

Employee Training Regulatory Agencies

NUCLEAR REGULATORY COMMISSION (NRC)– Federal agency that develops, inspects and enforces rules and regulations governing the possession, use and disposal of byproduct material, noted as Title 10 Energy of the Code of Federal Regulations (CFR). NRC issues, regulates and terminates licenses for this purpose.

Byproduct Material is the residual radioactive material from the fission reaction of Uranium in a reactor i.e. (H-3, C-14, P-32, S-35, Co-60, Sr-89, Y-90, Mo-99, Tc-99m, I-131, Xe-133, Cs-137, etc.) as well as Naturally Occurring & Accelerator Produced Radioactive Material (NARM) i.e.: N-13, O-15, F-18, Co-57, Ga-67, Pd-103, In-111, I-123, Tl-201, Ra-226).

Sections of the Code of Federal Regulations (CFR) of importance:

Part 19 - Notices, Instructions, and Reports to Workers; Inspections
Postings, in-service requirements, rights of workers, etc.

Part 20 - Standards for Protection against Radiation
Radiation Protection Program (RPP), personnel exposure limits, exposure rate limits for areas, posting of areas, surveys, package opening, waste disposal, reportable events, etc.

Part 21 – Reporting of Defects and Noncompliance
Reporting Substantial Safety Hazards

Part 30 – Rules of General Applicability to Domestic Licensing of Byproduct Material
General Licensing Provisions such as completeness of information supplied to the NRC and deliberate misconduct, Exemptions, Types of Licenses, Records, Inspections, Tests & Reports, Inspections and the Tables of Exempt Concentrations, Quantities as well as Quantities Requiring Labeling

Part 31 - General Domestic Licenses for Byproduct Material
Small RIA and in vitro licenses

Part 35 - Human Uses of Byproduct Material
Administrative requirements, Technical requirements, Unsealed use, Sealed source use, Written directive program, Medical events, training and experience requirements for authorized users, RSO, Nuclear Pharmacists, Reports

Part 71 – Packaging / Transportation of Radioactive Materials
Package requirements, signs, survey/wipe test limits, vehicle signs, etc.

Part 170 – Application Fees

Part 171 – Annual Fees, Small Entity Status

Regulatory Agencies

DEPARTMENT OF TRANSPORTATION (DOT) – Regulates transportation of radioactive materials via Title 49, NRC adopts all DOT requirements, Hazardous Materials Training

FEDERAL AVIATION ADMINISTRATION (FAA) - Regulates airborne transportation of radioactive materials, Hazardous Materials Training

FOOD AND DRUG ADMINISTRATION (FDA) – review and approves all radioactive drugs for routine or research use

ENVIRONMENTAL PROTECTION AGENCY (EPA) – Regulates emissions of radioactive material

STATE DEPARTMENT OF HEALTH OR BOARD OF HEALTH – can develop, inspect and enforce rules and regulations governing the possession, use and disposal of naturally occurring and accelerator produced material (NARM). State agencies can issue regulate and terminate certificates and or licenses for this purpose.

NOTE: The Energy Recovery Act (ERA) of 2005 gave total control of all uses of byproduct material (to include NARM) to the NRC. The NRC has issued exemptions to all non-“Agreement States” until 2009. However these exemptions can be rescinded at anytime. At this time, the NRC has cancelled the exemption issued to the State of Indiana effective November 30, 2007. Licensees will have six (6) months to amend their existing license. Those without a license must file for one within twelve (12) months.

NOTE – State governments can enter into a written agreement with the NRC to govern all uses of radioactive materials within their borders, excluding federal installations (VA Hospitals, Nuclear Reactors, and Military Bases). These are known as **“Agreement States”**. There are approximately 34 such states.

Agreement states “agree” to enforce NRC requirements at a minimum.

Examples: Illinois, Ohio, Wisconsin

Machines which produce ionizing radiation- diagnostic x-ray, linear accelerators.