

May 12, 1999

Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046

ATTN: Applications Examining Division

RE: Microhard Systems, Inc., Certification Application;
FCCID: NS999P2

Gentlemen:

Please find the enclosed application for Certification of a Part 15 Frequency Hopping Spread Spectrum Transmitter module.

The **Model MHX-900 Embedded Wireless Modem** is designed to meet the FCC definition of a SST module. These aspects include RF shielding, buffered data input, power regulation (operates off existing +5 volts rail), unique antenna connector (12" length cable with SMC to reverse gender TNC connectors provided with antenna), FCC testing performed with module in stand-alone configuration and outside of case, and properly labeled with FCCID and interference statement.

The MHX-900 does not have a data I/O connector attached to the module, but rather a connection header. Although it contains a modem module along with the radio module, it is up to the actual finished product into which this device is embedded, to provide a data connector. Therefore the MHX-900 is not considered to be a Digital Device Peripheral.

The 0.23 meter safe distance limit for 1 mW/cm RF exposure, to be referenced in the user manual page 27, was calculated from **FCC OET 65 Appendix B, Table 1B** Guidelines for General Population/Uncontrolled Exposure. This calculation was based on the highest EIRP possible from the system, considering maximum power and antenna gain. The formula used was:

$$S = (P_o * G) / (4 * \pi * r^2)$$

Your consideration is much appreciated.

Sincerely,

Steven Dayhoff
Chief Engineer