



## **APPENDIX G**

### **AIR INSTALLATION COMPATIBLE USE ZONE (AICUZ)**

#### **LAND USE COMPATIBILITY**

#### **Noise and Accident Potential**

**Extract from Air Force Handbook (AFH) 32-7084**





Attachment 4

LAND USE COMPATIBILITY

Table A4.1. Land Use Compatibility With Respect To Noise And Accident Potential.

SLUCM NO.	LAND USE NAME	ACCIDENT POTENTIAL ZONES			NOISE ZONES			
		CLEAR ZONE	APZ I	APZ II	65-69 dB	70-74 dB	75-79 dB	80+ dB
10	Residential							
11	Household units							
11.11	Single units; detached	N	N	Y <sup>1</sup>	A <sup>11</sup>	B <sup>11</sup>	N	N
11.12	Single units; semidetached	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.13	Single units; attached row	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.21	Two units; side-by-side	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.22	Two units; one above the other	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.31	Apartments; walk up	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.32	Apartments; elevator	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
12	Group quarters	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
13	Residential hotels	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
14	Mobile home parks or courts	N	N	N	N	N	N	N
15	Transient lodgings	N	N	N	A <sup>11</sup>	B <sup>11</sup>	C <sup>11</sup>	N
16	Other residential	N	N	N <sup>1</sup>	A <sup>11</sup>	B <sup>11</sup>	N	N
20	Manufacturing							
21	Food & kindred products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
22	Textile mill products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
23	Apparel and other finished products made from fabrics, leather, and similar materials; manufacturing	N	N	N <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
24	Lumber and wood products (except furniture); manufacturing	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
25	Furniture and fixtures; manufacturing	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
26	Paper & allied products; manufacturing	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
27	Printing, publishing, and allied industries	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
28	Chemicals and allied products; manufacturing	N	N	N <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
29	Petroleum refining and related industries	N	N	N	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
30	Manufacturing							
31	Rubber and misc. plastic products; manufacturing	N	N <sup>2</sup>	N <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
32	Stone, clay and glass products manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
33	Primary metal industries	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
34	Fabricated metal products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>



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		CLEAR ZONE	APZ I	APZ II	65-69 dB	70-74 dB	75-79 dB	80+ dB
35	Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks manufacturing	N	N	N <sup>2</sup>	Y	A	B	N
39	Miscellaneous manufacturing	N	Y <sup>2</sup>	Y <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
40	Transportation, communications and utilities							
41	Railroad, rapid rail transit and street railroad transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
42	Motor vehicle transportation	N <sup>3</sup>	Y	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
43	Aircraft transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
44	Marine craft transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
45	Highway & street right-of-way	N <sup>3</sup>	Y	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
46	Automobile parking	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
47	Communications	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	A <sup>15</sup>	B <sup>15</sup>	N
48	Utilities	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>
49	Other transportation communications and utilities	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	A <sup>15</sup>	B <sup>15</sup>	N
50	Trade							
51	Wholesale trade	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
52	Retail trade-building materials, hardware and farm equipment	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
53	Retail trade-general merchandise	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
54	Retail trade-food	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
55	Retail trade-automotive, marine craft, aircraft and accessories	N	Y <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
56	Retail trade-apparel and accessories	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
57	Retail trade-furniture, home furnishings and equipment	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
58	Retail trade-eating and drinking establishments	N	N	N <sup>2</sup>	Y	A	B	N
59	Other retail trade	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
60	Services							
61	Finance, insurance and real estate services	N	N	Y <sup>6</sup>	Y	A	B	N
62	Personal services	N	N	Y <sup>6</sup>	Y	A	B	N
62.4	Cemeteries	N	Y <sup>7</sup>	Y <sup>7</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14,2</sup> 1
63	Business services	N	Y <sup>8</sup>	Y <sup>8</sup>	Y	A	B	N
64	Repair services	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
65	Professional services	N	N	Y <sup>6</sup>	Y	A	B	N



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		CLEAR ZONE	APZ I	APZ II	65-69 dB	70-74 dB	75-79 dB	80+ dB
65.1	Hospitals, nursing homes	N	N	N	A*	B*	N	N
65.1	Other medical facilities	N	N	N	Y	A	B	N
66	Contract construction services	N	Y <sup>6</sup>	Y	Y	A	B	N
67	Governmental services	N	N	Y <sup>6</sup>	Y*	A*	B*	N
68	Educational services	N	N	N	A*	B*	N	N
69	Miscellaneous services	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
70	Cultural, entertainment and recreational							
71	Cultural activities (including churches)	N	N	N <sup>2</sup>	A*	B*	N	N
71.2	Nature exhibits	N	Y <sup>2</sup>	Y	Y*	N	N	N
72	Public assembly	N	N	N	Y	N	N	N
72.1	Auditoriums, concert halls	N	N	N	A	B	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	Y <sup>17</sup>	Y <sup>17</sup>	N	N
73	Amusements	N	N	Y <sup>8</sup>	Y	Y	N	N
74	Recreational activities (including golf courses, riding stables, water recreation)	N	Y <sup>8,9,10</sup>	Y	Y*	A*	B*	N
75	Resorts and group camps	N	N	N	Y*	Y*	N	N
76	Parks	N	Y <sup>8</sup>	Y <sup>8</sup>	Y*	Y*	N	N
79	Other cultural, entertainment and recreation	N	Y <sup>9</sup>	Y <sup>9</sup>	Y*	Y*	N	N
80	Resources production and extraction							
81	Agriculture (except livestock)	Y <sup>16</sup>	Y	Y	Y <sup>18</sup>	Y <sup>19</sup>	Y <sup>20</sup>	Y <sup>20,21</sup>
81.5 to 81.7	Livestock farming and animal breeding	N	Y	Y	Y <sup>18</sup>	Y <sup>19</sup>	Y <sup>20</sup>	Y <sup>20,21</sup>
82	Agricultural related activities	N	Y <sup>5</sup>	Y	Y <sup>18</sup>	Y <sup>19</sup>	N	N
83	Forestry activities and related services	N <sup>5</sup>	Y	Y	Y <sup>18</sup>	Y <sup>19</sup>	Y <sup>20</sup>	Y <sup>20,21</sup>
84	Fishing activities and related services	N <sup>5</sup>	Y <sup>5</sup>	Y	Y	Y	Y	Y
85	Mining activities and related services	N	Y <sup>5</sup>	Y	Y	Y	Y	Y
89	Other resources production and extraction	N	Y <sup>5</sup>	Y	Y	Y	Y	Y



### LEGEND

**SLUCM** - Standard Land Use Coding Manual, U.S. Department of Transportation.

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

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

**Y<sup>x</sup>** - (yes with restrictions) - Land use and related structures generally compatible; see notes indicated by the superscript.

**N<sup>x</sup>** - (no with exceptions) - See notes indicated by the superscript.

**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.

**A, B, or C** - Land use and related structures generally compatible; measures to achieve NLR for A(DNL/CNEL 65-69), B(DNL/CNEL 70-74), C(DNL/CNEL 75-79), need to be incorporated into the design and construction of structures.

**A<sup>\*</sup>, B<sup>\*</sup>, and C<sup>\*</sup>** - Land use generally compatible with NLR. However, measures to achieve an overall noise level reduction do not necessarily solve noise difficulties and additional evaluation is warranted. See appropriate footnotes.

**\*** - The designation of these uses as "compatible" in this zone reflects individual federal agencies' and program considerations of general cost and feasibility factors, as well as past community experiences and program objectives. Localities, when evaluating the application of these guidelines to specific situations, may have different concerns or goals to consider.

### NOTES:

1. Suggested maximum density of 1-2 dwelling units per acre, possibly increased under a Planned Unit Development (PUD) where maximum lot coverage is less than 20 percent.
2. Within each land use category, uses exist where further deliberating by local authorities may be needed due to the variation of densities in people and structures. Shopping malls and shopping centers are considered incompatible use in any accident potential zone (CZ, APZ I, or APZ II).
3. The placing of structures, buildings, or above-ground utility lines in the clear zone is subject to severe restrictions. In a majority of the clear zones, these items are prohibited. See AFI 32-7060 (formerly AFR 19-9) and AFJM 32-8008 (formerly AFM 86-14) for specific guidance.
4. No passenger terminals and no major above-ground transmission lines in APZ I.
5. Factors to be considered: labor intensity, structural coverage, explosive characteristics, and air pollution.
6. Low-intensity office uses only. Meeting places, auditoriums, etc., are not recommended.
7. Excludes chapels.
8. Facilities must be low intensity.
9. Clubhouse not recommended.
10. Areas for gatherings of people are not recommended.
11.
  - A. Although local conditions may require residential use, it is discouraged in DNL/CNEL 65-69 dB and strongly discouraged in DNL/CNEL 70-74 dB. The absence of viable alternative development options should be determined and an evaluation indicating a demonstrated community need for residential use would not be met if development were prohibited in these zones should be conducted prior to approvals.
  - B. Where the community determines the residential uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) for DNL/CNEL 65-69 dB and DNL/CNEL 70-74 dB should be incorporated into building codes and considered in individual approvals
  - C. NLR criteria will not eliminate outdoor noise problems. However, 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.
12. Measures to achieve the same NLR as required for facilities in DNL/CNEL 65-69 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
13. Measures to achieve the same NLR as required for facilities in DNL/CNEL 70-74 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
14. Measures to achieve the same NLR as required for facilities in DNL/CNEL 75-79 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
15. If noise sensitive, use indicated NLR; if not, the use is compatible.
16. No buildings.
17. Land use is compatible provided special sound reinforcement systems are installed.
18. Residential buildings require the same NLR as required for facilities in DNL/CNEL 65-69 dB range.
19. Residential buildings require the same NLR as required for facilities in DNL/CNEL 70-74 dB range.
20. Residential buildings are not permitted.
21. Land use is not recommended. If the community decides the use is necessary, hearing protection devices should be worn by personnel.