

Federal Cathode Ray Tube (CRT) Rule

- Promulgated July 28, 2006
- Export requirements effective January 29, 2007

NYS Department of Environmental Conservation



Internal Workings of a Typical Color Television

(From <http://electronics.howstuffworks.com/tv5.htm>)

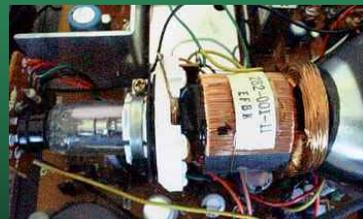


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Alternate Views

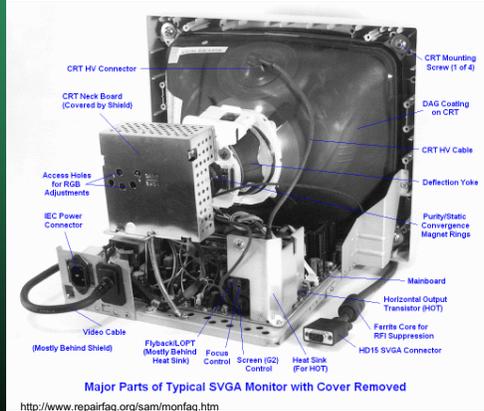
(From <http://electronics.howstuffworks.com/tv5.htm>)



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Computer Monitor



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Current NYS Management Practices

- Intact CRTs destined for recycling
 - eligible for hazardous scrap metal exemption
- Broken or when metal is no longer adherent to the CRT
 - could be regulated as a hazardous waste

Note: Broken refers to the vacuum tube only.

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Why adopt the Federal CRT Rule?

- Proven markets
- Consistency across state boundaries
- NYS must be as strict as EPA

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Federal CRT Rule

- Conditional exclusion:
 - used, unbroken for reuse or recycling
 - used or broken for recycling
- Used, unbroken CRTs
- not regulated as hazardous waste
 - unless stored for more than one year (speculative accumulation)
- Note: Broken refers to the vacuum tube only.



Federal CRT Rule (continued)

- Used, broken CRTs
- not regulated as hazardous waste if:
 - CRT containers clearly labeled regarding contents;
 - CRTs safely transported in containers to minimize releases;
 - CRTs stored in buildings or containers to minimize releases; and
 - CRTs stored on site less than one year before recycling (speculative accumulation).



Federal CRT Rule (continued)

- CRTs undergoing glass processing remain unregulated if:
 - processed inside building
 - Temperature below volatilization of lead from glass
 - CRT processed glass
 - Sent to CRT glass manufacture
 - Sent to lead smelter
 - stored for less than one year (speculative accumulation)
 - not used in manner constituting disposal (applied to land)



40 CFR 261.1(c)(8): “Speculative Accumulation”

- 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. 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 Sec. 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.



Export requirements

- Used, unbroken CRTs for reuse
 - one-time notification to EPA Regional Office
- Used, broken or unbroken CRTs for recycling
 - notify EPA Headquarters (Washington, D.C.)
 - Receive written consent from receiving country through EPA
- Note: No notification if export is processed CRT glass.



U.S. Export Rules for CRTs and CRT Glass

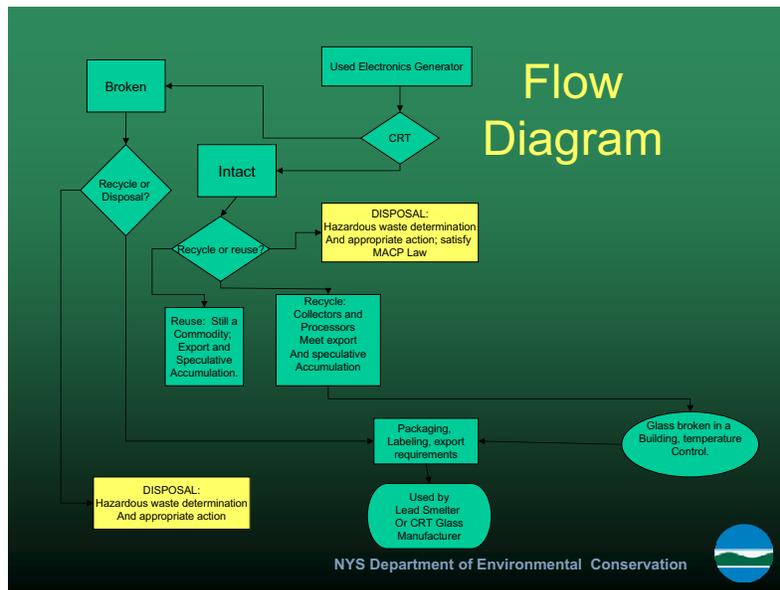
- Organization for Economic Cooperation and Development (OECD)
- OECD Countries - mostly developed nations
 - NA, Western & Northern Europe, Australia, Japan, S Korea
 - http://www.oecd.org/document/58/0,3343,en_2649_201185_1889402_1_1_1_1,00.html



U.S. Export Rules for CRTs and CRT Glass (continued)

- Basel Convention
 - 170 Countries are parties
 - U.S. is not a party to the Convention
 - Non-OECD Countries cannot legally accept hazardous waste from U.S without bilateral agreement
 - U.S. has no such export bilateral agreements
- <http://www.basel.int/> - Basel Convention
- <http://www.ban.org/> - Basel Action Network

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CRT Links

- Federal Register – Includes CRT Rule text.
 - HTML
<http://www.epa.gov/fedrgstr/EPA-WASTE/2006/July/Day-28/f6490.htm>
 - PDF
<http://www.epa.gov/epaoswer/hazwaste/recycle/electron/crt-final.pdf>
- Link to EPA fact sheet
 - HTML
<http://www.epa.gov/epaoswer/hazwaste/recycle/electron/crt-fs06.htm>
 - PDF
<http://www.epa.gov/epaoswer/hazwaste/recycle/electron/crt-fs06.pdf>
- Frequently Asked Questions
<http://www.epa.gov/epaoswer/hazwaste/recycle/electron/crt-faq.htm>

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Questions?

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