**Section 340.1060 Transfer for Disposal and Manifests**

a) Each licensee who transports or offers for transportation low-level radioactive waste intended for ultimate disposal at a licensed low-level radioactive waste disposal facility shall prepare a manifest reflecting information requested on the applicable NRC Forms 540 (Uniform Low-Level Radioactive Waste Manifest-Shipping Paper) and 541 (Uniform Low-Level Radioactive Waste Manifest-Container and Waste Description) and, if necessary, on an applicable NRC Form 542 (Uniform Low-Level Radioactive Waste Manifest-Manifest Index and Regional Compact Tabulation).

AGENCY NOTE: For guidance in completing these forms, refer to the instructions that accompany the forms. NRC Forms 540, 540A, 541, 541A, 542, and 542A and the accompanying written instructions may be obtained from the Office of the Chief Information Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-5877, or http://www.nrc.gov.

b) NRC Forms 540 and 540A shall be completed and shall physically accompany each low-level radioactive waste shipment. Each licensee shipping low-level radioactive waste shall transfer manifest information to the consignee.

c) Upon agreement between the shipper and the consignee, NRC Forms 541, 541A, 542, or 542A may be completed, transmitted, and stored in electronic media with the capability of producing legible, accurate, and complete records on the respective forms. Copies of manifests required by this Section may be legible carbon copies, photocopies, or computer printouts that reproduce the data in the format of the uniform manifest.

d) Licensees are exempt from the manifesting requirements of this Section when shipping:

1) Low-level radioactive waste for processing and when they expect its return (i.e., for storage under their license) prior to disposal at a licensed disposal facility;

2) Low-level radioactive waste that is being returned to the licensee who is the waste generator; or

3) Radioactively contaminated material to a waste processor that becomes the processor's residual waste.

e) Each licensee shipping low-level radioactive waste shall also comply with the reporting requirements specified in 32 Ill. Adm. Code 609.

f) Each shipper of radioactive waste shall provide the following information regarding the waste shipment on the uniform manifest:

1) The name, facility address, and telephone number of the licensee shipping the waste;

2) An explicit declaration indicating whether the shipper is acting as a waste generator, collector or processor, or a combination of these identifiers, for purposes of the manifested shipment;

3) The name, address, and telephone number, or the name and USEPA identification number, for the carrier transporting the waste;

4) The date of the waste shipment;

5) The total number of packages/disposal containers;

6) The total disposal volume and disposal weight in the shipment;

7) The total radionuclide activity in the shipment;

8) The activity of each of the radionuclides H-3, C-14, Tc-99 and I-129 contained in the shipment; and

9) The total masses of U-233, U-235, and plutonium in special nuclear material, and the total mass of uranium and thorium in source material.

AGENCY NOTE: The reporting requirements of the uniform manifest meet the reporting requirements of USDOT for the shipments of waste. Therefore, no additional USDOT forms are required for shipments of low-level radioactive waste. However, the uniform manifest does not meet the reporting requirements of USEPA for the shipment of hazardous, medical, or other waste. Any additional USEPA requirements shall be met by using an additional USEPA manifest. In addition, the uniform manifest reporting requirements do not meet the tracking requirements of 32 Ill. Adm. Code 609.

g) For waste shipments in disposal containers, each shipper shall provide the following information on the uniform manifest regarding the waste and each disposal container of waste in the shipment:

1) An alphabetic or numeric identification that identifies each disposal container in the shipment;

2) A physical description of the disposal container, including the manufacturer and model of any high integrity container;

3) The volume displaced by the disposal container;

4) The gross weight of the disposal container, including the waste;

5) For waste consigned to a disposal facility, the maximum radiation level at the surface of each disposal container;

6) A physical and chemical description of the waste;

7) The total weight percentage of chelating agent for any waste containing more than 0.1 percent chelating agent by weight, plus the identity of the principal chelating agent;

8) The approximate volume of waste within a container;

9) The sorbing or solidification media, if any, and the identity of the manufacturer of the solidification media and brand name;

10) The identities and activities of individual radionuclides contained in each container, the masses of U-233, U-235, and plutonium in special nuclear material, and the masses of uranium and thorium in source material. For discrete waste types (i.e., activated materials, contaminated equipment, mechanical filters, sealed sources/devices, and wastes in solidification/ stabilization media), the identities and activities of individual radionuclides associated with or contained in these waste types within a disposal container shall be reported;

11) The total radioactivity within each container; and

12) For wastes consigned to a disposal facility, the classification of the waste shall be identified on the manifest pursuant to Section 340.1052. Waste not meeting the structural stability requirements of Section 340.1055(b) shall also be identified on the manifest.

h) For waste shipments delivered without a disposal container, the shipper of the radioactive waste shall provide the following information on the uniform manifest:

1) The approximate volume and weight of the waste;

2) A physical and chemical description of the waste;

3) The total weight percentage of chelating agent for any waste containing more than 0.1 percent chelating agent by weight, plus the identity of the principal chelating agent;

4) For wastes consigned to a disposal facility, the classification of the waste shall be identified on the manifest pursuant to Section 340.1052. Waste not meeting the structural stability requirements of Section 340.1055(b) shall also be identified on the manifest;

5) The identities and activities of individual radionuclides contained in the waste, the masses of U-233, U-235, and plutonium in special nuclear material, and the masses of uranium and thorium in source material; and

6) For waste consigned to a disposal facility, the maximum radiation levels at the surface of the waste.

i) For waste comprised of mixtures of waste originating from different waste generators, the shipper shall provide the following information on the uniform manifest:

AGENCY NOTE: The origin of the low-level radioactive waste resulting from a processor's activities may be attributable to one or more "waste generators" as defined in this Part.

1) For homogeneous mixtures of waste, such as incinerator ash, provide the waste description applicable to the mixture and the volume of the waste attributed to each waste generator.

2) For heterogeneous mixtures of waste, such as the combined products from a large compactor, identify each generator contributing waste to the disposal container, and for discrete waste types (i.e., activated materials, contaminated equipment, mechanical filters, sealed source/devices and wastes in solidification/stabilization media), the identities and activities of individual radionuclides contained on these waste types within the disposal container. For each waste generator, provide the following:

A) The volume of waste;

B) A physical and chemical description of the waste, including the solidification agent, if any;

C) The total weight percentage of chelating agents for any waste containing more than 0.1 percent chelating agent by weight, plus the identity of the principal chelating agent;

D) The sorbing or solidification media, if any, and the identity of the solidification media vendor and brand name if the media is claimed to meet stability requirements in Section 340.1055(b); and

E) Radionuclide identities and activities contained in the waste, the masses of U-233, U-235, and plutonium in special nuclear material, and the masses of uranium and thorium in source material if contained in the waste.

j) An authorized representative of the licensee shall certify, by signing and dating the shipment manifest, that the transported materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the requirements of USDOT regulations and this Part. A collector, in signing the certification, is certifying that nothing has been done to the collected waste that would invalidate the waste generator's certification.

k) Any licensee who transfers radioactive waste to a land disposal facility or a licensed waste collector shall comply with the requirements in subsections (k)(1) through (9). Any licensee who transfers waste to a licensed waste processor for waste treatment or repackaging shall comply with the requirements of subsections (k)(4) through (9). The licensee shall:

1) Prepare all wastes so that the waste is classified according to Section 340.1052 and meets the waste characteristics requirements in Section 340.1055;

2) Label each disposal container (or transport package if potential radiation hazards preclude labeling of the individual disposal container) of waste to identify whether it is Class A waste, Class B waste, Class C waste, or greater than Class C waste, in accordance with Section 340.1052;

3) Conduct a quality assurance program to assure compliance with Sections 340.1052 and 340.1055 (the program shall include management evaluation of audits);

4) Prepare the appropriate NRC Uniform Low-Level Radioactive Waste Manifest form as required by this Part;

5) Forward a copy or electronically transfer the Uniform Low-Level Radioactive Waste Manifest to the intended consignee so that receipt of the manifest precedes the low-level radioactive waste shipment, or the manifest is delivered to the consignee with the waste at the time the waste is transferred to the consignee. Using either or both of these methods is acceptable;

6) Include NRC Form 540 (and NRC Form 540A, if required) with the shipment regardless of the option chosen in subsection (k)(5);

7) Receive acknowledgement of the receipt of the shipment in the form of a signed copy of NRC Form 540;

8) Retain a copy of or electronically store the Uniform Low-Level Radioactive Waste Manifest and documentation of acknowledgement of receipt as the record of transfer of licensed material as required by the Agency; and

9) For any shipments or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in this Part, conduct an investigation in accordance with Section 340.1270.

l) Any waste collector licensee who handles only prepackaged waste shall comply with subsections (l)(1) and (2) and (l)(7) through (12). Any licensed waste processor who treats or repackages waste shall comply with subsections (l)(1) and (l)(3) through (12).

1) Acknowledge receipt of the waste from the shipper within one week after receipt by returning a signed copy of NRC Form 540 to the shipper;

2) Prepare a new manifest to reflect consolidated shipments that meet the requirements of this Part. The waste collector shall ensure that, for each container of waste in the shipment, the manifest identifies the generator of that container of waste;

3) Prepare a new manifest that meets the requirements of this Part. Preparation of the new manifest reflects that the processor is responsible for meeting these requirements. For each container of waste in the shipment, the manifest shall identify the waste generators, the preprocessed waste volume, and the other information required in subsection (i);

4) Prepare all wastes so that the waste is classified according to Section 340.1052 and meets the waste characteristics requirements in Section 340.1055;

5) Label each package of waste to identify whether it is Class A waste, Class B waste, or Class C waste, in accordance with Sections 340.1052 and 340.1055;

6) Conduct a quality assurance program to assure compliance with Sections 340.1052 and 340.1055 (the program shall include management evaluation of audits);

7) Forward a copy or electronically transfer the Uniform Low-Level Radioactive Waste Manifest to the intended consignee so that receipt of the manifest precedes the low-level radioactive waste shipment, or the manifest is delivered to the consignee with the waste at the time the waste is transferred to the consignee. Using either or both of these methods is acceptable;

8) Include NRC Form 540 (and NRC Form 540A, if required) with the shipment regardless of the option chosen in subsection (l)(7);

9) Receive acknowledgement of the receipt of the shipment in the form of a signed copy of NRC Form 540;

10) Retain a copy of or electronically store the Uniform Low-Level Radioactive Waste Manifest and documentation of acknowledgement of receipt as the record of transfer of licensed material as required by the Agency;

11) For any shipments or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in this Part, conduct an investigation in accordance with Section 340.1270; and

12) Notify the shipper and the Agency when any shipment or part of a shipment has not arrived within 60 days after receipt of an advance manifest, unless notified by the shipper that the shipment has been cancelled.

m) Any licensed land disposal facility operator shall:

1) Acknowledge receipt of low-level radioactive waste within 1 week after receipt by returning, at a minimum, a signed copy of NRC Form 540 to the shipper. The shipper to be notified is the licensee who last possessed the waste and transferred the waste to the operator. If any discrepancy exists between materials listed on the Uniform Low-Level Radioactive Waste Manifest and materials received, copies or electronic transfer of the affected forms shall be returned indicating the discrepancy;

2) Maintain copies of all completed manifests until the Agency terminates the license; and

3) Notify the shipper and the Agency when any shipment or part of a shipment has not arrived within 60 days after receipt of an advance manifest, unless notified by the shipper that the shipment has been cancelled.

(Source: Amended at 47 Ill. Reg. 9163, effective June 22, 2023)