American Nuclear Society

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use of soluble neutron absorbers in nuclear facilities outside reactors

an American National Standard

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American National Standard Use of Soluble Neutron Absorbers in Nuclear Facilities Outside Reactors

Secretariat
American Nuclear Society

Prepared by the
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Working Group ANS-8.14

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American National Standard

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Foreword

(This foreword is not part of American National Standard "Use of Soluble Neutron Absorbers in Nuclear Facilities Outside Reactors," ANSI/ANS-8.14-2004)

This standard provides guidance for the use of soluble neutron absorbers for process and handling operations in which solutions of neutron absorbers are used for criticality control. This standard supplements the provisions for "Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors," ANSI/ANS-8.1-1998, in providing more detailed guidance for the use of soluble neutron absorbers. Soluble neutron absorbers can be used as a primary means of criticality safety control or as defense in depth to provide an additional safety margin and as such make the safety of the system more robust. As with any parameter controlled for criticality safety, and particularly important with soluble neutron absorbers, one must ensure that the controlled parameter is maintained within the range that has been shown by experiment or evaluation to maintain subcriticality.

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