste may also occur during construction and operations of access roadways, parking facilities, rental car lots, or because of other on-airport activities. Activities needed to maintain airside and landside facilities produce yet other sources of waste. As a result, when a proposed airport project would cause or change a solid waste stream, the environmental analysis section of the Environmental Assessment (EA) or Environmental Impact Statement (EIS) should discuss how the potential, associated solid waste would be handled and disposed properly to minimize environmental effects. This analysis should also determine whether local disposal facilities have the capacities to hold solid waste volumes the proposed airport facilities would produce during their construction or operation.

**4. PERMITS, CERTIFICATIONS, AND APPROVALS.** State and local agencies are often responsible for and have the most knowledge about solid waste issues in an airport area. The airport sponsor should consult those officials for information on potential impacts the solid waste would cause and how to handle waste to minimize those impacts. Those agencies also provide valuable information on how to handle and dispose of airport-generated solid waste in an environmentally-safe manner. The agencies would also indicate if the alternatives under consideration would produce material that municipal solid waste landfills (MSWLF) would not accept or if the waste volume would exceed the capacities of planned or existing disposal facilities that are being considered for use. The sponsor should provide assurances that it will meet applicable solid waste disposal requirements. Environmental documents should contain records of all relevant communications with the consulted agencies.

**5. ENVIRONMENTAL COMPLIANCE PROCEDURES - ENVIRONMENTAL ANALYSIS.**

**a.** Environmental documents prepared for airport actions involving airfield, terminal, or cargo facility development may require consideration of solid waste resulting from building or operating the facilities. As appropriate, analysts should consider the following factors for each reasonable alternative and include the information in the environmental document. This information helps the decision maker determine if local disposal facilities will accept the potential types or volumes of solid waste the alternatives under consideration would produce.

**b. Quantity.** As needed, the environmental document should:

(1) Provide estimated quantities of solid waste each reasonable alternative would likely cause during its construction or operation. Base those quantities on existing design plans. Be aware that some airport projects produce more solid waste during construction than during operation or maintenance activities.

(2) Summarize disposal methods that will be used to handle the reported volumes of solid waste products. and

(3) Disclose if airfield or landside construction or terminal construction or operation would overload receiving solid waste facilities.

c. **Compliance.** As needed, the environmental document should

(1) describe how the sponsor would control project-related solid waste to comply with applicable regulations;

(2) summarize how the sponsor would transport, contain, and control project-related solid waste; or

(3) indicate if the disposal of solid waste from any reasonable alternative would violate any local, state, or Federal regulations.

d. **Other.** As needed, the environmental document should summarize critical information gleaned from consulting with responsible solid waste agencies. For example, the environmental document should note if current, available MSWLF capacity is lacking. If it is, point out whether planned MSWLF expansion or construction would be timely and provide the needed capacity to handle solid waste the alternatives under consideration would generate.

6. **DETERMINING IMPACTS.** After completing the consultation and analysis discussed above, use the information to determine the potential level of solid waste impacts the alternatives under consideration would cause.

7. **DETERMINING IMPACT SIGNIFICANCE.** Use the following information to determine if a significant impact could occur. Consider the factors in the right-hand column when determining if an action would cause a condition calling for more information or analysis as part of an environmental document.

ORDER 1050.1E THRESHOLD	FACTORS TO CONSIDER
None.	<p>The responsible FAA official should determine if an alternative under consideration would cause any of the following conditions:</p> <ul style="list-style-type: none"> <li>• Project-generated solid waste would exceed available landfill (MSWLF) or incineration capacities or require extraordinary effort to meet applicable solid waste permit conditions or regulations.</li> <li>• Local, State, or Federal agencies determine that substantial unresolved waste disposal issues exist and may require more analyses.</li> </ul>

From: Table 7-1, FAA Order 5050.4B.

**a. Indirect effects.** If solid waste would adversely affect another resource, refer the reader to the section of the environmental document discussing the affected resource. For example, solid waste disposal could contaminate water quality. The environmental document's water quality section would discuss that impact in detail.

**b. Potential mitigation measures.** During the environmental review process, agencies having responsibility for solid waste disposal in the affected area may provide letters addressing the project's effects on waste disposal. Often, those letters include recommended measures to mitigate those effects. The mitigation should focus on measures that would most effectively reduce demands on existing or proposed waste storage facilities. 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 the FAA or the sponsor does not adopt any recommended mitigation, the environmental document should clearly explain why the recommendation was not adopted.

Potential mitigation measures may include the sponsor working with on-airport businesses and waste handlers to develop and complete the following measures to reduce project-related solid waste demand on MSWLF receiving that waste:

- (1) source reduction strategies such as recovering, recycling, or composting;
- (2) building or modifying source recovery facilities; or
- (3) finding markets for recovered, recycled, or composted products or other wastes that are usable for producing energy or other activities.

## 8. ENVIRONMENTAL IMPACT STATEMENT CONTENT.

**a. General.** In rare instances, FAA may need to prepare an EIS to address significant solid waste impacts. Generally, more information or analysis is needed as part of an EIS only if problems are anticipated with respect to meeting the applicable local, State, Tribal, or Federal laws and regulations on solid waste management. The decision to do so would occur after FAA and the airport sponsor consult with the agencies responsible for managing solid waste in the affected area and evaluating project-induced environmental impacts (using information from section 6 of this chapter). In addition to the information presented about other affected resources, the EIS should include:

(1) information that may result from extra consultation with the responsible solid waste management agencies;

(2) extra measures that would minimize solid waste impacts and enable solid waste agencies to give their approval to the project; or

(3) the sponsor's agreement with or acceptance of required mitigation measures to show resolution of conflict involving solid waste.

**b. Mitigation.** FAA and the airport sponsor should fully consider mitigation agencies recommend and balance its benefits against those of the proposed action and explain why the sponsor or FAA does not adopt any recommended mitigation. If feasible, the EIS should also provide an estimated schedule for undertaking accepted mitigation.