

REMP Air Sampling Issues

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Abstract

At the 2003 RETS-REMP Workshop, one of the presentations listed several areas where there may be significant errors in monitoring of environmental airborne activity. One of these areas is the use of air sampling equipment where the actual air is sampled from inside the air sampling equipment enclosure (commonly referred to as “doghouses”). Air activity inside these “doghouses” may not be representative of the outside air. The sampling at Millstone has historically been from inside these “doghouses.” The State of Connecticut has a co-located location at one of our routine air sampling sample sites. Beginning in 1995, the State of Connecticut changed their sampling set-up from inside to outside the “doghouse.” The purpose of this paper is to compare data from the two sampling methods to determine if there is an observable effect.

Another issue, identified by the Millstone Oversight group is a suspected problem caused by vegetative growth in the immediate area of the “doghouses.” Nearby vegetation may have a tendency to cause non-representative sampling. Although we have typically attempted to limit vegetative growth around most of our sampling stations, one of our locations is in the middle of a highly vegetative area. Therefore, to place this issue in perspective, several years of significant airborne activity have been reviewed. This data includes significant levels of activity detected in air samples from the 1976 and 1977 Chinese weapons tests and Chernobyl (1986).