U.S. Department of Transportation

Federal Aviation Administration

Advisory Circular

Subject: CONSTRUCTION OR ESTABLISHMENT OF LANDFILLS NEAR PUBLIC AIRPORTS

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Initiated by: AAS-300

AC No: 150/5200-34
Change:

1. Purpose. This advisory circular (AC) contains guidance on complying with new Federal statutory requirements regarding the construction or establishment of landfills near public airports.

2. Application. The guidance contained in the AC is provided by the Federal Aviation Administration (FAA) for use by persons considering the construction or establishment of a municipal solid waste landfill (MSWLF) near a public airport. Guidance contained herein should be used to comply with recently enacted MSWLF site limitations contained in 49 U.S.C. § 44718(d), as amended by section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, Pub. L. No. 106-181 (April 5, 2000), "Structures interfering with air commerce." In accordance with § 44718(d), as amended, these site limitations are not applicable in the State of Alaska.

In addition, this AC provides guidance for a state aviation agency desiring to petition the FAA for an exemption from the requirements of § 44718(d), as amended.

3. Related Reading Materials.

a. AC - 150/5200-33, Hazardous Wildlife Attractions On or Near Airports, May 1, 1997.
b. Wildlife Strikes to Civil Aircraft in the United States 1990-1998, FAA Wildlife Aircraft Strike Database Serial Report Number 5, November 1998.
c. Report to Congress: Potential Hazards to Aircraft by Locating Waste Disposal Sites in the Vicinity of Airports, April 1996, DOT/FAA/AS/96-1.
d. Title 14, Code of Federal Regulation, Part 139, Certification and Operations: Land Airports Serving Certain Air Carriers.
e. Title 40, Code of Federal Regulation, Part 258, Municipal Solid Waste Landfill Criteria.

Some of these documents and additional information on wildlife management, including guidance on landfills, are available on the FAA's Airports web site at www.faa.gov/arp/arphome.htm.

4. Definitions. Definitions for the specific purpose of this AC are found in Appendix 1.

5. Background. The FAA has the broad authority to regulate and develop civil aviation under the Federal Aviation Act of 1958, 49 U.S.C. § 40101, et. seq., and other Federal law. In section 1220 of the Federal Aviation Reauthorization Act of 1996, Pub. L. No. 104-264 (October 9, 1996), the Congress added a new provision, section (d), to 49 U.S.C. § 44718 to be enforced by the FAA and placing limitations on the construction or establishment of landfills near public airports for the purposes of enhancing aviation safety. Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21), Pub. L. No. 106-181 (April 5, 2000) has replaced section 1220 of the 1996 Reauthorization Act, 49 U.S.C. § 44718 (d), with new language. Specifically, the new provision, § 44718(d), as amended, was enacted to further limit the construction or establishment of a MSWLF near certain smaller public airports.

In enacting this legislation, Congress expressed concern that a MSWLF sited near an airport poses a potential hazard to aircraft operations because such a waste facility attracts birds. Statistics support the fact that bird strikes pose a real danger to aircraft. An estimated 87 percent of the collisions between wildlife and civil aircraft occurred on or near airports when aircraft are below 2,000 feet above ground level (AGL). Collisions with wildlife at these altitudes are especially dangerous as aircraft pilots have minimal time to recover from such emergencies.

Databases managed by FAA and the United States Air Force show that more than 54,000 civil and military aircraft sustained reported strikes with wildlife from 1990 to 1999 (28,150 civil strikes and 25,853 military strikes). Between 1990-1999, aircraft-wildlife strikes involving U. S. civil aircraft result in over $350 million/year worth of aircraft damage and associated losses and over 460,000 hours/year of aircraft down time.

From 1990 to 1999, waterfowl, gulls and raptors were involved in 77% of the 2,119 reported damaging aircraft-wildlife strikes where the bird was identified. Populations of Canada geese and many species of gulls and raptors have increased markedly over the last several years. Further, gulls and Canada geese have adapted to urban and suburban environments and, along with raptors and turkey vultures, are commonly found feeding or loafing on or near landfills.

In light of increasing bird populations and aircraft operations, the FAA believes locating landfills in proximity to airports increases the risk of collisions between birds and aircraft. To address this concern, the FAA issued AC 150/5200-33, *Hazardous Wildlife Attractions On or Near Airports*, to provide airport operators and aviation planners with guidance on minimizing wildlife attractant. AC 150/5200-33 recommends against locating municipal solid waste landfills within five statute miles of an airport if the landfill may cause hazardous wildlife to move into or through the airport's approach or departure airspace.

6. General. Using guidance provided in the following sections, persons considering construction or establishment of a landfill should first determine if the proposed facility meets the definition of a new MSWLF (see Appendix 1). Section 44718(d), as amended, applies only to a new MSWLF. It does not apply to the expansion or modification of an existing MSWLF, and does not apply in the State of Alaska. If the proposed landfill meets the definition of a new MSWLF, its proximity to certain public airports (meeting the criteria specified in Paragraph 8 below) should be determined. If it is determined that a new MSWLF would be located within six miles of such a public airport, then either the MSWLF should be planned for an alternate location more than 6 miles from the airport, or the MSWLF proponent should request the appropriate State aviation agency to file a petition for an exemption from the statutory restriction.

In addition to the requirements of § 44718(d), existing landfill restrictions contained in AC 150/5200-33, *Hazardous Wildlife Attractions On or Near Airports* (see Paragraph 5, Background) also may be applicable. Airport operators that have accepted Federal funds have obligations under Federal grant assurances to operate their facilities in safe manner and must comply with standards prescribed in advisory circulars, including landfill site limitations contained in AC 150/5200-33.

7. Landfills Covered by the Statute. The limitations of § 44718(d), as amended, only apply to a new MSWLF (constructed or established after April 5, 2000). The statutory limitations are not applicable where construction or establishment of a MSWLF began on or before April 5, 2000, or to an existing MSWLF (received putrescible waste on or before April 5, 2000). Further, an existing MSWLF that is expanded or modified after April 5, 2000, would not be held to the limitations of § 44718(d), as amended.

8. Airports Covered by the Statute. The statutory limitations restricting the location of a new MSWLF near an airport apply to only those airports that are recipients of Federal grants (under the Airport and Airway Improvement Act of 1982, as amended, 49 U.S.C. § 47101, *et seq.*) and to those that primarily serve general aviation aircraft <u>and</u> scheduled air carrier operations using aircraft with less than 60 passenger seats.

While the FAA does not classify airports precisely in this manner, the FAA does categorize airports by the type of aircraft operations served and number of annual passenger enplanements. In particular, the FAA categorizes public airports that serve air carrier operations. These airports are known as commercial service airports, and receive scheduled passenger service and have 2,500 or more enplaned passengers per year.

One sub-category of commercial service airports, nonhub primary airports, closely matches the statute requirement. Nonhub primary airports are defined as commercial service airports that enplane less than 0.05 percent of all commercial passenger enplanements (0.05 percent equated to 328,344 enplanements in 1998) but more than 10,000 annual enplanements. While these enplanements consist of both large and small air carrier operations, most are conducted in aircraft with less than 60 seats. These airports also are heavily used by general aviation aircraft, with an average of 81 based aircraft per nonhub primary airport.

In addition, the FAA categorizes airports that enplane 2,500 to 10,000 passengers annually as non-primary commercial service airports, and those airports that enplane 2,500 or less passengers annually as general aviation airports. Both types of airports are mainly used by general aviation but in some instances, they have annual enplanements that consist of scheduled air carrier operations conducted in aircraft with less than 60 seats. Of the non-primary commercial service airports and general aviation airports, only those that have scheduled air carrier operations conducted in aircraft with less than 60 seats would be covered by the statute. The statute does not apply to those airports that serve only general aviation aircraft operations.

To comply with the intent of the statute, the FAA has identified those airports classified as nonhub primary, non-primary commercial service and general aviation airports that:

1. Are recipients of Federal grant under 49 U.S.C. § 47101, et. seq.;
2. Are under control of a public agency;
3. Serve some scheduled air carrier operations conducted in aircraft with less than 60 seats; and
4. Have total annual enplanements consisting of at least 51% of scheduled air carrier enplanements conducted in aircraft with less than 60 passenger seats.

Persons considering construction or establishment of a new MSWLF should contact the FAA to determine if an airport within six statute miles of the new MSWLF meets these criteria (see paragraph 11 below for information on contacting the FAA). If the FAA determines the airport does meet these criteria, then § 44718(d), as amended, is applicable.

An in-depth explanation of how the FAA collects and categorizes airport data is available in the FAA's National Plan of Integrated Airport Systems (NPIAS). This report and a list of airports classified as nonhub primary, non-primary commercial service and general aviation airports (and associated enplanement data) are available on the FAA's Airports web site at http://www.faa.gov/arp/410home.htm.

9. Separation distance measurements. Section 44718(d), as amended, requires a minimum separation distance of six statute miles between a new MSWLF and a public airport. In determining this distance separation, measurements should be made from the closest point of the airport property boundary to the closest point of the MSWLF property boundary. Measurements can be made from a perimeter fence if the fence is co-located, or within close proximity to, property boundaries. It is the responsibility of the new MSWLF proponent to determine the separation distance.

10. Exemption Process. Under § 44718(d), as amended, the FAA Administrator may approve an exemption from the statute's landfill location limitations. Section 44718(d), as amended, permits the aviation agency of the state in which the airport is located to request such an exemption from the FAA Administrator. Any person desiring

such an exemption should contact the aviation agency in the state in which the affected airport is located. A list of state aviation agencies and contact information is available at the National Association of State Aviation Officials (NASAO) web site at www.nasao.org or by calling NASAO at (301) 588-1286.

A state aviation agency that desires to petition the FAA for an exemption should notify the Regional Airports Division Manager, in writing, at least 60 days prior to the establishment or construction of a MSWLF. The petition should explain the nature and extent of relief sought, and contain information, documentation, views, or arguments that demonstrate that an exemption from the statute would not have an adverse impact on aviation safety. Information on contacting FAA Regional Airports Division Managers can be found on the FAA's web site at www.faa.gov.

After considering all relevant material presented, the Regional Airports Division Manager will notify the state agency within 30 days whether the request for exemption has been approved or denied. The FAA may approve a request for an exemption if it is determined that such an exemption would have no adverse impact on aviation safety.

11. Information. For further information, please contact the FAA's Office of Airport Safety and Standards, Airport Safety and Certification Branch, at (800) 842-8736, Ext. 73085 or via email at WebmasterARP@faa.gov. Any information, documents and reports that are available on the FAA web site also can be obtained by calling the toll-free telephone number listed above.

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APPENDIX 1. DEFINITIONS.

The following are definitions for the specific purpose of this advisory circular.

a. Construct a municipal solid waste landfill means excavate or grade land, or raise structures, to prepare a municipal solid waste landfill as permitted by the appropriate regulatory or permitting authority.

b. Establish a municipal solid waste landfill (MSWLF) means receive the first load of putrescible waste on site for placement in a prepared municipal solid waste landfill.

c. Existing municipal solid waste landfill (MSWLF) means a municipal solid waste landfill that received putrescible waste on or before April 5, 2000.

d. General aviation aircraft means any civil aviation aircraft not operating under 14 C.F.R. Part 119, Certification: Air carriers and commercial operators.

e. Municipal solid waste landfill (MSWLF) means publicly or privately owned discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 C.F.R. § 257.2. A MSWLF may receive other types of RCRA subtitle D wastes, such as commercial solid waste, nonhazardous sludge, small quantity generator waste and industrial solid waste, as defined under 40 C.F.R. § 258.2. A MSWLF may consist of either a standalone unit or several cells that receive household waste.

f. New municipal solid waste landfill (MSWLF) means a municipal solid waste landfill that was established or constructed after April 5, 2000.

g. Person(s) means an individual, firm, partnership, corporation, company, association, joint-stock association, or governmental entity. It includes a trustee, receiver, assignee, or similar representative of any of them (14 C.F.R. Part 1).

h. Public agency means a State or political subdivision of a State; a tax-supported organization; or an Indian tribe or pueblo (49 U.S.C. § 47102(15)).

i. Public airport means an airport used or intended to be used for public purposes that is under the control of a public agency; and of which the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft is publicly owned (49 U.S.C. § 47102(16)).

j. Putrescible waste means solid waste which contains organic matter capable of being decomposed by micro-organisms and of such a character and proportion as to be capable of attracting or providing food for birds (40 C.F.R. § 257.3-8).

k. Scheduled air carrier operation means any common carriage passenger-carrying operation for compensation or hire conducted by an air carrier or commercial operator for

which the air carrier, commercial operator, or their representatives offers in advance the departure location, departure time, and arrival location. It does not include any operation that is conducted as a supplemental operation under 14 C.F.R. Part 119, or is conducted as a public charter operation under 14 C.F.R. Part 380 (14 C.F.R. § 119.3).

l. Solid waste means any garbage, or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. § 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) (40 C.F.R. § 258.2).

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