Date: July 26, 2005

Subject: Request for additional information regarding FCC ID: IHDT5FA1 (Portable PCS GSM transceiver)

Reference:

Application Received:	06/24/2005
Correspondence Reference Number:	250628A.IHD
Date of Original Email:	06/28/05

Prepared by:
Andrew Bachler, Principal Staff Engineer
Motorola Mobile Device Business
Libertyville, Illinois

Questions and responses follow:

1. At the recent FCC/TCBC Training Workshop (May 2005- I believe there were Motorola employees present), the FCC instituted new requirements with respect to SAR testing for phones that employ the cdma2000 chipset. Any device utilizing cdma2000 must address if and how the various combinations of Radio Configurations, Service Options, data rates, channel combinations and modulations affect the output power level, and, in turn, the measured SAR levels. Please see the attached documents.

   The document entitled "CDMA-2000 SAR Testing Guidance.doc" is from the FCC, and, while still in draft form, outlines the FCC's concerns. The attachment entitled "CDMA-2000 SAR Testing Guidance List.doc" is PCTEST's attempt to make the FCC's document more specific. Please address the issues in the "List" document. The various combinations listed above must be examined (e.g., through the use of power meter measurements) in order to determine which produces the highest level of sustained output power, and determines the combination that must be used for SAR testing. The document entitled "CDMA-2000 SAR Config.doc" is further guidance and info provided by the FCC. Please note that it, also, is still a preliminary (draft) document.

   If your investigations show that a particular combination, that was not used for your SAR measurements, produces the highest sustained output power, then you must remeasure SAR using that combination, and submit new data. Please also submit the results of your investigation of the various combinations, as well as a table describing all of these combinations in which the EUT is capable of operating. Please contact PCTEST, or the FCC directly, with any questions. Below is an excerpt from an email from the FCC Lab to PCTEST regarding these issues.

   "The attached contains additional info on CDMA-2000 operations and test options since the last time we communicated, which could be helpful for TCB reviews. Depending on the Radio Configurations a specific device is capable of operating, the applicable (simultaneous) code channels and test mode configurations (defined by the standards) may vary. The attached also contains info on relative code channel gains and how maximum power measurement conditions are recommended or suggested by the standards. One may need to adapt such recommended procedures for SAR purposes. Please ensure that there is sufficient documentation for the test setup, equipment configurations, device configurations and procedures for setting the device to transmit at maximum output (generally through open loop control) according to its capabilities in the test report.

   Our current plans are to audit these 3-G device filings, at least for little while, in order to provide better guidance to the community. Please let us know after the devices are granted so that we can initiate the audits."

RESPONSE: Please refer to supplemental SAR report submitted on 7/26/05.

2. Please specify the RBW/VBW and detector function used to measure the occupied bandwidth and bandedge emissions. Please specify the detector function used to measure spurious radiated and conducted measurements.

RESPONSE: Please refer to the following:

OCCUPIED BANDWIDTH

	Equipment Settings					
Plot	Resolution Bandwidth (kHz)	Video Bandwidth (kHz)	Sweep Points (#)	Trace Mode	Detector	Samples (≥ #)
Reference Plot - CDMA 800	3000	Auto	2001	Max Hold	Peak	100
OCBW - CDMA 800	30	Auto	1601	Max Hold	Peak	100
Lower Band Edge - CDMA 800	1	Auto	2004	Max Hold	Peak	30
Upper Band Edge - CDMA 800	1	Auto	2004	Max Hold	Peak	30
Reference Plot - CDMA 1900	300	Auto	1001	Max Hold	Peak	30
OCBW - CDMA 1900	3	Auto	1001	Max Hold	Peak	30
Lower Band Edge - CDMA 1900	1	Auto	2004	Max Hold	Peak	30
Upper Band Edge - CDMA 1900	1	Auto	2004	Max Hold	Peak	30

Notes: 1) When the video bandwidth is set to Auto the video bandwidth self adjusts for ³ the resolution bandwidth.

2) The plotted data shown for the band edge measurements is representative of data taken with a true 3 kHz resolution bandwidth filter. The raw data was taken using a 1 kHz resolution bandwidth and was integrated to produce a response representative of data taken using a true 3 kHz resolution bandwidth filter.

FIELD STRENGTH OF SPURIOUS EMISSIONS

Units	dBm
Divisions	10 dB
Resolution Bandwidth	100 KHz
Video Bandwidth (AVG)	Auto
Sweep Time	Auto
Trace Detector	Peak

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Units	dBm
Divisions	10 dB
Resolution Bandwidth	100 KHz
Video Bandwidth (AVG)	Auto
Sweep Time	Auto