## Hi Sandi

In your response to the comments on the above item you mentioned an interpretation of 60dB roll off being allowed for device in the 10kHz range. However, while I can sympathize with the dilemma, you will please note the following:

- 1 TCBs are obligated to follow the most recent interpretations.
- 2 the interpretation you provided is from the Feb 2002 TCB training while a more recent interpretation disagrees with the 'carte blanche' approach to the allowance of 60dB and now the FCC states that this 60db must be **proven by measurements** at several distances.
- 3 This was not done. Consequently the 40dB factor is still the accepted roll off. Please either provide the proof as required in the interpretation below or please provide evidence that the device meets the 40dB roll off factor.

## FCC interpretations

1 Date 10/26/04

"Question: Dog fence transmitters and pet containment systems operating at 10 kHz. Under what conditions will a 60 dB per decade extrapolation factor (roll-off) be acceptable for operations below 490 kHz for devices such as a dog fence transmitter or pet containment device?

Answer: Dog fence transmitters and pet containment systems operating on frequencies below 490 kHz are subject to the general radiated emission limits in 47 CFR 15.209. The procedures for measuring intentional radiators operating on frequencies below 30 MHz are given in 47 CFR 15.31(f). In the case of a dog fence transmitter or pet containment device operating at 10 kHz, a 40 dB per decade roll-off is acceptable. However a 60 dB per decade roll-off must be proven through multiple measurements at several distances, e.g. 3 meters, 10 meters and 30 meters. This higher roll-off is acceptable if it can be proven empirically. As an example, at 262 kHz, a maximum field strength (F/S) of 9.2 uV/m at 300 meters is permitted. A 40 dB per decade roll-off is acceptable and would convert the above stated 300 meter limited to about 8.3 millivolts/meter at the 10 meter distance. However, a 60 dB per decade (same as 18 dB/octave) must be proven through multiple measurements at several distances, e.g., 3 meters, 10 meters and 30 meters.

## **Thanks**

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