
Irradiator Technology H-315

Tentative Course Schedule

DAY 1

Session 00	Welcome and Course Schedule
8:00 – 08:30	Welcome and Schedule
Session 01	Introduction
8:30 – 09:30	Introduction to Sterigenics and Nordion Course Objectives
09:30 – 09:45	<u>COFFEE BREAK</u>
Session 02	Industrial Irradiators
09:45 – 10:45	. Types . Components . Design principles . PLC
Session 03	Research Irradiators
10:45 - 12:00	. Types . Design
12:00-13:00	<u>LUNCH</u>
Session 04	Cobalt-60
13:00 - 14:00	. Cobalt-59 . Production of Co-60 . Transportation of Co-60 . Handling of Co-60

DAY 1(continued)

Session 05	Source Loading
14:00 - 14:45	<ul style="list-style-type: none">. What every operator should know. Handling tools. Typical loading. Source loading procedure
14:45 - 15:00	<u>COFFEE BREAK</u>
Session 06	Safety Systems & Features
15:00 - 15:30	Personnel protection Equipment protection Product protection
Session 07	Emergency Procedures
15:30 - 16:30	Emergency Procedures

DAY 2

08:00-09:00	Travel to Fort Worth Facility
Session 8	Walk-through Inspection (hands-on)
19:30- 12:00	A complete safety inspection is performed Review Radiation Dosimetry in-use at Facility
12:00 - 13:00	<u>LUNCH</u>
Session 9	Radiation Survey of Irradiator
13:00- 15:00	A complete safety inspection is performed
15:30 – 16:30	Return to NRC HQ

DAY 3

Session 10	Dosimetry
08:00 -09:00	. Types of dosimeters . Characteristics . Reading equipment
Session 11	Wipe test (video)
09:00 – 09:45.	How a source rack wipe test is performed
09:45 - 10:00	<u>COFFEE BREAK</u>
Session 12	Radiation Safety Officer and Operator responsibilities
10:00 – 11:00	. Maintenance records . Irradiation log book . Visitor records
Session 13	Intro to Regs Licensing & Inspections (by USNRC Instructor)
11:00 – 12:00	
12:00 - 13:00	<u>LUNCH</u>
Session 13 (Continued)	Intro to Regs Licensing & Inspections (by USNRC Instructor)
13:00 – 14:00	
Session 14	Incidents
14:00 - 15:00	. Incidents at irradiation facilities
Session 15	Operation of Industrial Irradiators
15:00 - 16:00	
Session 16	Irradiator Maintenance
16:00 - 17:00	

DAY 4

Session 17	Review
9:00 – 10:00	. Questions & Discussion

Session 21	Examination
10:30 - 12:15	. Written test

Note: . All hands-on exercises are carried out using a full scale commercial irradiator and two research irradiators.