

1. Executive Summary

The purpose of this Report is to provide guidance for performing self assessments of radiation-safety programs. The self-assessment process is important for all institutions that use radioactive material or radiation-generating devices. These institutions range from a college using small radioactive sources in the physics department to a large nuclear power plant complex. Of course, the extent and rigor of a self-assessment program will be tailored to the size and complexity of the radiation-safety program at the institution.

Self assessments are a proactive component of an effective radiation-safety program and they should occur at all levels within the institution. Self assessments can identify and correct deficiencies and can improve the performance of the radiation-safety program. The self-assessment process is designed to find and correct deficiencies before they have a negative impact on safety or the institution's activities. Another benefit of the self-assessment program is to encourage worker involvement in improving the radiation-safety program. Finally, an effective self-assessment program can demonstrate to regulators that the risk of radiological activities is being adequately managed and that the institution is committed to safe use of radiation and radioactive material.

Self assessments are planned and controlled internally by an institution. They differ from external reviews, which are generally referred to as inspections, audits or appraisals and are controlled from outside the institution, often by regulatory agencies.

This Report provides guidance for individuals who have the responsibility of developing and implementing a self-assessment program at an institution. It provides information and guidance on the following topics:

- definition and purposes of self assessment;
- types of self assessment (*i.e.*, performance based, risk based, compliance based, task, process and program level, formal and informal);
- responsibilities for establishing self-assessment programs including upper management, line management, the radiation-safety committee (RSC), radiation-safety program personnel including the radiation-safety program manager or radiation-safety officer (RSO), and workers;

- self-assessment program planning for an institution including determining the purpose and type of self assessments, selecting the program elements to be assessed, allocating the necessary resources, and developing a self-assessment program review plan;
- qualification and selection of individuals performing the self assessments;
- self-assessment methods and techniques including evaluation of radiation-safety program survey and monitoring results, workplace observations, interviews, document reviews, checklists, review of metrics, and questionnaires;
- types of deficiencies that can be identified in the self-assessment process, ranging from the minor ones that are most likely to be found to those that are more serious;
- identification of noteworthy practices;
- planning an individual self assessment including the program elements to be assessed, the schedule for performing the self assessment, and the type(s) of self assessment to be used;
- conducting the self assessment including the entrance meeting, performing the assessment activities, daily team conferences, upper management briefings, exit meeting, and documentation;
- documenting the self assessment including writing reports, report approval, communicating the results, and legal considerations; and
- developing corrective-action plans including tracking and resolution of corrective actions and reviewing the effectiveness of the corrective-action program.