UNITED STATES GOVERNMENT

memorandum

DATE: March 11, 1994

REPLY TO
ATTN OF: Robert Cleveland, OET

SUBJECT: Item to be placed in Docket ET 93-62

TO: Secretary

Please place the attached letter from Stephen Mallinger of the Occupational Safety and Health Administration, U.S. Department of Labor, dated March 1, 1994, into the record of ET Docket 93-62, "Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation." Three copies are enclosed.

ENCLOSURE

U.S. Department of Labor

Occupational Safety and Health Administration
Washington, D.C. 20210

MAR 1 1994

Reply to the attention of:

Thomas P. Stanley
Chief Engineer
Office of Engineering and Technology
and Office of the Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

93-62

Dear Mr. Stanley:

I am pleased to submit reply comments to the Federal Communications Commission (FCC) on the Notice of Proposed Rulemaking, Guidelines for Evaluating the Environmental Effects of Radiofrequency (RF) Radiation (ET Docket No. 93-62) on behalf of the Occupational Safety and Health Administration (OSHA). We generally endorse FCC's proposal to update its guidelines by adopting the IEEE/ANSI C95.1-1991 RF hazard limits to replace the currently referenced ANSI C95.1-1982 criteria. However, we also offer the following specific reply comments in response to submissions you have received from other organizations:

1. In previously submitted comments, the Food and Drug Administration also endorsed the FCC adoption of IEEE/ANSI C95.1-1991 with certain reservations. The Environmental Protection Agency (EPA) recommended the adoption of the National Council on Radiation Protection (NCRP) exposure criteria instead. Both criteria are based on biological-effects literature reviews conducted over seven years ago, and need to be updated. An important factor in our recommendation to adopt the ANSI limits is the scheduled, on going review and update of this standard. If the NCRP were commissioned to update its 1986 criteria as suggested by EPA, our concerns for the future viability of the NCRP guidelines could be resolved.

2. The major deficiency of both the ANSI and NCRP recommendations is their focus on exposure limits, almost to the exclusion of other RF protection elements which must be considered in developing a comprehensive safety and health program. It is recommended that FCC require its applicants to implement a written RF protection program which appropriately addresses traditional safety and health program elements including training, medical monitoring, protective procedures and engineering controls, signs, hazard assessments, employee involvement, and designated responsibilities for program implementation. Exposure criteria may be useful in determining when certain elements of an RF program must be implemented.

3. IEEE/ANSI C95.1-1991 provides two tiers of exposure limits, one for "controlled environments" and more stringent criteria for "uncontrolled environments." The possible implication that employees may be subjected to a higher level of risk because

they "are aware of the potential for exposure as a concomitant of employment" is unacceptable to OSHA. Rather, it is suggested that FCC adopt the uncontrolled environment criteria as an "action limit" which determines when an RF protection program is required. Persons exposed above the uncontrolled environment criteria would be protected by a program designed to mitigate any potential increase in risk.

4. The FCC must consider the potential impact of ANSI interpretations of C95.1-1991. In its comments to the Commission, the IEEE - SCC 28 Working Group on Interpretations recommended that "all subsequent interpretations or supplements to that guideline adhere to such adoption." Although we recognize the importance for the IEEE to prepare formal interpretations of its standard, we strongly recommend that the FCC retain its own procedures for interpreting FCC standards, including those based on IEEE/ANSI criteria.

5. The application of the exclusion sections of the IEEE/ANSI standard for Low-Power Devices (ref. Sections 4.2.1.1 and 4.2.2.1) is currently being discussed within the IEEE subcommittees. As a minimum, it is recommend that FCC require manufacturers of devices intending to qualify for the exclusions to implement an RF protection program on behalf of potential users. For example, it would be appropriate for manufacturers of hand-held RF devices in excess of 1.4 Watts to 1) evaluate spatial peak SARs to ensure the devices meet the controlled environment criteria under all reasonable conditions, 2) prepare a users manual which describes the safe use of the device and objectively describes health concerns for its use, and 3) affix a warning label to the device to direct the users to the manual.

6. Pages 38-39 of the comments submitted by the National Association of Broadcasters (NAB) describes RF protective clothing as having been "tested extensively and endorsed by OSHA as providing compliance with ANSI ..." It is important to note, as stated in the OSHA letter referenced by NAB, that "OSHA does not approve nor endorse products." In addition, OSHA did not conduct testing of the RF protection suit referenced by NAB, but did review the results of the manufacturer's sponsored research. OSHA was encouraged by the test results and does accept the utilization of RF protective clothing as part of a safety and health program where its use has been demonstrated to be safe and effective for the specific conditions of the job site.

Sincerely,

Stephen Mallinger

Stephen Mallinger
Acting Director
Directorate of Technical Support