

Challenging Environmental TLD Posting Height Requirements

Ken Sejkora – Entergy Nuclear, Pilgrim Station

ABSTRACT

Standard ODCM guidance in NUREG-1301/1302 requires measurement of direct radiation as part of the Radiological Environmental Monitoring Program (REMP). Although several methods are allowed to assess the direct radiation component of exposure, most utilities utilize thermoluminescent dosimeters (TLDs) or similar devices posted in the field to measure integrated exposure over an extended period. Standard guidance on TLD posting was provided in ANSI N545-1975, which required posting TLDs at a standard height of 1-meter above the ground surface. Such a posting height can result in problems in areas of deep snowfall or loss of TLDs to vandalism. More recent guidance in ANSI/HPS N13.37-2013 allows for more latitude in posting height. This presentation assesses the various components of direct radiation exposure measured by a TLD, as well as a comparison of TLDs posted at different heights to determine if posting height affects the integrated exposure measurements obtained from the devices.

Paper presented at the 24th Annual RETS/REMP Workshop, June 24-26, 2014, Savannah, GA.