

**TABLE 4.8.1–2.—Land Use Compatibility with Yearly Day-Night
Average Sound Levels^A (in dB)**

LAND USE	YEARLY DAY-NIGHT AVERAGE SOUND LEVEL (DNL)					
	BELOW 65	65–70	70–75	75–80	80–85	OVER 85
RESIDENTIAL						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
PUBLIC USE						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
COMMERCIAL USE						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
MANUFACTURING AND PRODUCTION						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(5)	Y(6)	N	N	N
Livestock farming and breeding	Y	Y(5)	Y(6)	Y(7)	Y(7)	Y(7)
Mining and fishing, resource production, and extraction	Y	Y	Y	Y	Y	Y
RECREATIONAL						
Outdoor sports arenas and spectator sports	Y	Y(8)	Y(8)	N	N	N
Outdoor music halls and amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusement parks, resorts, and camps	Y	Y	Y	N	N	N

TABLE 4.8.1-2.—Land Use Compatibility with Yearly Day-Night Average Sound Levels^A (in dB)-Continued

LAND USE	YEARLY DAY-NIGHT AVERAGE SOUND LEVEL (DNL)					
	BELOW 65	65-70	70-75	75-80	80-85	OVER 85
Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

^AThe designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local laws. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. The Federal Aviation Administration determinations under Part 150 are not intended to substitute Federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise-compatible land uses.

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

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

25, 30, or 35 - Land use and related structures generally compatible; measures to achieve Noise Level Reduction (NLR) of 25, 30, or 35 dB must be incorporated into design and construction of structure.

1 - Where the community determines that residential or school uses must be allowed, measures to achieve outdoor-to-indoor NLR of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide an NLR of 20 dB; thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year-round. However, the use of NLR criteria will not eliminate outdoor noise problems.

2 - Measures to achieve an NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, offices areas, noise-sensitive areas, or where the normal noise level is low.

3 - Measures to achieve an NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, offices areas, noise-sensitive areas, or where the normal noise level is low.

4 - Measures to achieve an NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, offices areas, noise-sensitive areas, or where the normal noise level is low.

5 - Residential buildings require an NLR of 25.

6 - Residential buildings require an NLR of 30.

7 - Residential buildings not permitted.

8 - Land use-compatible, provided special sound reinforcement systems are installed.

Source: 14 CFR 150

compatibility with noise exposure as a function of land use in terms of DNL. For all residential uses, compatibility is considered to exist with sound levels up to 65 dB without qualification and up to 75 dB for certain specific uses with suitable building features. For livestock farming and breeding, compatibility is considered to exist up to 75 dBA. These guidelines are advisory in nature and are not mandatory (14 CFR 150).

Also, the Environmental Protection Agency has determined that no significant effects on public health and welfare occur for the most sensitive

portion of the population (within an adequate margin of safety) if the prevailing DNL is less than 55 dB (NAS 1977).

Major noise emission sources within Pantex Plant include various industrial facilities, equipment, and machines. Traffic is the primary source of noise at the site boundary and at residences near roads. Other sources of noise include aircraft, wind, insect activity, and agricultural activity.