

## **EXHIBIT 1**

### **Radiation Hazard Analysis**

A radiation hazard analysis has been performed in accordance with FCC document OET Bulletin 65, Edition 97-01, August 1997.

The calculations are based on recommendations within the document, specifically:

Surface Density      Equation 11  
Near Field Distance   Equation 12  
Near Field Density    Equation 13  
Far Field Distance    Equation 16  
Transition Density    Equation 17  
Far Field Density     Equation 18

Table 1 summarizes the calculations:

Table 1 Radiation Hazard Analysis

|                             | HUB       | Mobile1  | Mobile2  | Fixed    | Trailer  |         |
|-----------------------------|-----------|----------|----------|----------|----------|---------|
| Antenna Diameter            | 4.50      | 1.20     | 1.20     | 1.20     | 2.40     | Meters  |
| SSPA Power                  | 40.00     | 16.00    | 8.00     | 8.00     | 25.00    | Watts   |
| Feed Loss                   | 2.00      | 1.00     | 1.00     | 1.00     | 1.00     | db      |
| Antenna Efficiency          | 70.00     | 70.00    | 70.00    | 70.00    | 70.00    | %       |
| Antenna Gain                | 53.60     | 43.20    | 43.20    | 43.20    | 49.20    | dbi     |
| Frequency                   | 14250.00  | 14250.00 | 14250.00 | 14250.00 | 14250.00 | Mhz     |
|                             |           |          |          |          |          |         |
| Feed Power                  | 25238.29  | 12709.25 | 6354.63  | 6354.63  | 19858.21 | mW      |
| Ant Area                    | 159043.13 | 11309.73 | 11309.73 | 11309.73 | 45238.93 | cm^2    |
| Wavelength                  | 0.021     | 0.021    | 0.021    | 0.021    | 0.021    | Meters  |
| Near Field Distance         | 240.47    | 17.10    | 17.10    | 17.10    | 68.40    | Meters  |
| Far Field Distance          | 577.13    | 41.04    | 41.04    | 41.04    | 164.16   | Meters  |
|                             |           |          |          |          |          |         |
| Surface Density             | 0.63      | 4.49     | 2.25     | 2.25     | 1.76     | mW/cm^2 |
| Near Field Density          | 0.44      | 3.15     | 1.57     | 1.57     | 1.23     | mW/cm^2 |
| Transition Density (mid pt) | 0.26      | 1.85     | 0.93     | 0.93     | 0.72     | mW/cm^2 |
| Far Field Density           | 0.14      | 1.25     | 0.63     | 0.63     | 0.49     | mW/cm^2 |

Table 5 of OET Bulletin 65 cites 5 mW/cm^2 as the safe limit of RF exposure, at the frequency of interest, in a controlled area. All calculations indicate densities below this level.

All antennas are located in "controller areas". Mobile1 and 2 antennas are on vehicle roof tops and Fixed, Trailer, and Hub antennas are located on property with restricted access.