



Fort Knox Compatible Use Implementation Plan

A-weighting (dBA): A measure of sound that depicts higher frequency noise caused by small arms firing, aircraft use, and vehicle operations.

Accident Potential Zone I (APZ I) [Class A Runway Accident]: An area just beyond the Clear Zones at each end of the runway. Less critical than the Clear Zone it still possesses significant potential for accidents. Land use compatibility guidelines allow a wide variety of industrial, manufacturing, transportation, communication, utilities, wholesale trade, open space, recreation and agricultural uses. Uses that concentrate people in small areas are not acceptable in APZ I.

Accident Potential Zone II (APZ II) [Class A Runway]: An area extending beyond APZ I. This area is less critical than APZ I but still possesses potential for accidents. Acceptable land uses include those in APZ I, as well as low density, single family residences. Also acceptable are personal and business services and commercial retail trade uses of low intensity or scale of operation. High-density functions such as multi-story buildings, places of assembly (e.g., theaters, schools, churches, and restaurants) and high-density office uses are not considered appropriate.

Army Compatible Use Buffer (ACUB): A new Army program which allows an installation to work with partners to encumber land to protect habitat and training without acquiring any new land for Army ownership. Through ACUBs, the Army reaches out to partners to identify mutual objectives of land conservation and to prevent development of critical open areas. The program allows the Army to contribute funds to the partner's purchase of easements or properties from willing landowners. These partnerships preserve high-value habitat and limit incompatible development in the vicinity of military installations. Partners may include states, cities and counties as well as non-governmental conservation organizations.

C-weighting (dBC): A measure of sound that shows the low frequency noise and vibration associated with the firing of larger weapons systems.

Clear Zone (CZ) [Class A Runway]: An area 1,000 feet wide by 3,000 feet long located at the immediate end of the runway. The accident potential in this area is so high that no building is allowed.

Day-Night Average Sound Level (DNL): The 24-hour average frequency-weighted sound level, in decibels, from midnight to midnight, obtained after addition of 10 decibels to sound levels in the night from midnight up to 7 a.m. and from 10 p.m. to midnight (0000 up to 0700 and 2200 up to 2400 hours).

Decibels (dB): The decibel is a logarithmic unit of measure of sound pressure.

Land Use Planning Zone: The Land Use Planning Zone consists of an area where the day-night sound level (DNL) is between 60 and 65 dBA or 57 and 62 dBC. Exposure to noise within this area is considered significant during periods of increased operations. The LUPZ accounts for the variability

of noise levels caused by higher daily numbers of operations than the annual average. It shows where levels of annoyance usually associated with Noise Zone II can be found during periods of increased operations. The LUPZ provides the installation with a means to predict possible complaints, and meet the public demand for a description of what will exist during a period of increased operations.

Noise Zone I: Noise Zone I (NZ I) includes areas around a noise source in which the DNL is less than 65 dBA and less than 62 dBC. Since the noise exposure in this zone is low enough that it does not trigger compatibility with sensitive uses, maps of the noise environment do not show NZ I contours.

Noise Zone II: Noise Zone II (NZ II) consists of an area where the A-weighted DNL is between 65 and 75 decibels and the C-weighted DNL is between 62 and 70 decibels. Guidance deems noise exposure within this area to be significant and recommends limiting use of land to non-sensitive activities such as industry, manufacturing, transportation, and agriculture. However, if the community determines that land in NZ II areas must be used for residential purposes, guidance suggests that the design and construction of the buildings incorporate noise level reduction (NLR) features to minimize the annoyance experienced by residents. Noise Zone III.

Noise Zone III: (NZ III) consists of the immediate areas around the source of the noise in which the A-weighted DNL (ADNL) is more than 75 decibels, and the C-weighted DNL (CDNL) exceeds 70 decibels. Guidance indicates that noise in this zone is severe enough to cause conflicts with almost all activities, particularly sensitive land uses, such as housing, schools, medical facilities, and places of worship.