

From: William Dolash

To: John Kennedy

Date: May 18, 2006

Subject:

FCC File # 0139-EX-ML-2005

Message:

1.1307(a)

- (1) ☐ The facility will be located on an existing, active, and long established industrial site, not in connection with any designated wilderness area.
- (2) ☐ The facility will not be in connection with any designated wildlife preserve.
- (3) ☐ The exact location of the facility is devoid of threatened or endangered or proposed threatened or endangered species or designated or proposed critical habitats.
- (4) ☐ The exact location of the facility is not near, border, or have upon it, any listing in the National Register for Historic Places.
- (5) ☐ The exact location of the facility is not known to be near, adjacent, or upon any Indian religious site.
- (6) ☐ The exact location of the facility is not on any flood plain.
- (7) ☐ The facility is mounted on vehicles for ease of transport and will not change the surface features.
- (8) ☐ The facility will not have any antenna towers or supporting structures.

1.1307(b)

The levels of RF radiation do not exceed the exposure limits in Part 1.1310. The system will be located on Raytheon Missile Systems property as shown in Figure 1. The distance to the property fence is measured to be 1500 meters. The theoretical absolute worst case calculation at 1500 meters range is a power density of $164\text{mW}/\text{cm}^2$ within the focused beam. However, the system antenna performs shaping to smooth out the beam center thereby reducing the theoretical peak level by a factor of two, as measured. Applying this measured reduction results in $82\text{mW}/\text{cm}^2$ at 1500 meters range.

We shall measure the exposure at the property fence when we first turn on the system (and there are no people on the road on the other side of the fence) to confirm our calculations of $82\text{mW}/\text{cm}^2$ at 1500 meters range. If required, system adjustments shall be made to ensure the required power density level is achieved.

The system operation is limited to short bursts of transmitted RF emissions between periods of several minutes. For the power density level described above, the system will operate for no more than 20 seconds total over a 30 minute period. This operating cycle shall assure conformance with the FCC general public exposure limit TWA of $1\text{mw}/\text{cm}^2$ over consecutive 30 minute intervals. The occupational exposure limit TWA of $5\text{mw}/\text{cm}^2$ over consecutive 6 minute intervals will be calculated and will determine the perimeter of the controlled area on both sides of the beam. Measurements with the system in operation will either validate the calculated exclusion corridor width or cause appropriate changes. It is anticipated that the exclusion corridor will not be more than 20 meters wide, and will use barriers and other suitable materials and methods to preclude entry into the corridor. Employees shall receive the standard site RF awareness training modified to the requirements of this particular activity. Site Environmental Health and Safety will audit and monitor this activity for compliance in accordance with company requirements.