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## FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road Columbia, MD 21046 USA

Subject: Class II Permissive Change under FCC Part 15, Subpart C, Para.

15.209, Low Power Communication Device Transmitters Operating at 6.3

GHz.

**Applicant: MILLTRONICS** 

Product: Milltronics Radar Level Gauge (6.3 GHz) for uses with tanks/vessels

made metals, concrete or non-conductive materials.

Model: IQ RADAR 160 FCC ID: NJA-IQ160

Dear Sir/Madam,

As appointed agent for **MILLTRONICS**, please find enclosed copies of the engineering report, authorization form, application form and a check of US \$180.00.

<u>Objectives of Changes</u>: Based on our measurements for the IQ-160 being uses in the concrete and plastic tanks, we found no radio signal from the IQ-169 outside the 3m radius circular area. Therefore, the applicant (Milltronics) would like extend the authorization for using its equipment with other types of tanks such as concrete tanks, plastic tanks, glass tanks or any other non-conductive tanks.

In our original grant, the IQ-160 was certified for being used with metal tanks/vessels in its normal application and installation. However, in our later tests with the IQ-160 mounted on top of the concrete and plastic tanks, we have found that there was no significant radio emissions found at the distance 3 meters around any types of tanks including metal tanks, concrete tanks and plastic tanks. The experiments, measurements and logic of the EUT designs proved that the radio transmission and reflection between the EUT's antenna and material contained inside the tanks were limited in only a small geographical area of less 3 meters in radius, and the full power was only able to be measured when the receiving/measuring antenna was placed directly toward the EUT's radiating antenna which was impractical in normal operation since EUT's antenna is required to be placed inside the tank and pointed directly downward and toward the material inside any tanks.

There was no changes in equipment designs, packaging and installation methods.

If you have any queries, please do not hesitate to contact us by our TOLL FREE numbers:

OUR TELEPHONE NO.: 1-800-263-7670 Yours truly,

Tri Minh Luu, P. Eng., V.P., Engineering