



American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

August 14, 2008

RE: ATCB006608 – Original Equipment / Single Certification

FCC ID: N82-KOHLER004 & IC: 4554A-KOHLER004 for Kohler Company

I have a few comments on this Application. Please **do not put confidential information** in your responses to these questions because the response letter will not be held confidential by the FCC. Depending on your answers there may be more questions.

1. While a limited modular approval (LMA) is possible for a transmitter without a shield in place, the applicant must understand that final compliance of the transmitter installed in a different host is dependent on each different host as well. This is due to the fact that the shielding (or in this case, the lack thereof) affects both emissions and immunity. Therefore despite approval under an LMA, the manufacturer is still responsible to retest the transmitter spurious emissions for each different host since the affect of not having a shield on the modular transmitter now makes it host dependent. Please have the applicant/manufacturer acknowledge that he understands this limitation.
2. The revised test report does not contain the following items which were in the first test report:
 - (a) AC line conducted test results (pages 24 to 27 of the amended test report), and
 - (b) Radiated data and graphs for field strength of spurious emission measurements (pages 58 to 63 of the revised test report).
3. Please provide a letter from the applicant stating that all modifications made to this device during compliance testing will be incorporated into all units during installation. Note this request was included in my original request for additional information dated August 5, 2008.
4. The user manual and the professional installation manual for this device do not contain instructions for installing the ferrite beads listed in Section 8 of the test report on the interconnecting cables. These ferrites were added to this device during compliance testing. The only way that I can ignore these ferrite beads in this transmitter application for Certification is if these ferrites were added to eliminate digital device emissions from the interconnected equipment. Please either provide an amended installation manual with instructions for adding these ferrites to the interconnecting cables or provide information that these ferrites were added only to suppress digital device emissions and have nothing to do with the transmitter emissions.
5. The FCC RF safety evaluation is still not correct. If this device can always be installed to maintain a 20 cm separation from all people during operation, please provide an analysis that it meets the 1 mW/cm^2 power density limits in Section 1.1310 of the FCC Rules using the formula $S = \text{EIRP}/(4\pi r^2)$, where S is in mW/cm^2 and r is 20 cm. If S is less than the value listed in Section 1.1310 of the FCC Rules, the device is complaint with the RF safety limits at 20 cm.
6. For Your Information – The grant for this device will be conditioned as follows or with similar wording: Limited Modular Approval. Output power listed is conducted. Installation of this device is limited to Kohler professional installers who will insure the use of the necessary ferrite beads and interconnecting Kohler controllers. The antenna used for this device must be installed to provide a separation distance of at least 20 cm from all persons, and must not be co-located or operating in conjunction with any other antenna or transmitter other than those

contained within this device. Users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF Exposure compliance.

A handwritten signature in dark ink, reading "Richard Fabina". The signature is written in a cursive style with a large, stylized initial 'R'.

Richard Fabina

Examining Engineer

[mailto: rfabina@AmericanTCB.com](mailto:rfabina@AmericanTCB.com)

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.