

Challenging Environmental TLD Posting Height Requirements

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ABSTRACT

ANSI Standard N545-1975 contains guidance for posting environmental TLDs to be used to assess external radiation fields near nuclear power plants. This Standard requires that TLDs be posted at a nominal height of 1.0 meter above the ground. However, many facilities commonly post TLDs at a height of 2.5 to 3 meters to avoid loss to vandalism. A scientific comparison was performed at five nuclear power plants in which TLDs were posted at the standard height of 1.0 meter, and at an extended height of 2.5 meters. This presentation will discuss the findings of this study, as well as some of the background basis for the 1-meter posting height requirement, and a discussion of the various components of radiation exposure that contribute to TLD measurements.