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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<td>6) The financial impact of DRP controls</td>
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<td>7) Other worker, health, and safety program impacts related to DRPs</td>
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<td><strong>Duration:</strong> from: 1992 to: 1994</td>
<td><strong>Funding:</strong> N/A</td>
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<td><strong>Status:</strong> Completed</td>
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