

EPRI Groundwater Monitoring Guidance for Nuclear Power Plants

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ABSTRACT

EPRI has developed a comprehensive guidance document for Nuclear Power Plants. This document provides a roadmap for performing an initial investigation for identifying the potential for radionuclide contamination in the aquifer, for identifying potential radionuclides of concern, and for performing the preliminary hydrogeologic investigations. This document presents a summary of groundwater investigations performed at three nuclear power facilities, two of which are undergoing decommissioning activities. The basic principles of hydrogeologic investigations and tools are presented along with examples and applications of their use and interpretation. Finally, a methodology for assessing and identifying long-term laboratory biases from low level analysis of radionuclides in groundwater is presented.

An overview of the contents of this EPRI document will be provided along with specific excerpts from the document and recommended ways in which this may be applied to operating nuclear power facilities.