The revision of Part 35 became effective October 2002 implementing a major overhaul of Nuclear Regulatory Commission (NRC) regulations for the medical use of radioactive materials. A goal of these changes was to focus regulations on high risk uses. The structure has de-emphasized the diagnostic procedures but increased importance of therapeutic applications. The applications of low dose rate (LDR) and high dose rate (HDR) sealed sources radiopharmaceutical therapy are procedures that will receive increased focus. This awareness has been heightened by increased security concerns for sealed sources of significant radioactivity. Another NRC goal of the revision was performance-based regulations, which allow increased flexibility in the demonstrating compliance. The increased flexibility has eliminated some prescriptive requirements from Part 35, but shifted regulatory compliance to the fundamental standards in Part 20. Shortly before revised Part 35 became effective, the NRC published NUREG-1556, volume 9. This document provided suggested guidance for the licensee to demonstrate compliance with the revised regulations. Areas of revision include definitions, radiation safety committee, training and experience, record keeping, written directives, surveys, notification/reports, and disposal. The presentation will address those elements as they relate to the radiation safety program of brachytherapy procedures. Discussion will include suggested changes that may be effected to implement the revised regulations of Part 35.

## Educational Objectives:

- 1. Review changes in the general, technical, and administrative requirements of revised Part 35 relevant to brachytherapy sources.
- 2. Discuss guidance to demonstrate compliance of the radiation safety program authorized for brachytherapy sources.
- 3. Provide an update to amendments and clarifications in Part 35 relevant to the medical physicist responsible for the brachytherapy program.