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June 2, 2008

To: Mr. Andrew Leimer (Andrew.Leimer@fcc.gov)
FCC Application-Processing Branch

Applicant: Redline Communications Inc
FCC ID: QC8-AN80IB
Form 731 Confirmation Number: EA619856
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Correspondence Reference Number: 35480

Dear Mr. Leimer,

Thank you for your letter dated June 2, 2008 in regards to our application for 5225-5335 MHz band. (Part 90 Subpart Y)

RF Exposure Evaluation According to §90.1217 and §1.1310:

Our Transceiver AN-80i is classified as fixed application has the following calculation done for power Density to calculate the min separation distance-General public cannot be exposed to dangerous RF level:

Since the Limit for power density for general population/uncontrolled exposure is 1 mW/cm² (for 1500 –100,000 MHz frequency range),

The power density **P (mW/cm²) = $P_T / 4\pi * R^2$**

Where P_T is the transmitted power, which is equal to the peak transmitter output power 28.3 dBm (for 20 MHz channel) plus maximum antenna gain 32 dBi, the maximum equivalent isotropically radiated power EIRP is $P_T = 28.3 \text{ dBm} + 32 \text{ dBi}$ which is the worst case with slightly reduced power to give a max power of 59 dBm (EIRP) = **794.328 W**.

The power density P at x cm (minimum safe distance required is calculated as follows):

$P = 1 \text{ mW/cm}^2 \text{ (max)} \quad 794328 \text{ mW} / 4\pi * (x \text{ cm}^2)$

Or $(x \text{ cm}^2) = 794328 \text{ mW} / 4\pi = 63210 \text{ cm}^2$

Which gives min. $x = 251 \text{ cm}$

As a result, the min. separation distance in the user's manual = 255 cm

Please contact the undersigned if you have any questions.

Sincerely Yours,

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