## **RADIATION HAZARD STATEMENT**

The Maximum Permissible Exposure (MPE) for this mobile earth station at a distance of 0.3 meters is calculated as follows:

 $S = EIRP/4\pi R^2$ 

WhereS = Power Density (Watts/m²)EIRP =Radiated Power (Watts)R = Distance from body (m)

EIRP = maximum EIRP \* duty cycle

Max EIRP = 27.7 dBW = 588.8 watts (two carriers each operating at max EIRP) Duty cycle = 4 time slots \* 8.28 ms per transmission / 90 ms per frame = 0.368 EIRP = 588.8\* 0.368 = 216.7 watts

 $S = 216.7/(4\pi *0.3 *0.3) = 191.6 Watts/m^2$ 

The minimum separation distance from the terminal to ensure that the power density is below the 10 Watts/m<sup>2</sup> requirement is calculated as:

R =  $(EIRP/4\pi S)^{1/2}$  =  $(216.7/4\pi 10)^{1/2}$  = 1.3 meters

At 1.3m the power density is less than the 10 Watts/m<sup>2</sup> requirement for the general population/uncontrolled exposure.

The installation/user manual specifies a 2m minimum spacing between the Iridium Certus antenna and the general public. Further, there is a warning on the device itself showing the minimum 2m separation distance.