

August 7, 2012

Keith Pooler, Superintendent
Belfast Water District
P.O. Box 506
Belfast, ME 04915

Subject: R900 Radio Waves

Dear Mr. Pooler:

It is my understanding that the city is in the initial deployment of the Neptune R900 radio frequency meter interface units. It has been indicated that there are a small number of residents that are concerned with the safety of the radio waves transmitted by the R900 device. This letter provides information regarding the safety of the R900 MIU to help address the concerns of the residents.

The Neptune R900 device is a one-way device that operates in the 902-928 MHz band. That range of frequencies is referred to as an "unlicensed" band, as opposed to "licensed" frequencies on which AM and FM operate. The R900 uses frequency hopping spread spectrum to avoid harmful interference or collisions with radio waves emanating from other household equipment. The R900 is certified under Part 15.247 of the FCC regulations. That certification is required by law of any RF device. We are required by the FCC to place in the R900 manuals the following statement from the Part 15 rules.



FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

RF Exposure Information

This equipment complies with the FCC RF radiation requirements for uncontrolled environments. To maintain compliance with these requirements, the antenna and any radiating elements should be installed to ensure that a minimum separation distance of 20cm is maintained from the general population.

The R900 is certified pursuant to Part 15 of the FCC regulations. In addition, the following factors ensure that the R900 does not cause any environmental or health issues:



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- Low power device
 - Relative to cell phones, the R900 has approximately 1/3 less the output power.
- Distance of installation
 - Instead of being adjacent to your head as with a cell phone, the R900 typically is located remotely to the homeowner (i.e. with the meter in the basement, on the outside of a house, etc).
- Duration of transmission
 - The duration of the message is every 7 mSec every 14 seconds, which is quite a low duty cycle versus continuous signal transmission of a cell phone

We have over 4 million R900 radio frequency meter interface units installed throughout the North America. There have been no reported issues of interference or health issues related to the transmission of the R900 RF device.

I sincerely hope this letter addresses and answers any questions you and your residents have in regards to safety of the R900 transmissions.

If you have any additional questions or concerns please feel free to give me a call at (905) 858-4211 or email me at jagzarian@neptunetg.com.

Regards,

Jack Agzarian
Water Product Specialist

