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## INDUSTRY EXPERIENCE WITH DISCRETE RADIOACTIVE PARTICLES (DRP)

**Keywords:** DISCRETE RADIOACTIVE PARTICLES; RADIATION PROTECTION; EXPOSURE CONTROLS

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**Objectives:** The objective of the project is to provide comprehensive information on industry DRP experience as mid-1991. The study was performed in conjunction with the Nuclear Management and Resources Council Atomic committee.

The objectives are to:

- 1) To survey and document the experience of the U.S. nuclear utility industry in regard to DRPs.
- 2) To analyze the result of the study and develop conclusions about the magnitude of DRP challenges at nuclear power plants.
- 3) To document common approaches and techniques for identifying and controlling DRPs and mitigating their impact on plant operations and maintenance.

**Comments:** No previous extensive study of DRPs has been performed and documented. Therefore, most utilities facing DRP challenges developed identification and control program without the benefit of a broad perspective of hands-on experience. In addition, national agencies relied on limited information regarding DRP-related regulatory issues. This study offers a basis for developing in-plant radiological controls and provides input for the regulatory decision-making process.

**Potential for dose limitation:** The study provides comprehensive information on industry DRP experience. It includes the detailed, summarized, and tabulated survey data regarding the following areas:

- 1) DRP activities and the number of DRPs discovered
- 2) DRP discovery and prediction techniques
- 3) DRP exposure and contamination limits, events, and responses
- 4) DRP prevention and control measures, including the external dose resulting from DRP controls
- 5) The effect of DRP controls on the number of personnel contamination

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6) The financial impact of DRP controls

7) Other worker, health, and safety program impacts related to DRPs

**References:** EPRI TR-104125, Final Report, July 1994.

**Duration:** from: 1992 to: 1994

**Funding:** N/A

**Status:** Completed

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