Federal Communications Commission
Washington, D.C. 20554

August 11, 2003

Mr. Michael Ramnath
c/o Ken Weiss
Motorola
1301 East Algonquin Rd
Rm 1726
Schaumburg, IL 60196

Dear Mr. Ramnath:

This is in reply to your waiver request dated July 18, 2003, related to your application for equipment certification, FCC ID: ABZ99FT3046. Specifically, Motorola is requesting a waiver of 47 CFR §§1.1310 and 2.1091(d), in order to allow a mobile transmitter that is subject to Maximum Permissible Exposure (MPE) limits specified in 47 CFR §1.1310 to instead demonstrate compliance with our RF exposure guidelines by means of specific absorption rate (SAR) testing.

Motorola has performed 52 MPE measurements with antennas intended for the subject transmitter. It has been determined that 10 of the test configurations do not comply with the MPE limit for bystander exposure. Motorola points out that the MPE limits for field strength and power density adopted by the FCC are based on applicable SAR requirements. Accordingly, for those configurations, it seeks to rely on compliance with the underlying SAR limits to demonstrate the safety of this device.

Since the Commission allows portable transmitters to demonstrate compliance either by measurement or by computational procedures, Motorola is proposing to use numerical procedures based on the finite-difference time-domain (FDTD) method to perform SAR computations for this transmitter (FCC ID: ABZ99FT3046). The antennas are to be center-mounted on the trunk or roof of a vehicle, and according to the information provided by Motorola, the SAR limit for the general population is applicable to the exposure conditions expected for bystanders located near the antennas intended for this vehicle-mounted radio.

Demonstration of compliance according to SAR limit will be an acceptable way to ensure that the operation of this mobile transmitter is in accordance with the Commission's RF exposure guidelines, and your waiver is hereby granted. Since this transmitter is intended for use in radio services that provide public safety, approval of this device would also serve public interest.

In granting this waiver, we recommend that Motorola consult with the Equipment Authorization Branch on acceptable SAR modeling procedures. In order for computed SAR results to be acceptable for demonstrating compliance, protocols equivalent to those used in SAR measurements should be followed; such as, computational algorithm, tissue and antenna model validations, evaluating the exposure conditions according to normal operating configurations, applying appropriate algorithms to determine compliance in any one gram of tissue and to establish an estimated error margin for the test results. The procedures used for this transmitter may not fully apply to other transmitters; therefore, future equipment certifications must follow the procedures applicable at that time.

If you have any further questions, please contact Martin Perrine at (301) 362-3025.

Sincerely,

Bruce Franca
Deputy Chief
Office of Engineering and Technology

bc: