November 3, 1998

Federal Communications Commission
Equipment Authorization Division
7435 Oakland Mills Road
Columbia, MD 21046

Subject: Maximum Permissible Exsposure calculations for   **FCC ID: NVCRMI0003**

To whom it may concern,

Whisper is submitting a low power transmitter for the Gas Remote Meter Interface. The unit has a low power frequency hopping spread spectrum radio operateing in the 902 - 928 MHz range with a radiated output power of 10.4 mW.

Assuming a worst case of no duty cycle.

For an Isotropic radiator the surface area of a sphere can be used to determine the area over which the transmitter energy is radiated.

$$\text{Surface area of a sphere} = 4 * \Pi * radius^2$$

In the case where there is antenna gain,the worst case energy density is increased by the antenna gain. The exposure level can be calculated as follows for the -3.0 dBi antenna gain:

MPE distance = (output power*duty cycle*10(antenna gain/10)/(4*Π*Exposure Limit (mW/cm^2)$^{1/2}$

For the -3.0 dBi Antenna

NVCRMI0003 MPE distance = (10.4 mW*1*0.5/4*3.14*1)$^{1/2}$
                                            = .64 cm
                                            = .25 in

If you have any questions please do not hesitate to call me.

Sincerely,

Chris Byleckie
Technical Director
Electronic Compliance Laboratories