

**ELECTRO-TEST, INC**  
**3470 Fostoria Way**  
**San Ramon, CA. 94583**

April 23, 1999

**Federal Communications Commission**  
**Experimental Radio Service**  
**P.O. Box 358320**  
**Pittsburgh, PA 15251-5320**

**Subject: Application for Experimental Radio Service (other than broadcast)**

Gentlemen,

This letters asks the FCC to grant authorization to Electro-test, Inc. to perform limited on-site radio frequency testing as part of determination of compliance with European community EMC Directives.

Electro-Test, Inc., is an independent testing organization engaged in improving industrial electrical product safety. Part of our services to provide inspection and testing services. Our request is for authorization to perform infrequent and limited testing on-site at clients locations to determine if client's equipment will meet European Community immunity requirements.

**Test Objective:**

The objective of these tests is to determine that the client's equipment is immune to impinging radiated radio energy. European EMC standards require that the devices do not cause misoperation or safety hazards beyond certain clearly defined levels by the application of these radio waves. The client's devices will be judged to have succeeded with the necessary immunity if the device demonstrates no hazardous miss-operations. These tests are required for products manufactured within the United States if they are to be sold and exported to the European Market. The test would contribute to the expanded economic opportunity of the United States and the overall reduction of EMC noise.

**Description of the testing:**

This testing regime is to be applied to industrial equipment that is either too large or too difficult to move to an enclosed RF testing laboratory environment and, thus, must be tested at the manufacturing site..

The test involves radiated immunity tests. The radiated immunity test consisting of illumination of client's device with a directed radiated field of not greater than 10 volts per meter. The frequency band of interest is 80 to 1000 MHz. The frequency would be a single sweep from 80 to 1000 MHz in the period of approximately one hour. (No single frequency would be held for any more than a few seconds.) The test might be repeated as many as five times in the course of one test evening (test period). The signal would be amplitude modulated to 80% at 1 kHz. Directional antennas would be used. These antennas might include both bi-conical and log periodic type of portable antennas. The antennas would be located approximately one meter above the ground floor. No permanent installation is planned.

**Test site and test periods:**

Testing would only be done on specific projects that require such tests. (These are expected to be no more often than approximately one per month at the current workload we are experiencing.)

The tests would be conducted only during the period from approximately 11PM to 5AM to reduce interference to any other service, unless a shorter test period is appropriate. The test site would be inside of the client's building to maximize any shielding affect from the building construction. Logs would be kept of the radiation times, test duration, power levels, personnel, and equipment.

**Testing Personnel Qualifications:**

The test personnel would be experienced radio frequency test technicians who understand the test process and have experience with EMC testing. Individual technical resumes will be provided upon request.

Please grant this authorization. If there are any questions, please contact me at 925-244-2025. Thank you.

Best regards,

ELECTRO-TEST, Inc.

A handwritten signature in cursive script, reading "Ashley Harkness, Jr.", written in black ink.

Ashley Harkness, Jr.  
Laboratory Manager