

Information on the Source Collection and Threat Reduction (SCATR) Collection Sealed Sources for Disposal at the Waste Control Specialists Andrews, TX Facility

The Source Collection and Threat Reduction Program (SCATR), administered by the Conference of Radiation Control Program Directors (CRCPD), is providing sealed source licensees in states which do not have access to a low level radioactive waste disposal facility an opportunity to dispose of certain unwanted radioactive sealed sources. On April 25, 2012 the Waste Control Specialists' (WCS) Compact Waste Facility (CWF) located in Andrews County, Texas was authorized to collect and dispose of sealed sources. This effort is supported by the Department of Energy's Global Threat Reduction Initiative (GTRI), the Texas Commission on Environmental Quality (TCEQ), the Texas Low-Level Radioactive Waste Disposal Compact Commission (Texas Compact Commission), and Waste Control Specialists. CRCPD may offer financial assistance as needed to generators who participate in the SCATR program.

WCS's license allows for disposal of Class A, B and C sealed sources in accordance with the following requirements:

- An Import Agreement from the Texas Compact Commission is required for all shipments from generators located in states other than Texas and Vermont. Waste brokers can assist with import authorizations;
- All sealed sources (i.e., source material deposited in a plastic medium or ANSI designed special form sources) or special form radioactive material, with the exception of check sources (< 100 uCi), disposed of in WCS' containerized waste facility shall be doubly-packaged and encased in concrete or similar inert material within the outer package;
- For waste classification purposes, the activity in a waste package may be averaged over the entire package in accordance with the United States Nuclear Regulatory Commission (U.S. NRC) "Final Branch Technical Position on Concentration Averaging and Encapsulation, Revision in Part to Waste Classification Technical Position," dated January 17, 1995;
- Encapsulation media shall be in the form of structural grade cement or material technologically equivalent or superior to structural grade cement as demonstrated through technical specifications and testing;
- The encapsulation method for sealed sources shall be geometrically centered within a minimum of four (4) inches of encapsulation media distributed uniformly around the source(s);
- More than one source may be placed in a single container as long as the requirements of the WCS waste acceptance criteria, WCS' radioactive material license, and the Texas rules for low-level radioactive waste disposal (30 Texas Administrative Code Chapter 336) rules are met;
- The maximum concentration of any radionuclide(s) in one or more sources encapsulated in a single container must not exceed the concentration limits specified in 30 Texas Administrative Code §336.362(a)(2) for Class C low-level radioactive waste;

- Combinations of radionuclides in a single container shall not exceed unity;
- The maximum amount of cesium-137/barium-137 gamma-emitting radioactivity in a source(s) that may be encapsulated in a single container is 30 curies (Ci). Other gamma emitters shall not exceed Class C limits or have a dose rate that exceeds U.S. Department of Transportation (U.S. DOT) shipping requirements;
- The maximum amount of radioactivity in a source(s) from transuranics, other than plutonium-241 and curium-242 that may be encapsulated in a single container, is 30 millicuries (mCi);
- The maximum amount of carbon-14 radioactivity in a source(s) that may be encapsulated in a single container shall not exceed one (1) Curie;
- The maximum amount of radium-226 radioactivity in a source(s) that may be encapsulated in a single container shall not exceed 30 mCi;
- Additional specific notifications to WCS and TCEQ are required to accept any neutron source, please contact WCS in advance (e.g., polonium-210, americium-241, radium-226 in combination with beryllium or other target);
- For Nationally-tracked sources as defined in 10 CFR 20.1003, referring to sealed sources containing a quantity equal to or greater than Category 1 or 2 levels listed in Appendix E to 10 CFR Part 20, prior to shipping, the generator shall provide WCS and the TCEQ the following information specifically identifying these sources for review and approval:
 - Generators name, shipping address, radioactive material License number, and name of individual preparing the reported information;
 - The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
 - The radioactive material in the source and current activity in Becquerels and Curies. The activity reported must be the same as the activity that will be listed on the shipment manifest;
 - The date the source strength is reported;
 - The requested shipping date, estimated arrival date the waste manifest number and the waste disposal container number;
- The sealed source must be registered with the Off Site Source Recovery Project (OSRP) before it can be accepted for disposal. Go to <http://osrp.lanl.gov/PickUpSources.aspx> for information about how to register your source(s). If your source(s) are already registered, you may wish to update your registration;

- Each source must be uniquely identified by a serial number or other unique identifier and the site should have ready any documentation available pertaining to a particular source's activity, isotope, and date of manufacture or original assay upon broker's packaging and acceptance of material.

Some radionuclides such as C-14 may have site specific constraints based on concentrations or on total activities allowed based on the performance assessment of the CWF facility. Please check with Waste Control Specialists on sources containing C-14 or on those sources that might require specific notifications.

To facilitate participation in this program, a current list of sealed source brokers is included below. If you have additional questions regarding the collection effort, please call or email Russ Meyer at CRCPD (512)-761-3822 or rmeyer@crcpd.org.

WSC Qualified Radioactive Material Brokers		
Bionomics Inc.	(865) 220-8501	1550 Bear Creek Rd. Oak Ridge, TN 37830
Thomas Gray & Associates/EMC	(209) 667-1102	3106 S Faith Home Road Turlock, CA 95380
Philotechnics	(865) 285-3064	201 Renovare Blvd Oak Ridge, TN 37830
Ecology Services (WCS qualification pending)	(301) 362-6700	9135 Guilford Road, Suite 200 Columbia, MD 21046
Ram Services (WCS qualification pending)	(920) 686-3889	510 County Highway V Two Rivers, WI 54241
Qal Tek Inc. ((WCS qualification pending)	(208) 523-5557	3998 Commerce Circle Idaho Falls, ID 83401
B & B Environmental Safety, Inc.	(209) 858-5806	17416 Murphy Parkway Lathrop, CA 95330
Nuclear Sources and Services (WCS qualification pending)	(713) 641-0391	5711 Etheridge Street Houston, TX 77087