APPLICANT: MOTOROLA FCC ID: IHDT56ZF1

March 22, 2000

Class II Permissive Change For FCC ID: IHDT56ZF1 (EA96962) RESPONSE TO SAR QUESTIONS

(Correspondence Reference Number: 12856)

Federal Communications Commission Authorization and Evaluation Division 7435 Oakland Mills Road Columbia, Maryland 21046

Re: Application for Cellular/PCS Transceiver Certification (EA96962)

Kwok Chan & Frank Coperich:

Purpose:

This document responds to questions on the submission for a class 2 permissive change to the IHDT56ZF1 (EA96962) application.

Description:

To facilitate the response to questions, the following includes the original text and the highlighted answer.

1. Cover letter indicates this is a Class II Permissive Change for SAR compliance due to implementation of a new housing, as a result of higher SAR levels for PCS band for head only and higher body-worn SAR for both AMPS and PCS bands. SAR was tested for the original filing at a maximum conducted output of 570 mW for PCS band but SAR for the current Class II was tested at 400 mW conducted output for the same band. The reported maximum SAR is 1.31 W/kg and if allowed to operate at the maximum rating of the original grant (there is no output changes for this Class II), by scaling, it would exceed the 1.6 W/kg limit; please clarify.

RESPONSE: The entire IHDT56ZF1 product line (all versions of housings) are phased (adjusted) for the following "Permissive Change" power output levels:

BAND (Modulation)	Original Grant	Permissive Change
800 (Analog)	0.446 W (0.505 W ERP)	0.298 W (0.283 W ERP)
800 (Digital)	0.561 W (0.636 W ERP)	0.568 W (0.533 W ERP)
1900 (Digital)	0.576 W (1.42 W EIRP)	0.411 W (1.030 W EIRP)

A revised Exhibit 6A (RF POWER OUTPUT DATA) is submitted. Please update Item 12 on form 731 to reflect the updated power output levels.

2. Please identify the locations of peak SAR with respect to the phone for the body-worn conditions tested and the separation distance provided by the belt-clip. The reported maximum SAR for body-worn operating configurations is 1.58 W/kg (AMPS mode), which is substantially higher than previously reported for the original filing; please update users manual to include proper body-worn operating instructions to ensure SAR

compliance (similar to those in recent filings) and upload the relevant page of the revised manual. What are the output power levels used for body-worn SAR tests (both bands)?

RESPONSE:

- Please refer to <u>"3. Clarification of Body Worn Test Configuration"</u> in the attached supplemental SAR report for location of peak SAR and for separation distances.
- The entire user's manual has been revised. Refer to the attached users manual pages for the body-worn operating instructions.
- 3. FYI The E-field probe calibration data indicated on the SAR report is over a year old (1998), please check calibration.

RESPONSE:

The calibration was good, the date was incorrectly reported as October 28, 1998. It should have been reported as October 28, 1999.

- 4. FYI The 1900 MHz tissue recipe indicated in the SAR report generally provide lower dielectric constant value than that indicated in the report, please check for future filings.
- 4. Please confirm if the reported 21 mW hand absorption is for AMPS or PCS band and if tests were performed for both frequency bands. Note: this phone has a fixed antenna but hand absorption section indicates testing with antenna extended and retracted?

RESPONSE:

This is confirmed, please refer to <u>"4 Requested Information about SAR in</u> the Hand tests" in the supplemental SAR report for details.

5. FYI - Original grant has 1.25 W EIRP for PCS band, current filing is requesting for 1.24 W EIRP.

RESPONSE: Please correct item 12 on the 731 form to reflect the following power levels:

824 849	0.51 0.28	40K0F8W
824 849	0.51 0.28	40K0F1D
824 849	0.51 0.53	30K0DXW
1.850 1910	1.24 1.03	30K0DXW