STATE OF CONNECTICUT, DEPARTMENT OF PUBLIC HEALTH DRINKING WATER DIVISION

INFORMATION FOR BETA PARTICLE AND PHOTON RADIOACTIVITY SAMPLING REQUIREMENTS

Monitoring for man-made radiological parameters is <u>required only of those Community Water Systems (CWS) deemed to have a vulnerable source of supply.</u>

A new radionuclides (RAD) rule went into effect beginning December 8, 2003. There are two major changes in this rule (with respect to man-made contaminants):

- 1) <u>All samples must be taken from each entry point</u>. Samples taken from a point in the distribution system will not be accepted for compliance with respect to this rule. Raw samples will not be accepted for compliance with respect to this rule.
- 2) The requirement to monitor will be based on vulnerability, not population served.

The initial monitoring for the new requirements will be phased in over a period of three years, based on a CWS's previous RAD schedule frequency:

Those next due in 2004, will sample in 2004 Those next due in 2005, will sample in 2005 Those next due in 2006, will sample in 2006 Those next due in 2007, will sample in 2006

Sample requirements for the initial monitoring period are as follows (*see below for more sampling information*):

<u>Parameter</u>	<u>Frequency</u>
Gross Beta Particle Activity *	Quarterly
Strontium-90	Annually
Tritium	Annually

* The reported Gross Beta Particle Activity is the analyzed value minus the naturally-occurring potassium-40 particle activity. Refer to Code of Federal Regulations (CFR) Ch. 40 part 141.26(b)(4) for conversion requirements of the potassium-40 result.

Compliance with the Maximum Contaminant Level is based on the equivalent dosage from manmade contaminants (Man-Made Beta Particle & Photon Emitters). Refer to the "Beta Particle and Photon Radioactivity Monitoring and Reporting Form" and associated conversion chart. Future monitoring frequency will be based on the average of four (4) consecutive quarters of Gross Beta Particle Activity results.

For reporting purposes, refer to the "Beta Particle and Photon Radioactivity Monitoring and Reporting Form," found on the DWD website.

If you are a community water system and a man-made radiological requirement did not appear on your 2004, nor appears on your 2005, Water Quality Monitoring Schedule, keep in mind that **if deemed vulnerable** you will be required to monitor in 2006.

For additional information on this rule, please refer to the Code of Federal Regulations: 40 CFR 141, and other guidance documents from the EPA website: www.epa.gov/safewater (look for 'Radionuclides Rule'). If, after reviewing the EPA guidance, you need more information specific to this rule, please contact Kathleen Pacholski of the Drinking Water Division at (860) 509-7333.

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