

CITY OF DOVER
ORDINANCE #2013-01

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF DOVER, IN COUNCIL MET:

That Appendix B – Zoning, Article 3 – District Regulations, Section 22 Airport Environs Overlay Zone (AEOZ) be amended to read as follows:

Section 22. Airport environs overlay zone (AEOZ).

22.1 Purpose and intent.

The airport environs overlay zone (AEOZ) is expressly intended to protect the public health, safety, and welfare by identifying areas impacted by high levels of aircraft noise, and the potential for aircraft accidents associated with airport operations, by regulating land use and the construction of buildings within such areas. The AEOZ is further intended to preserve and promote the integrity of the mission of Dover Air Force Base (DAFB) as a matter of local, regional and national importance, by regulating development and land use within the specific areas surrounding DAFB, and to protect DAFB from encroachment of incompatible land uses. The AEOZ shall serve as an overlay zone that applies additional standards and requirements to properties located therein.

- (a) The AEOZ is based on information provided by the Dover Air Force Base's Air Installation Compatible Use Zone Study Update. The City shall work with the Dover Air Force Base to update the provisions of this section as needed.
- (b) In case of conflicting standards and requirements, the more stringent standards and requirements shall apply. Uses prohibited by the underlying zoning designations of the properties within the AEOZ shall not be permitted by this section.

22.2 Definitions.

- (a) Air installations compatible use zones (AICUZ): is a department of defense program to achieve compatibility between air installations and neighboring communities.
- (b) Airport environs: is the geographic area that is affected by airport air traffic operations and defined on the basis of those areas immediately impacted by aircraft noise of the 65 decibels (dBs) and greater noise exposure areas as delineated by the current and approved DAFB air compatibility use zone study. This area is represented as the airport environs overlay zone (AEOZ).
- (c) Day-night average A-weighted sound level (DNL): is a cumulative aircraft noise index which estimates the exposure to aircraft noise and relates the estimated exposure to an expected community response; a 24-hour energy average sound level expressed in decibels (dBs), with a ten-decibel penalty applied to noise occurring between 10:00 p.m. and 7:00 a.m.
- (d) DNL contour: is an isoline linking together a series of points of equal cumulative noise exposure based on Ldn metric. Such contours are developed based on aircraft flight patterns, number of daily aircraft operations by type of aircraft and time of day, noise characteristics of each aircraft, and typical runway usage patterns.
- (e) Decibel (dB) : is a unit of measure of sound pressure or intensity.
- (f) Ldn metric: is the average equivalent A-weighted sound level during a 24-hour day, obtained by adding ten decibels to the hourly noise levels measured during the night (10:00 p.m. to 7:00 a.m.).
- (g) SLUCM: Standard Land Use Coding Manual, U.S. Department of Transportation.

22.3 Accident potential zones and noise zones. The AEOZ is comprised of two basic regulatory components: accident potential zones and noise zones. This section establishes three accident potential zones and four noise zones. The boundaries of each of these zones are delineated on the City of Dover zoning map and are further described as follows:

(a) Accident potential zones:

- (1) Clear zone (CZ) is that area immediately adjoining the end of a runway and which extends outward from the edge of the runway a distance of 3,000 feet and which is 3,000 feet in width (1,500 feet to either side of the centerline of the airport runway);
- (2) Accident potential zone I (APZ I) is that area immediately adjoining the outer edge of the CZ and which extends outward from the boundary of the CZ a distance of 5,000 feet, and which is 3,000 feet in width; and
- (3) Accident potential zone II (APZ II) is that area immediately adjoining the outer edge of the APZ I and which extends outward from the boundary of the APZ I a distance of 7,000 feet, and which is 3,000 feet in width.

(b) Noise zones:

- (1) Noise zone A (DNL A) is that area within and bounded by DNL contour lines of between 65 decibels and 69 decibels of noise pressure.
- (2) Noise zone B (DNL B) is that area within and bounded by DNL contour lines of between 70 decibels and 74 decibels of noise pressure.
- (3) Noise zone C (DNL C) is that area within and bounded by DNL contour lines of between 75 decibels and 79 decibels of noise pressure.
- (4) Noise zone D (DNL D) is that area within and bounded by DNL contour lines of 80 decibels and subject to noise pressure of 80 decibels and greater.

22.4 Exemptions. The following uses and structures are exempt from compliance with the provisions of this section:

(a) Additions to existing one-family dwellings. Additions to existing one-family dwellings may be permitted when all other applicable zoning district bulk requirements are met.

(b) Additions to existing non-residential buildings.

- (1) Additions to existing non-residential buildings designed for human occupation shall be limited to a maximum increase of 50% of the floor area.
- (2) Additions to existing non-residential buildings designed for storage, warehousing and other uses not designed or intended for human occupancy as a primary use are unlimited in floor area.

(c) Temporary uses. Temporary uses which include but are not limited to public gatherings, celebrations and outdoor entertainment events are permitted, so long as the period of operation does not exceed five days.

(d) Temporary structures. Temporary buildings and structures such as tents, pavilions, bleachers, etc., that are not used for residential purposes, and which meet said applicable requirements as contained within this zoning ordinance appendix are permitted, so long as such uses and associated structures are constructed incidental to a permitted use.

(e) Accessory uses and structures. Accessory uses and structures incidental to a permitted principal structure or use.

22.5 Land use and development standards. Any building or portion thereof constructed or placed within the AEOZ shall comply with the following standards:

(a) Unless specifically exempted under subsection 22.4 above, land uses shall be permitted or prohibited in accordance with subsection 22.6, land use compatibility table.

(b) Proposed structures situated within noise zones A through D shall be constructed with noise attenuation features to achieve the minimum interior noise level reductions specified by building type in subsection 22.6, land use compatibility table.

(c) In APZ I and APZ II, no structure may be erected over 60 feet in height, regardless of zoning district bulk regulations of the individual zoning district.

(d) All building permit applications for construction of new buildings or building additions not exempted under section 22.4, within AEOZ shall be accompanied by a written statement from a licensed architect or engineer, which lists all construction materials to be used and the resultant interior noise level reductions to be achieved. The written analysis provided by the engineer or architect shall demonstrate that the proposed construction will achieve compliance with the minimum required interior noise level reductions specified in subsection 22.6, land use compatibility table.

22.6 Land use compatibility table.

TABLE INSET:

Land Use Compatibility Table		Accident Potential Zones			Noise Zones in DNL dBA			
SLUCM No.	Name	Clear Zone	APZ I	APZ II	A 65-69	B 70-74	C 75-79	D 80+
10	Residential							
11	Household units							
11.11	Single units; detached	N	N	Y5, 12	Y1,12	Y2	N	N
11.12	Single units; semidetached and attached	N	N	N	Y1	Y2	N	N
11.31	Apartments	N	N	N	Y1	Y2	N	N
12	Group quarters	N	N	N	Y1	Y2	N	N
13	Residential hotels	N	N	N	Y1	Y2	N	N
14	Mobile home parks or courts	N	N	N	N	N	N	N
15	Transient lodgings	N	N	N	Y1	Y2	Y5	N
16	Other residential	N	N	N	Y1	Y2	N	N
20	Manufacturing							
21	Food & kindred products; manufacturing	N	N	Y	Y1	Y2	Y3	Y4
22	Textile mill products; manufacturing	N	N	Y	Y1	Y2	Y3	Y4
23	Apparel and other finished products made from fabrics, leather, and similar materials; manufacturing	N	N	N	Y1	Y2	Y3	Y4
24	Lumber and wood products (except furniture); manufacturing	N	Y5,9	Y	Y1	Y2	Y3	Y4
25	Furniture and fixtures; manufacturing	N	Y5,9	Y	Y1	Y2	Y3	Y4
26	Paper & allied products; manufacturing	N	Y5,9	Y	Y1	Y2	Y3	Y4
27	Printing, publishing, and allied industries	N	Y5,9	Y	Y1	Y2	Y3	Y4
28	Chemicals and allied products; manufacturing	N	N	N	Y1	Y2	Y3	Y4
29	Petroleum refining and related industries	N	N	Y	Y1	Y2	Y3	Y4
30	Manufacturing							
31	Rubber and misc. plastic products, manufacturing	N	N	N	Y1	Y2	Y3	Y4
32	Stone, clay and glass products manufacturing	N	N	Y	Y1	Y2	Y3	Y4
33	Primary metal industries	N	N	Y	Y1	Y2	Y3	Y4
34	Fabricated metal products;	N	N	Y	Y1	Y2	Y3	Y4

	manufacturing							
35	Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks manufacturing	N	N	N	Y1	Y2	Y3	N
39	Miscellaneous manufacturing	N	Y5,9	Y5,9	Y1	Y2	Y3	Y4
40	Transportation, Communications and Utilities							
41	Railroad, rapid rail transit and street railroad transportation	N	N	Y	Y1	Y2	Y3	Y4
42	Motor vehicle transportation	N	Y	Y	Y1	Y2	Y3	Y4
43	Aircraft transportation	N	Y10	Y	Y1	Y2	Y3	Y4
44	Marine craft transportation	N	Y10	Y	Y1	Y2	Y3	Y4
45	Highway & street right-of-way	N	Y	Y	Y1	Y2	Y3	Y4
46	Automobile parking	N	Y10	Y	Y1	Y2	Y3	Y4
47	Communications	N	Y10	Y	Y1	Y2	Y3	N
48	Utilities	N	Y10	Y	Y1	Y2	Y3	Y4
49	Other transportation communications and utilities	N	Y10	Y	Y1	Y2	Y3	N
50	Trade							
51	Wholesale trade	N	Y5	Y	Y1	Y2	Y3	Y4
52	Retail trade-building materials, hardware and farm equipment	N	Y5	Y	Y1	Y2	Y3	Y4
53	Retail trade-general merchandise	N	N	Y5	Y1	Y2	Y3	N
54	Retail trade-food	N	N	Y5	Y1	Y2	Y3	N
55	Retail trade-automotive, marine craft, aircraft and accessories	N	Y5	Y5	Y1	Y2	Y3	N
56	Retail trade-apparel and accessories	N	N	Y5	Y1	Y2	Y3	N
57	Retail trade-furniture, home furnishings and equipment	N	N	Y5	Y1	Y2	Y3	N
58	Retail trade-eating and drinking establishments	N	N	N	Y1	Y2	Y3	N
59	Other retail trade	N	N	Y5,9	Y1	Y2	Y3	N
60	Services							
61	Finance, insurance and real estate services	N	N	Y5,9	Y1	Y2	Y3	N
62	Personal services	N	N	Y5,9	Y1	Y2	Y3	N
62.4	Cemeteries	N	N	Y11	Y1	Y2	Y3	N
63	Business services	N	Y5,9	Y5,9	Y1	Y2	Y3	N
64	Repair services	N	Y5,9	Y	Y1	Y2	Y3	Y4
65	Professional services	N	N	Y5,9	Y1	Y2	Y3	N
65.1	Hospitals, nursing homes	N	N	N	Y1	Y2	N	N
65.1	Other medical facilities	N	N	N	Y1	Y2	Y3	N
66	Contract construction services	N	Y5,9	Y	Y1	Y2	Y3	N
67	Governmental services	N	N	Y5,9	Y1	Y2	Y3	N
68	Educational services	N	N	N	Y1	Y2	N	N
69	Miscellaneous services	N	N	Y5	Y1	Y2	Y3	N
70	Cultural, Entertainment and Recreational							
71	Cultural activities (including churches)	N	N	N	Y1	Y2	N	N
71.2	Nature exhibits	N	N	Y	Y1	N	N	N
72	Public assembly	N	N	N	Y1	N	N	N

72.1	Auditoriums, concert halls	N	N	N	Y1	Y2	N	N
72.11	Outdoor music shell, amphitheaters	N	N	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	N	N	N	Y6	Y6	N	N
73	Amusements	N	N	Y9	Y1	Y2	N	N
74	Recreational activities (including golf courses, riding stables, water recreation)	N	N	Y	Y	Y	N	N
75	Resorts and group camps	N	N	N	Y1	Y2	N	N
76	Parks	N	Y9	Y9	Y	Y	N	N
79	Other cultural, entertainment and recreation	N	N	N	Y2	Y3	N	N
80	Resources Production and Extraction							
81	Agriculture (except livestock)	Y8	Y	Y	Y7	Y7	Y8	Y8
81.5 to 81.7	Livestock farming and animal breeding	N	Y	Y	Y7	Y7	N	N
82	Agricultural related activities	N	Y	Y	Y7	Y7	N	N
83	Forestry activities and related services	N	Y	Y	Y7	Y7	N	N
84	Fishing activities and related services	N	N	N	N	N	N	N
N	Mining activities and related services	N	N	N	N	N	N	N
89	Other resources production and extraction	N	N	N	N	N	N	N

Y - (Yes) - Land use and related structures are compatible without restriction.

N - (No) - Land use and related structures are not compatible and are prohibited.

Yx - (yes with restrictions) - Land use and related structures generally compatible; see notes 1-12.

NLR - (Noise Level Reduction) - NLR (outdoor to indoor) to be achieved through incorporation of noise attenuation measures into the design and construction of the structures.

NOTES

1. Require NLR of 25dB for DNL A.
2. Require NLR of 30dB for DNL B.
3. Require NLR of 35dB for DNL C.
4. Require NLR of 40dB for DNL D.
5. Require NLR of noise zone and building location and site planning, and design and use of berms and barriers can help mitigate outdoor exposure, particularly from near ground level sources. Measures that reduce outdoor noise should be used whenever practical in preference to measures which only protect interior spaces.
6. Require NLR of noise zone and special sound reinforcement systems are installed.
7. Associated residential uses require NLR of noise zone.
8. Structures are not permitted and personnel should wear hearing protection devices.
9. Facilities shall be low intensity.
10. No Passenger terminals and no major aboveground transmission lines in APZ I.
11. Excludes chapels.
12. Maximum density of 1 dwelling unit per acre.

22.7 Design standards.

(a) All buildings and structures to be constructed or placed within the AEOZ shall be situated on the portion of the lot that affords the least noise impact to the proposed building or structure, wherever and whenever practicable. Buildings and structures shall be designed and oriented to minimize exposure to the noise source and should take maximum advantage of existing physical features to minimize noise impact. Windows, doors and other building openings shall be located the greatest possible distance away from the noise source.

(b) Landscape buffer plantings and related screening material shall be used whenever practicable to deflect noise away from areas intended for human habitation.

22.8 Prohibited uses. In addition to uses prohibited by subsection 22.6, land use compatibility table, the following activities are prohibited within the CZ, APZ I and APZ II zones of the AEOZ, including, but not limited to:

- (a) Storage of explosives;
- (b) Hazardous or toxic materials/waste;
- (c) Aboveground transmission lines;
- (d) Uses that release into the air any substance which would impair visibility or otherwise interfere with the operation of aircraft (dust, smoke, etc.);
- (e) Uses that produce light emission, direct or indirect, which would interfere with pilot vision;
- (f) And uses that attract birds or water fowl, such as, but not limited to, landfills, wastewater treatment facilities, and associated settling ponds, artificial marshes, dredge spoil materials, sand and gravel dredging operations and open fish farming.

ADOPTED: MARCH 11, 2013

SYNOPSIS

The proposed ordinance would update the Airport Environs Overlay Zone in accordance with the 2010 Air Installation Compatible Use Zone study published by the Dover Air Force Base.

Actions History:

March 11, 2013 - Final Reading by Council

January 28, 2013 – First Reading by Council

January 14, 2013 – Introduced at the Legislative, Finance and Administration Committee

January 28, 2013 – First Reading at City Council