## **Exemptions from licensing** for source material

f. safety instructions

Source material < 0.05 wt%

Unrefined and unprocessed ore

Incandescent gas mantles

Vacuum tubes

Electric lamps

Welding rods

Germicidal lamps, sunlamps, etc.

Rare earths ≤ 0.25% source material

Personnel neutron dosimeters

Glazed ceramic tableware

Piezoelectric ceramic

Glassware

Photographic film, negatives, prints Glass enamel or glass enamel frit

Tungsten or mag-thorium alloys

Uranium in shipping containers Uranium in counterweights

Thorium in optical lenses

Aircraft engine parts

Fire detection units

Provisions of regulations pertaining to:	Ø	ر	=	>	>	ш	O	œ	ш	O	ш	O	O	<u>п</u>	-	ر	ر	-	∢	ш
The product:																				
Manufactured or imported by specific licensee																~				
Distribution license by NRC only																~				
Specific final product			~		~	~	~		~	~				٧		~				~
Certain nuclides specified	~	~	~	~	~	~	~	~	~	~	~	>	>	>	>	~	>	~	~	~
Quantity limit/product						~	~		~											~
Concentration or weight % limit	~							~		~	~	>	>		>			~	~	
External radiation level limit																				
Various restrictions such as not in toys, adornments, food beverage, etc.	,																			
Safety criteria: a. specific dose limits for use, distribution, etc.																				
b. unlikely for change in integrity, containment, shielding																				
Labeled with: a. manufacturer																~				
b. product name																				
c. identity of radionuclide																~	>			
d. quantity per product																				
e. specific legend																~	>			

Exemptions from	licensing
for source ma	aterial

Exemptions from licensing for source material	Source material < 0.05 wt%	Unrefined and unprocessed ore	Incandescent gas mantles	Vacuum tubes	Welding rods	Electric lamps	Germicidal lamps, sunlamps, etc.	Rare earths ≤ 0.25% source material	Personnel neutron dosimeters	Glazed ceramic tableware	Piezoelectric ceramic	Glassware	Glass enamel or glass enamel frit	Photographic film, negatives, prints	Tungsten or mag-thorium alloys	Uranium in counterweights	Uranium in shipping containers	Thorium in optical lenses	Aircraft engine parts	Fire detection units
Provisions of regulations pertaining to:																				
Specific licensee distributor:																				
Testing of inspection lots with specified criteria																			<u> </u>	+
Visual inspection of every unit																				
Approved quality control procedures																				
Records and reports of transfers																				
Applicant for a specific license supplies info:																				
Description of product and intended uses																				
Type, quantity, chemical, physical form of the material																				
Changes expected during useful life																				
Solubility in water & body fluids																				
Design features for containment, shielding, safety under normal & severe handling, storage, use, disposal																				
Maximum radiation level & method of measurement																				
Degree of access to human beings																				
Total quantity expected to be distributed annually																				
Expected useful life																				

## Demonstration of ALARA Quality control procedures Estimated external radiation dose & dose commitment Applicant for a specific license supplies info: User: actions restricted -icensed User: explicit exemption from Part 20 Method of labeling or sample labels rototype test procedures and results prototype tests and standard specified Provisions of regulations pertaining to: **Exemptions from licensing** for source material Source material < 0.05 wt% Unrefined and unprocessed ore Incandescent gas mantles Vacuum tubes Welding rods Electric lamps Germicidal lamps, sunlamps, etc. Rare earths ≤ 0.25% source material Personnel neutron dosimeters Glazed ceramic tableware Piezoelectric ceramic Glassware Glass enamel or glass enamel frit Photographic film, negatives, prints 7 Tungsten or mag-thorium alloys 7 Uranium in counterweights Uranium in shipping containers 7 Thorium in optical lenses Aircraft engine parts Fire detection units