

NRC/Agreement States Radioactive Sources Interim Inventory

Please provide/update the information in Part I: Licensee Information.

Logon to the Web site and review, confirm, or update the information provided.

Note: If you have more than 1 license assigned to you, please review your licensee information for each license (we have received different information in the past).

Do you have sources in your possession, under this license, that meet the criteria listed in Table 1?

Yes _____ No _____

If YES then please provide/update the information requested either through the World Wide Web or this questionnaire.

If NO then please update Part I either through the World Wide Web or this questionnaire. Then you are finished.

Return any completed questionnaires to:

Gloria Caton

Oak Ridge National Lab.

1060 Commerce Park, MS 6480

Oak Ridge, TN 37830

Note: the recommended method of updating your information is by the Web.

This information request has been approved by OMB 3150-0029, expiration 6/30/07 and OMB 3150-0011, expiration 2/28/07. The estimated burden per response to comply with this voluntary collection is approximately 3 hours. Forward any comments regarding the burden estimate to the Information and Records Branch (T-6F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0029, 3150-0011), Office of Management and Budget, Washington, DC 20503. If a document does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information.

NRC/Agreement States Radioactive Sources Interim Inventory

Part I: Licensee Information *(Please provide complete and accurate information. Type or Print clearly with black ink.)*

Date _____

LICENSEE INFORMATION

Licensing State/Agency *(i.e., NRC, TX, CA, etc)* _____

License Number _____

Licensee Company Name _____

Licensee Company Name2 or Doing Business As *(optional)*

Mailing Address 1 _____

Address 2 *(optional)* _____

City _____ State ____ Zip _____

CONTACT INFORMATION

Contact: First Name *(and Initial)* _____ Last Name _____

Title _____

Phone _____ Fax _____

E-mail _____

Mailing Address *(if different from Licensee address)*

City _____ State ____ Zip _____

Backup Contact: First Name *(and Initial)* _____ Last Name _____

Phone _____ Fax _____ E-mail _____

License Category *(Table #2)* _____

Main business type license is issued for. If your business type is not listed then enter it below.

Other _____

Number of sites used under the license *(for licenses with multiple storage locations, how many locations are authorized and/or used including major locations of storage at a single authorized location such as a university campus and various labs)*

0 ____ 1 ____ 2-3 ____ 4-8 ____ >8 ____

IF you checked 'NO' on page 1, ignore the remaining pages. You are DONE!!

Part II: Source Data

(Report information only for sources whose activity is equal or greater than the quantity of concern.)

Isotope (Table #1) _____ Activity _____ Units _____ Date _____
Units - preferred units are curies
Date - date on which above activity was measured

Serial number _____ Alternate source ID (optional) _____

Manufacturer (Table #3) _____
if OTHER list here _____

Model Number _____

Isotope (Table #1) _____ Activity _____ Units _____ Date _____
Units - preferred units are curies
Date - date on which above activity was measured

Serial number _____ Alternate source ID (optional) _____

Manufacturer (Table #3) _____
if OTHER list here _____

Model Number _____

Isotope (Table #1) _____ Activity _____ Units _____ Date _____
Units - preferred units are curies
Date - date on which above activity was measured

Serial number _____ Alternate source ID (optional) _____

Manufacturer (Table #3) _____
if OTHER list here _____

Model Number _____

Source Data form continued on next page

Part II: Source Data - continued

Isotope (Table #1) _____ Activity _____ Units _____ Date _____

Units - preferred units are curies

Date - date on which above activity was measured

Serial number _____ Alternate source ID (optional) _____

Manufacturer (Table #3) _____

if OTHER list here _____

Model Number _____

Isotope (Table #1) _____ Activity _____ Units _____ Date _____

Units - preferred units are curies

Date - date on which above activity was measured

Serial number _____ Alternate source ID (optional) _____

Manufacturer (Table #3) _____

if OTHER list here _____

Model Number _____

Isotope (Table #1) _____ Activity _____ Units _____ Date _____

Units - preferred units are curies

Date - date on which above activity was measured

Serial number _____ Alternate source ID (optional) _____

Manufacturer (Table #3) _____

if OTHER list here _____

Model Number _____

information for additional sources should be attached at the end

The survey for this license is Completed: Thank you!

Thresholds for the Interim Inventory

Table 1. Radionuclides of Concern in TBq

Radionuclide	Quantity of Concern ¹	Exact equivalent in Curies ¹
Actinium-227, Californium-252, Thorium-228, Thorium-229	0.2 TeraBecquerel	5.405 Curies
Cobalt-60	0.3 TeraBecquerel	8.108 Curies
Radium-226	0.4 TeraBecquerel	10.811 Curies
Curium-244	0.5 TeraBecquerel	13.514 Curies
Americium-241, Americium-241/Be, Plutonium-236, Plutonium-238, Plutonium-239, Plutonium-239/Be, Plutonium-240, Polonium-210	0.6 TeraBecquerel	16.216 Curies
Iridium-192	0.8 TeraBecquerel	21.622 Curies
Cesium-137	1 TeraBecquerels	27.027 Curies
Selenium-75	2 TeraBecquerels	54.054 Curies
Ytterbium-169	3 TeraBecquerels	81.081 Curies
Gadolinium-153, Strontium-90 (Yttrium-90)	10 TeraBecquerels	270.270 Curies
Thulium-170	200 TeraBecquerels	5,405.400 Curies
Promethium-147	400 TeraBecquerels	10.811 Curies

Use the following method to determine which sources to report to the inventory:

- Convert Curies (Ci) to Terabecquerels (TBq) as follows: $n \text{ (TBq)} = N \text{ (Ci)} \times 0.037 \text{ TBq/Ci}$
- Convert Terabecquerels (TBq) to Curies (Ci) as follows: $N \text{ (Ci)} = n \text{ (TBq)} / 0.037 \text{ TBq/Ci}$
- Include any single source equal to or larger than the quantity of concern in Table 1

Please note: These reporting criteria have been simplified when compared to the first round of source data collection between November 2003 and October 2004. Now, there are no aggregation requirements and sources with activities below the Table 1 values are not reported.

¹ The TBq values in Table 1 are the same as the IAEA Category 2 values and are the regulatory standards. In the Code of Conduct, when the IAEA converted the TBq values to Curie values they were rounded to one significant digit after conversion. This is the proper method to convert. However, for simplicity in determining whether a given quantity exceeds the applicable threshold standard, the Curie values listed here are the exact values determined by using the formula given, to five significant digits and not less than one-thousand of a Curie (or nearest milliCurie).

Table 2: License Categories

Industrial - (IND)

Industrial - Civil Defense
Industrial - Decontamination Services
Industrial - Distribution Only
Industrial - Fixed Gauges
Industrial - Gas Chromatographs
Industrial - Industrial - Broad
Industrial - Industrial Radiography Fixed Location
Industrial - Industrial Radiography Temporary Job Sites
Industrial - Instrument Calibration Service Only
Industrial - Irradiator
Industrial - Manufacturing and Distribution - Other
Industrial - Manufacturing and Distribution - Sources
and/or Devices
Industrial - Nuclear Laundry
Industrial - Other Services
Industrial - Portable Gauges
Industrial - Research and Development
Industrial - Tracer & Field Flood Studies - Oil Well
Industrial - Well Logging

Medical & Academic - (M & A)

Medical & Academic - Academic
Medical & Academic - Eye Applicators Strontium-90
Medical & Academic - High Dose Rate Remote Afterloader
Medical & Academic - Manufacturing and Distribution -
Prepared Radiopharmaceuticals
Medical & Academic - Medical - Institution
Medical & Academic - Medical - Private Practice

Medical & Academic - Mobile Therapy
Medical & Academic - Nuclear Pharmacies
Medical & Academic - Other
Medical & Academic - Pacemaker
Medical & Academic - Research and Development
Medical & Academic - Stereotactic Radiosurgery -
Gamma Knife
Medical & Academic - Teletherapy
Medical & Academic - Veterinary Non-Human

Other - (O)

Other - Critical Mass Material
Other - Decommissioning of Source Material Facilities
Other - Hot Cell Operations
Other - Other
Other - Power Sources With Byproduct and/or Special
Nuclear Material
Other - Reactor
Other - Source Material

Uranium & Waste - (U & W)

Uranium & Waste - Decommissioning of Byproduct
Material Facilities
Uranium & Waste - Fuel Cycle (UF6 Production,
Enrichment, Processing)
Uranium & Waste - Other
Uranium & Waste - Waste Disposal (Burial)
Uranium & Waste - Waste Disposal Service (Treatment,
Processing, Packaging)

Table 3: Source Manufacturers

AEA Technology/QSA, Inc.

Atomchem

Atomic Energy of Canada Limited

Bechtel Bettis, Inc.

Beckman Instruments

Best Medical International

Brookhaven National Laboratory

Carolinas-Virginia Nuclear Power Associates (CVNPA)

CIS Bio International

CIS-US, Inc.

Commisariat a l'Energie Atomique (CEA)

Compagnie Oris Industrie S.A. (CEA-ORIS-LAPIB)

Curtiss-Wright

Eberline

Elekta AB

Federal Emergency Management Agency

Gamma Industries, Inc.

Gammacell 40

Gammatron, Inc.

GE Medical Systems

General Atomic

General Electric Company

General Nuclear, Inc.

GNI Incorporated

Gulf Nuclear, Inc.

Hopewell

Idaho Nuclear Corporation

IMS

Industrial Nuclear Company, Inc.

Industrial Reactor Laboratories, Inc.

International CIS, Inc

International Isotopes Idaho, Inc.

Isomedix, Inc.

J. L. Shepherd & Associates

Kewaunee/MDS Nordion

Lockheed

Lockheed-Georgia Company

Los Alamos National Laboratory

Martin-Marietta Corp.

Maryland Irradiator source

MDS Nordion

Minnesota Mining and Manufacturing

Monsanto Agricultural Company

Monsanto Company, Dayton Laboratory

Natick Laboratories

Nems-Clarke

Neutron Products

Nordion International, Inc.

NRD, Inc.

NRG

Nuclear Environmental Engineering, Inc.

Nuclear Equipment Corporation

Nuclear Sources and Services, Inc.

Nucletron Corporation

Numec

Oak Ridge National Laboratory

Office of Civil Defense

ORIS

Picker Corporation

Radiation Machinery Corp.
Radiation Materials Company, Inc.
Radiation Resources , Inc.
Reviss Services
Savannah River
Schlumberger Well Services
Siemens Medical of America, Inc.
Source Production and Equipment (SPEC)
Technical Operations, Inc.
Teledyne Energy Systems, Inc. (TESI)
Teledyne Isotopes, Inc.
Texas Nuclear
Theratronics
Thermo MeasureTech
U.S. Army
U.S. Atomic Energy Commission
U.S. Department of Energy
U.S. Department of the Navy
U.S. Nuclear Corporation
Varian Medical Systems, Inc.