Establishing the Generator of Low-Level Radioactive Waste For the Purposes of Determining Party vs. Non-Party Status For the Texas Low-Level Radioactive Waste Disposal Compact

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Who is considered the waste generator when radioactive materials are to be disposed at the Texas Compact Waste Facility ("Compact Facility") located in Andrews County, Texas?

This white paper provides guiding principles for answering the above question. This paper does not address when a radioactive material is, or should be, declared waste. The decision of when to declare a radioactive material as waste is a business decision that involves many economic and technical factors. These factors are not required to answer the question of who is a waste generator for the purposes of determining the party status of low-level waste for disposal at the Compact Facility.

The answer to this question is important for three reasons. First, Texas law specifies that waste from non-party states must pay a 20% surcharge when disposed at the Compact Facility. Second, Texas law specifies that no waste of international origin may be disposed at the Compact Facility. Third, the Texas Low-Level Radioactive Waste Disposal Compact Commission is charged with protecting the disposal capacity for Texas and Vermont low-level radioactive waste generators.

This question most often arises for radioactive material that is classified as a sealed source, either by itself or contained within a device. It can also be important for radioactive materials associated with decontamination facilities. The primary consideration for the answer to this question begins with the premise that the last entity to own a radioactive material, and put it to beneficial use, will become the waste generator when that material is disposed at the Compact Facility.

The first operational year for the Compact Facility began on April 27, 2012; therefore, for radioactive materials acquired <u>on or after</u> this date, the following principles will be used to determine who the waste generator is for purposes of disposal at the Compact Facility:

- For a licensed sealed source or device manufacturer who chooses to take back from any customer, a sealed source or device that they manufactured, the manufacturer may declare that they are the waste generator when that source is disposed.
- For a licensed sealed source or device manufacturer who chooses to take back from any
 customer, a sealed source or device manufactured by another entity, when that source is
 disposed, the customer will be considered the waste generator.
- For a licensed sealed source or device manufacturer or initial distributor (A) who acquires
 ownership of another licensed sealed source manufacturer or initial distributor (B),
 manufacturer or initial distributor (A) may take back from any customer a sealed source or

- device manufactured or initially distributed by (B), and manufacturer or distributor (A) may declare that they are the waste generator when that source is disposed.
- For a licensed initial distributor of radioactive sealed sources or devices who chooses to take
 back from any customer, a sealed source or device that they distributed, the initial distributor
 may declare that they are the waste generator when that device is disposed.
- For a licensed initial distributor of radioactive sealed sources or devices who chooses to take back from any customer, a sealed source or device distributed by another entity, the customer will be considered the waste generator.
- For a licensed distributor other than the initial distributor of radioactive sealed sources or devices who chooses to take back from any customer, a sealed source or device, the customer will be considered the waste generator.
- For a licensed waste broker or waste processor who chooses to take radioactive materials from any customer, when that radioactive material is disposed, the customer will be considered the waste generator.
- For a licensed decontamination service provider who chooses to provide decontamination services for any customer, the customer will be considered the waste generator of any waste generated from provision of the service.
- For licensed sealed source or device manufacturers, waste brokers, waste processors, initial
 distributors, other distributors, and decontamination service providers, if the above
 determination indicates that the customer will be considered the waste generator, then that
 customer must be a U.S. public, private or government entity, for the waste to be disposed at
 the Compact Facility.
- For licensed sealed source or device manufacturers, waste brokers, waste processors, initial
 distributors, other distributors, and decontamination service providers, if the above
 determination indicates that the customer will be considered the waste generator, then the
 waste will be considered Party Waste (In-Compact) if the customer is located in Texas or
 Vermont.
- For licensed sealed source or device manufacturers, waste brokers, waste processors, initial
 distributors, other distributors, and decontamination service providers, if the above
 determination indicates that the customer will be considered the waste generator, then the
 waste will be considered Non-Party Waste (Out of Compact) if the customer is located in any
 State other than Texas or Vermont.
- For licensed users, sealed source or device manufacturers, or initial distributors that are the
 waste generator, that generator must be a U.S. public, private or government entity, for the
 waste to be disposed at the Compact Facility.
- For licensed users, sealed source or device manufacturers, or initial distributors that are the
 waste generator, the waste will be considered Party Waste (In-Compact) if the generator is
 located in Texas or Vermont.
- For licensed users, sealed source or device manufacturers, or initial distributors that are the waste generator, the waste will be considered Non-Party Waste (Out of Compact) if the generator is located in any State other than Texas or Vermont.

- All waste considered to be Non-Party Waste (Out of Compact) will require import authorization in accordance with 31 Texas Administrative Code ("TAC") 675.23.
- For all waste sent to the Compact Facility, whoever is determined to be the waste generator, based upon the above principles, will be required to complete TCEQ Form 20225.

It is recognized that from July 2008, when the Barnwell site began accepting waste only from states within the Atlantic Interstate Low-Level Radioactive Waste Management Compact, until April 27, 2012, waste disposal options were limited or non-existent for many low-level radioactive waste generators. During this period, licensed sealed source and device manufacturers, waste brokers, and initial distributors were extended some circumstantial consideration by regulatory agencies to accept radioactive materials (primarily sealed sources and devices) from customers. This circumstantial consideration was extended to licensees so that radioactive materials would be less likely to be misplaced, lost, abandoned, or stolen from customers. Future occurrences of misplaced, lost, abandoned, or stolen sources will be evaluated on a case-by-case basis in order to facilitate disposal and remove from the public domain. It is also acknowledged that the complete recordkeeping requirements were not in place until shortly before the Compact Facility opened.

Based on the principles listed above and acknowledging that storage/disposal options, recordkeeping requirements, and ability to transfer radioactive materials have been evolving since July 2008, for radioactive materials acquired <u>before</u> April 27, 2012, the determination of who the waste generator is for purposes of disposal at the Compact Facility will instead focus on where the waste came from. This shift in focus for radioactive materials acquired before April 27, 2012 will remain in effect for a period of approximately two years, ending April 26, 2015:

- Licensed sealed source or device manufacturers, waste brokers, waste processors, initial
 distributors, other distributors, and decontamination service providers, who received
 radioactive materials from a customer, must provide adequate documentation that the waste is
 not of international origin.
- Licensed sealed source or device manufacturers, waste brokers, waste processors, initial
 distributors, other distributors, and decontamination service providers, who received
 radioactive materials from a customer, must provide adequate documentation that the waste
 was from Texas or Vermont to be considered Party waste (In Compact), otherwise it will be
 considered Non-Party (Out of Compact) waste. Any waste considered to be Non-Party (Out of
 Compact) will require import authorization in accordance with 31 TAC 675.23.
- Licensed sealed source or device manufacturers, waste brokers, waste processors, initial
 distributors, other distributors, and decontamination service providers, who received
 radioactive materials from a customer, may use various records including, but not limited to,
 source/device leak tests, source/device inventories, transfer/receipt records, transportation
 manifests, purchasing records, or other records determined to be suitable, as documentation
 regarding who or where a waste came from.

Licensed sealed source or device manufacturers, waste brokers, waste processors, initial
distributors, other distributors, and decontamination service providers who received radioactive
materials from a customer, may be allowed to complete TCEQ Form 20225 as the waste
generator, upon providing adequate documentation as described above for documenting who
or where a waste came from.