

Federal Aviation Administration Office of Airports Safety and Standards



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Landfills



Landfill History

- ✈ 10 March 1960, Boston Logan, Lockheed Electra ingests European Starlings, crashes into Boston Harbor, killing 62.
- ✈ FAA initiates development of minimum bird ingestion standards for turbine engines.

Landfill History

- ✈ 26 February 1973, DeKalb Peachtree, Atlanta GA. Learjet 24 ingested several cowbirds during takeoff, lost engine power, crashed; 2 crew, 5 passengers killed, one person on ground burned.
- ✈ FAA promulgates minimum separation standards between airports and landfills

Landfill History

✈️ FAA Order 5: FAA Guidance Concerning Sanitary Landfills On Or near Airports
(16 October 1974)

- ✈️ Sanitary Landfills are incompatible with safe airport operations, if located within:
 - ✈️ 10,000-ft. of runway used by turbojet aircraft
 - ✈️ 5,000-ft. of runway used only by piston aircraft
 - ✈️ conical surface described by FAR Part 77
 - ✈️ attracts birds over airport

Landfill History

✈️ FAA Order 5A Waste Disposal Sites On Or Near Airports (31 January 1990)

- ✈️ Expanded to include: Landfills, garbage dumps, sewer or fish waste outfalls, and other similar facilities.
- ✈️ Keeps 10,000- and 5,000-ft. recommendation.
- ✈️ Adds 5-mile separation if causing bird movement into, across runways and/or approach departure patterns.

Landfill History

- ✈ 40 CFR 258. United States Environmental Protection Agency (~1990)
 - ✈ Landfills within 10,000-ft of runways used by turbojet aircraft, Or 5,000-ft of runways used only by piston type aircraft cannot pose a bird hazard to aviation.

Landfill History

✈ Report to Congress: Report On The Potential Hazards To Aircraft by Locating Waste Disposal Sites In the Vicinity Of Airports (1 April 1996)

✈ Landfills constitute a potential hazard if located within 5 miles from a runway end.

Landfill History

- ✈️ Advisory Circular 150/5200-33 Hazard Wildlife Attractants On Or Near Airports.
(1 May 1997)
 - ✈️ Maintains separation distances.
 - ✈️ Expands definition of hazardous wildlife attractants to include all potential attractants.
 - ✈️ July 1999, added to Grant Assurances List for AIP projects; recommended separation distance is now a requirement.

FAA Reauthorization Act, 1996

- ✈ Cannot have 2 landfills within 6 miles of certain airports, if FAA has objected to 1 of them.
- ✈ Challenged and declared unconstitutional
 - ✈ Specifically targeted Leatherwood and Happy Landings Landfills and DuBois-Jefferson County Airport.

Wendel H. Ford Aviation Investment and Reform Act For The 21st Century (“Air 21”, April 2000)

✈️ Section 503:

- ✈️ Cannot construct or establish new MSWLF within 6 miles of certain public airports.
- ✈️ Challenged in Federal Court and Sustained as Constitutional.

Advisory Circular 150/5200-34

Construction Or Establishment Of Landfills Near Public Airports

(26 August 2000)

- ✈ Presents FAA's interpretation of Section 503 of Air 21
 - ✈ Landfills covered by Statute
 - ✈ Airports Covered by Statute
 - ✈ Separation distance measurement
 - ✈ Exemption Process

Determining Applicability of Air 21

A. Is the edge of the airport property less than 6 miles from the edge of the landfill property?

1. No. Law does not apply

2. Yes. Go to “B”

Determining Applicability of Air 21

B. Did construction or establishment of the new landfill begin on or after 6 April 2000?

1. No. Law does not apply
2. Yes. Go to C

Determining Applicability of Air 21

C. Has the airport received Federal Grants?

1. No. Law does not apply

2. Yes. Go to D

Determining Applicability of Air 21

D. Is the airport owned/operated by public agency.

1. No. Law does not apply.
2. Yes. Go to E

Determining Applicability of Air 21

E. Does the most recent FAA data show passenger enplanements?

1. No. Law does not apply

2. Yes.

I - Enplanements greater than 342,082 (1999 figures). Law does not apply.

II - Enplanements less than 342,082 (1999 figures), Go to F

Determining Applicability of Air 21

F. Determine the percentage of enplanements by type of air carrier.

1. More than 50% enplaned by “Large Certificated Air Carriers.”

-- Law does not apply

2. More than 50% enplaned by “Commuter and Small Certificated Air Carriers.”

-- Law Applies

REPORT V3

U.S. AIRPORT ENPLANEMENT ACTIVITY SUMMARY FOR CY1999
 LISTED BY STATE AND BY RANK ORDER WITHIN THE STATE
 FOR AIRPORTS WITH SCHEDULED SERVICE AND 2,500 OR MORE PASSENGERS ENPLANED
 (PERCENTAGE SHOWN IS BASED ON 684,163,592 TOTAL ENPLANEMENTS AT ALL U.S. AIRPORTS)

Associated City	ST	Airport Name	LOCID	-----E N P L A N E M E N T S-----			
				Large Certificated Air Carriers	Commuter & Small Certif Air Carriers	Air Taxi/ Commercial Operators	All Foreign Flag Carriers
NEW JERSEY							
NEWARK	NJ	NEWARK INTL	EWR	14,969,511	163,966	249	1,793,322
ATLANTIC CITY	NJ	ATLANTIC CITY INTERNATIONAL	ACY	433,221	32,935	15,735	107
TRENTON	NJ	TRENTON MERCER	TTN	64,543	15,757	701	0
TETERBORO	NJ	TETERBORO	TEB	2,467	382	7,584	0
WRIGHTSTOWN	NJ	MC GUIRE AFB	WRI	2,533	0	0	0
PRINCETON/ROCKY HI	NJ	PRINCETON	39N	0	0	1,021	0
MORRISTOWN	NJ	MORRISTOWN MUNI	MMU	0	0	968	0
ANDOVER	NJ	AEROFLEX-ANDOVER	12N	0	0	180	0
SOMERVILLE	NJ	SOMERSET	SMQ	0	0	120	0
TOMS RIVER	NJ	ROBERT J. MILLER AIR PARK	MJX	0	0	74	0
MILLVILLE	NJ	MILLVILLE MUNI	MIV	0	0	31	0
ATLANTIC CITY	NJ	ATLANTIC CITY MUNI/BADER FIE	AIY	0	0	30	0
BELMAR/FARMINGDALE	NJ	ALLAIRE	BLM	0	0	15	0
CALDWELL	NJ	ESSEX COUNTY	CDW	0	0	8	0
OCEAN CITY	NJ	OCEAN CITY MUNI	OCN	0	0	0	0

REPORT V3

U.S. AIRPORT ENPLANEMENT ACTIVITY SUMMARY FOR CY1999 LISTED BY STATE AND BY RANK ORDER WITHIN THE STATE FOR AIRPORTS WITH SCHEDULED SERVICE AND 2,500 OR MORE PASSENGERS ENPLANED (PERCENTAGE SHOWN IS BASED ON 684,163,592 TOTAL ENPLANEMENTS AT ALL U.S. AIRPORTS)

Associated City	ST	Airport Name	LOCID	E N P L A N E M E N T S-----			
				Large Certificated Air Carriers	Commuter & Small Certif Air Carriers	Air Taxi/ Commercial Operators	All Foreign Flag Carriers
WEST VIRGINIA							
CHARLESTON	WV	YEAGER	CRW	118,843	147,819	17	0
HUNTINGTON	WV	TRI-STATE/MILTON J. FERGUSON	HTS	590	62,005	14	0
PARKERSBURG	WV	WOOD COUNTY AIRPORT GILL ROB	PKB	116	25,553	8	0
MORGANTOWN	WV	MORGANTOWN MUNI-WALTER L. BI	MGW	0	21,546	15	0
CLARKSBURG	WV	BENEDUM	CKB	0	16,273	3	0
LEWISBURG	WV	GREENBRIER VALLEY	LWB	2,965	9,723	83	0
BECKLEY	WV	RALEIGH COUNTY MEMORIAL	BKW	427	2,785	0	0
BLUEFIELD	WV	MERCER COUNTY	BLF	0	2,255	14	0
MARTINSBURG	WV	EASTERN WV REGIONAL/SHEPHERD	MRB	0	0	26	0
WHEELING	WV	WHEELING OHIO CO	HLG	0	0	10	0
POINT PLEASANT	WV	MASON COUNTY	3I2	0	0	5	0
MOUNDSVILLE	WV	MARSHALL COUNTY	74D	0	0	1	0
WEST VIRGINIA TOTAL (12 AIRPORTS) :				122,941	287,959	196	0

U.S. AIRPORT ENPLANEMENT ACTIVITY SUMMARY FOR CY1999
LISTED BY STATE AND BY RANK ORDER WITHIN THE STATE
FOR AIRPORTS WITH SCHEDULED SERVICE AND 2,500 OR MORE PASSENGERS ENPLANED
(PERCENTAGE SHOWN IS BASED ON 684,163,592 TOTAL ENPLANEMENTS AT ALL U.S. AIRPORTS)

				E N P L A N E M E N T S				
Associated City	ST	Airport Name	LOCID	Large	Commuter &	Air Taxi/	All Foreign	T
				Certificated Air Carriers	Small Certif Air Carriers	Commercial Operators	Flag Carriers	

PENNSYLVANIA								
PHILADELPHIA	PA	PHILADELPHIA INTL	PHL	10,349,205	1,070,375	1,299	341,261	1
PITTSBURGH	PA	PITTSBURGH INTERNATIONAL	PIT	8,021,222	1,232,360	400	48,668	
HARRISBURG	PA	HARRISBURG INTERNATIONAL	MDT	516,662	190,226	587	8,449	
ALLENTOWN	PA	LEHIGH VALLEY INTERNATIONAL	ABE	355,226	118,194	864	178	
WILKES-BARRE/SCRAN	PA	WILKES-BARRE/SCRANTON INTL	AVP	113,609	120,252	292	139	
ERIE	PA	ERIE INTL	ERI	148,006	19,248	253	0	
STATE COLLEGE	PA	UNIVERSITY PARK	UNV	21,756	104,924	265	0	
READING	PA	READING REGIONAL/CARL A SPAA	RDG	1,814	47,879	2,826	0	
WILLIAMSPORT	PA	WILLIAMSPORT RGNL	IPT	117	46,266	136	0	
LATROBE	PA	ARNOLD PALMER REGIONAL	LBE	4,962	22,677	290	0	
JOHNSTOWN	PA	JOHNSTOWN-CAMBRIA COUNTY	JST	460	20,265	174	0	
LANCASTER	PA	LANCASTER	LNS	0	18,538	804	0	
DU BOIS	PA	DU BOIS-JEFFERSON COUNTY	DUJ	0	17,252	103	0	
ALTOONA	PA	ALTOONA-BLAIR COUNTY	AOO	0	16,727	242	0	
BRADFORD	PA	BRADFORD REGIONAL	BFD	36	12,615	480	0	
FRANKLIN	PA	VENANGO REGIONAL	FKL	0	7,072	5	0	
DOYLESTOWN	PA	DOYLESTOWN	DYL	0	0	800	0	
PHILADELPHIA	PA	NORTHEAST PHILADELPHIA	PNE	0	0	509	0	
HARRISBURG	PA	CAPITAL CITY	CXY	0	0	468	0	
PITTSBURGH	PA	ALLEGHENY COUNTY	AGC	0	0	322	0	
COATESVILLE	PA	CHESTER COUNTY G O CARLSON	40N	0	0	265	0	
BEDFORD	PA	BEDFORD COUNTY	HMZ	0	0	260	0	
WILLOW GROVE	PA	WILLOW GROVE NAS JRB	NXX	160	0	0	0	
PHILADELPHIA	PA	WINGS FIELD	N67	0	0	153	0	
LEHIGHTON	PA	JAKE ARNER MEMORIAL	22N	0	0	122	0	
NEW CASTLE	PA	NEW CASTLE MUNI	UCP	0	0	65	0	
WASHINGTON	PA	WASHINGTON COUNTY	AWT	0	0	0	0	

Exemption Process for Air 21

- ✈️ Proponent petitions State Aviation Agency (in state where the landfills is).
- ✈️ State Aviation Agency petitions FAA.
- ✈️ FAA may approve request, if no adverse impact on aviation.

A photograph showing a large flock of white birds, possibly terns, flying over a large pile of dark, hazardous waste. In the background, a radio tower is visible against a clear blue sky. The text "The End" is overlaid in red at the top left.

The End

Thoughts?

Questions?

Comments?

<http://www.faa.gov/arp/hazard.htm>