

## Federal Code Relevant to CRT Recycling

### Definitions related to CRTs from 40 CFR 260.10

*CRT exporter* means any [person](#) in the [United States](#) who initiates a transaction to send used CRTs outside the [United States](#) or its territories for recycling or reuse, or any intermediary in the [United States](#) arranging for such export.

*CRT glass manufacturer* means an [operation](#) or part of an [operation](#) that uses a furnace to manufacture CRT glass.

*CRT processing* means conducting all of the following activities:

- (1) Receiving broken or intact CRTs; and
- (2) Intentionally breaking intact CRTs or further breaking or separating broken CRTs; and
- (3) Sorting or otherwise managing glass removed from CRT monitors.

*Hazardous secondary material* means a secondary material (e.g., spent material, by-product, or sludge) that, when discarded, would be identified as [hazardous waste](#) under [part 261](#) of this chapter.

*Hazardous secondary material generator* means any [person](#) whose [act](#) or process produces [hazardous secondary materials](#) at the generating [facility](#). For purposes of this paragraph, “generating facility” means all contiguous property owned, leased, or otherwise controlled by the [hazardous secondary material generator](#). For the purposes of [§ 261.2\(a\)\(2\)\(ii\)](#) and [§ 261.4\(a\)\(23\)](#), a [facility](#) that collects [hazardous secondary materials](#) from other [persons](#) is not the [hazardous secondary material generator](#).

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## § 260.43 Legitimate recycling of hazardous secondary materials.

(a) Recycling of [hazardous secondary materials](#) for the purpose of the exclusions or exemptions from the [hazardous waste](#) regulations must be legitimate. [Hazardous secondary material](#) that is not legitimately recycled is discarded material and is a [solid waste](#). In determining if their recycling is legitimate, [persons](#) must address all the requirements of this paragraph.

(1) Legitimate recycling must involve a [hazardous secondary material](#) that provides a useful contribution to the recycling process or to a [product](#) or intermediate of the recycling process. The [hazardous secondary material](#) provides a useful contribution if it:

- (i) Contributes valuable ingredients to a [product](#) or intermediate; or
- (ii) Replaces a catalyst or carrier in the recycling process; or
- (iii) Is the source of a valuable constituent recovered in the recycling process; or
- (iv) Is recovered or regenerated by the recycling process; or
- (v) Is used as an effective substitute for a [commercial product](#).

(2) The recycling process must produce a valuable [product](#) or intermediate. The [product](#) or intermediate is valuable if it is:

- (i) Sold to a third party; or
- (ii) Used by the recycler or the [generator](#) as an effective substitute for a [commercial product](#) or as an ingredient or intermediate in an industrial process.

(3) The [generator](#) and the recycler must manage the [hazardous secondary material](#) as a valuable commodity when it is under their control. Where there is an analogous raw material, the [hazardous secondary material](#) must be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner. Where there is no analogous raw material,

the [hazardous secondary material](#) must be [contained](#). [Hazardous secondary materials](#) that are [released](#) to the environment and are not recovered immediately are discarded.

(4) The [product](#) of the recycling process must be comparable to a legitimate [product](#) or intermediate:

(i) Where there is an analogous [product](#) or intermediate, the [product](#) of the recycling process is comparable to a legitimate [product](#) or intermediate if:

(A) The [product](#) of the recycling process does not exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous [products](#) do not exhibit, and

(B) The concentrations of any hazardous constituents found in appendix VIII of [part 261](#) of this chapter that are in the [product](#) or intermediate are at levels that are comparable to or lower than those found in analogous [products](#) or at levels that meet widely-recognized commodity standards and specifications, in the case where the commodity standards and specifications include levels that specifically address those hazardous constituents.

(ii) Where there is no analogous [product](#), the [product](#) of the recycling process is comparable to a legitimate [product](#) or intermediate if:

(A) The [product](#) of the recycling process is a commodity that meets widely recognized commodity standards and specifications (*e.g.*, commodity specification grades for common metals), or

(B) The [hazardous secondary materials](#) being recycled are returned to the original process or processes from which they were generated to be reused (*e.g.*, closed loop recycling).

(iii) If the [product](#) of the recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate [product](#) or intermediate per paragraph (a)(4)(i) or (ii) of this section, the recycling still may be shown to be legitimate, if it meets the following specified requirements. The [person](#) performing the recycling must conduct the necessary assessment and prepare documentation showing why the recycling is, in fact, still legitimate. The recycling can be shown to be legitimate based on lack of exposure from toxics in the [product](#), lack of the bioavailability of the toxics in the [product](#), or other relevant considerations which show that the recycled [product](#) does not contain levels of hazardous constituents that pose a significant human health or environmental risk. The documentation must include a [certification](#) statement that the recycling is legitimate and must be maintained [on-site](#) for three years after the recycling operation has ceased. The [person](#) performing the recycling must notify the [Regional Administrator](#) of this activity using EPA Form 8700-12.

(b)-(c) [Reserved]

[ [73 FR 64759](#), Oct. 30, 2008, as amended at [80 FR 1772](#), Jan. 13, 2015]

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## **40CFR 261.1(c)(8) Speculative Accumulation**

(8) A material is “accumulated speculatively” if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that—during the calendar year (commencing on January 1)—the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. Materials must be placed in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (*e.g.*, slags from a single smelting process) that is recycled in the same way (*i.e.*, from which the same material is recovered or that is

used in the same way). Materials accumulating in units that would be exempt from regulation under §261.4(c) are not to be included in making the calculation. Materials that are already defined as solid wastes also are not to be included in making the calculation. Materials are no longer in this category once they are removed from accumulation for recycling, however.

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## 40 CFR 261.39

### § 261.39 Conditional Exclusion for Used, Broken Cathode Ray Tubes (CRTs) and Processed CRT Glass Undergoing Recycling.

Link to an amendment published at [82 FR 60900](#), Dec. 26, 2017.

Used, broken CRTs are not [solid wastes](#) if they meet the following conditions:

**(a)Prior to processing:** These materials are not [solid wastes](#) if they are destined for recycling and if they meet the following requirements:

**(1)Storage.** The broken CRTs must be either:

**(i)** Stored in a building with a roof, floor, and walls, or

**(ii)** Placed in a [container](#) (*i.e.*, a package or a vehicle) that is constructed, filled, and closed to minimize releases to the environment of CRT glass (including fine solid materials).

**(2)Labeling.** Each [container](#) in which the used, broken CRT is [contained](#) must be labeled or marked clearly with one of the following phrases: “Used cathode ray tube(s)-contains leaded glass ” or “Leaded glass from televisions or computers.” It must also be labeled: “Do not mix with other glass materials.”

**(3)Transportation.** The used, broken CRTs must be transported in a [container](#) meeting the requirements of paragraphs (a)(1)(ii) and (2) of this section.

**(4)Speculative accumulation and use constituting disposal.** The used, broken CRTs are subject to the limitations on speculative accumulation as defined in [paragraph \(c\)\(8\)](#) of this section. If they are used in a manner constituting [disposal](#), they must comply with the applicable requirements of part 266, subpart C instead of the requirements of this section.

**(5)Exports.** In addition to the applicable conditions specified in paragraphs (a)(1)-(4) of this section, exporters of used, broken CRTs must comply with the following requirements:

**(i)** Notify EPA of an intended export before the CRTs are scheduled to leave the [United States](#). A complete notification should be submitted sixty (60) [days](#) before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification must be in writing, signed by the exporter, and include the following information:

- (A)** Name, mailing address, telephone number and EPA ID number (if applicable) of the exporter of the CRTs.
- (B)** The estimated frequency or rate at which the CRTs are to be exported and the period of time over which they are to be exported.
- (C)** The estimated total quantity of CRTs specified in kilograms.
- (D)** All points of entry to and departure from each foreign country through which the CRTs will pass.
- (E)** A description of the means by which each shipment of the CRTs will be transported (*e.g.*, mode of [transportation](#) vehicle (air, highway, rail, water, etc.), type(s) of [container](#) (drums, boxes, tanks, etc.)).
- (F)** The name and address of the recycler or recyclers and the estimated quantity of used CRTs to be sent to each [facility](#), as [well](#) as the names of any alternate recyclers.
- (G)** A description of the manner in which the CRTs will be [recycled](#) in the foreign country that will be receiving the CRTs.
- (H)** The name of any transit country through which the CRTs will be sent and a description of the approximate length of time the CRTs will remain in such country and the nature of their handling while there.
- (ii)** Notifications must be submitted electronically using EPA's Waste Import Export Tracking [System](#) (WIETS), or its successor [system](#).
- (iii)** Upon request by EPA, the exporter shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.
- (iv)** EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of [paragraph \(a\)\(5\)\(i\)](#) of this section. Where a claim of confidentiality is asserted with respect to any notification information required by [paragraph \(a\)\(5\)\(i\)](#) of this section, EPA may find the notification not complete until any such claim is resolved in accordance with [40 CFR 260.2](#).
- (v)** The export of CRTs is prohibited unless all of the following occur:
- (A)** The receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the CRTs, EPA will forward an Acknowledgment of Consent to Export CRTs to the exporter. Where the receiving country objects to receipt of the CRTs or withdraws a prior consent, EPA will notify the exporter in writing. EPA will also notify the exporter of any responses from transit countries.
- (B)** On or after the [AES filing compliance date](#), the exporter or a U.S. authorized agent must:

**(1)** Submit Electronic Export Information (EEI) for each shipment to the Automated Export [System](#) (AES) or its successor [system](#), under the International Trade Data [System](#) (ITDS) platform, in accordance with [15 CFR 30.4\(b\)](#).

**(2)** Include the following items in the EEI, along with the other information required under [15 CFR 30.6](#):

**(i)** EPA license code;

**(ii)** Commodity classification code per [15 CFR 30.6\(a\)\(12\)](#);

**(iii)** EPA consent number;

**(iv)** Country of ultimate destination per [15 CFR 30.6\(a\)\(5\)](#);

**(v)** Date of export per [15 CFR 30.6\(a\)\(2\)](#);

**(vi)** Quantity of waste in shipment and units for reported quantity, if required reporting units established by value for the reported commodity classification number are in units of weight or volume per [15 CFR 30.6\(a\)\(15\)](#); or

**(vii)** EPA net quantity reported in units of kilograms, if required reporting units established by value for the reported commodity classification number are not in units of weight or volume.

**(vi)** When the conditions specified on the original notification change, the exporter must provide EPA with a written renotification of the change using the allowable methods listed in [paragraph \(a\)\(5\)\(ii\)](#) of this section, except for changes to the telephone number in [paragraph \(a\)\(5\)\(i\)\(A\)](#) of this section and decreases in the quantity indicated pursuant to [paragraph \(a\)\(5\)\(i\)\(C\)](#) of this section. The shipment cannot take place until consent of the receiving country to the changes has been obtained (except for changes to information about points of entry and departure and transit countries pursuant to paragraphs (a)(5)(i)(D) and (H) of this section) and the exporter of CRTs receives from EPA a copy of the Acknowledgment of Consent to Export CRTs reflecting the receiving country's consent to the changes.

**(vii)** A copy of the Acknowledgment of Consent to Export CRTs must accompany the shipment of CRTs. The shipment must conform to the terms of the Acknowledgment.

**(viii)** If a shipment of CRTs cannot be delivered for any reason to the recycler or the alternate recycler, the exporter of CRTs must renotify EPA of a change in the conditions of the original notification to allow shipment to a new recycler in accordance with [paragraph \(a\)\(5\)\(vi\)](#) of this section and obtain another Acknowledgment of Consent to Export CRTs.

**(ix)** Exporters must keep copies of notifications and Acknowledgments of Consent to Export CRTs for a period of three years following receipt of the Acknowledgment. Exporters may satisfy this recordkeeping requirement by retaining electronically submitted notifications or electronically generated Acknowledgements in the [CRT exporter](#)'s account on EPA's Waste Import Export Tracking [System](#) (WIETS), or its successor [system](#), [provided](#) that such copies are readily available for viewing and production if requested by any EPA or authorized [state](#) inspector. No [CRT exporter](#) may be

held liable for the inability to produce a notification or Acknowledgement for inspection under this section if the [CRT exporter](#) can demonstrate that the inability to produce such copies are due exclusively to technical difficulty with EPA's Waste Import Export Tracking [System](#) (WIETS), or its successor [system](#) for which the [CRT exporter](#) bears no responsibility.

(x) [CRT exporters](#) must file with EPA no later than March 1 of each year, an annual report summarizing the quantities (in kilograms), frequency of shipment, and ultimate destination(s) (*i.e.*, the [facility](#) or facilities where the recycling occurs) of all used CRTs exported during the previous calendar year. Such reports must also include the following:

(A) The name, EPA ID number (if applicable), and mailing and site address of the exporter;

(B) The calendar year covered by the report;

(C) A [certification](#) signed by the [CRT exporter](#) that states:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

(xi) Prior to one year after the [AES filing compliance date](#), annual reports must be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460. Hand-delivered annual reports on used CRTs exported during 2016 should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 1200 Pennsylvania Ave. NW., Washington, DC. Subsequently, annual reports must be submitted to the office listed using the allowable methods specified in [paragraph \(a\)\(5\)\(ii\)](#) of this section. Exporters must keep copies of each annual report for a period of at least three years from the due date of the report. Exporters may satisfy this recordkeeping requirement by retaining electronically submitted annual reports in the [CRT exporter's](#) account on EPA's Waste Import Export Tracking [System](#) (WIETS), or its successor [system](#), [provided](#) that a copy is readily available for viewing and production if requested by any EPA or authorized [state](#) inspector. No [CRT exporter](#) may be held liable for the inability to produce an annual report for inspection under this section if the [CRT exporter](#) can demonstrate that the inability to produce the annual report is due exclusively to technical difficulty with EPA's Waste Import Export Tracking [System](#) (WIETS), or its successor [system](#) for which the [CRT exporter](#) bears no responsibility.

**(b) Requirements for used CRT processing:** Used, broken CRTs undergoing [CRT processing](#) as defined in [§ 260.10](#) of this chapter are not [solid wastes](#) if they meet the following requirements:

**(1)Storage.** Used, broken CRTs undergoing processing are subject to the requirement of [paragraph \(a\)\(4\)](#) of this section.

**(2)Processing.**

**(i)** All activities specified in paragraphs (2) and (3) of the definition of “CRT processing” in [§ 260.10](#) of this chapter must be performed within a building with a roof, floor, and walls; and

**(ii)** No activities may be performed that use temperatures high enough to volatilize lead from CRTs.

**(c)Processed CRT glass sent to CRT glass making or lead smelting:** Glass from used CRTs that is destined for recycling at a [CRT glass manufacturer](#) or a lead smelter after processing is not a [solid waste](#) unless it is speculatively accumulated as defined in [§ 261.1\(c\)\(8\)](#).

**(d)Use constituting disposal:** Glass from used CRTs that is used in a manner constituting [disposal](#) must comply with the requirements of [40 CFR part 266](#), subpart C instead of the requirements of this section.

[ [45 FR 33119](#), May 19, 1980, as amended at [79 FR 36231](#), June 26, 2014; [81 FR 85714](#), Nov. 28, 2016]

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