

# The CRT Glass Recycling Test

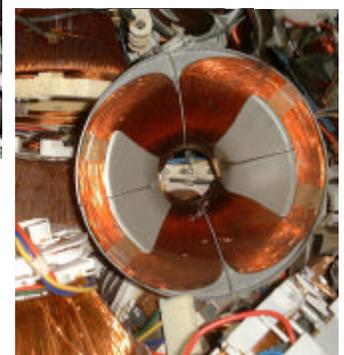
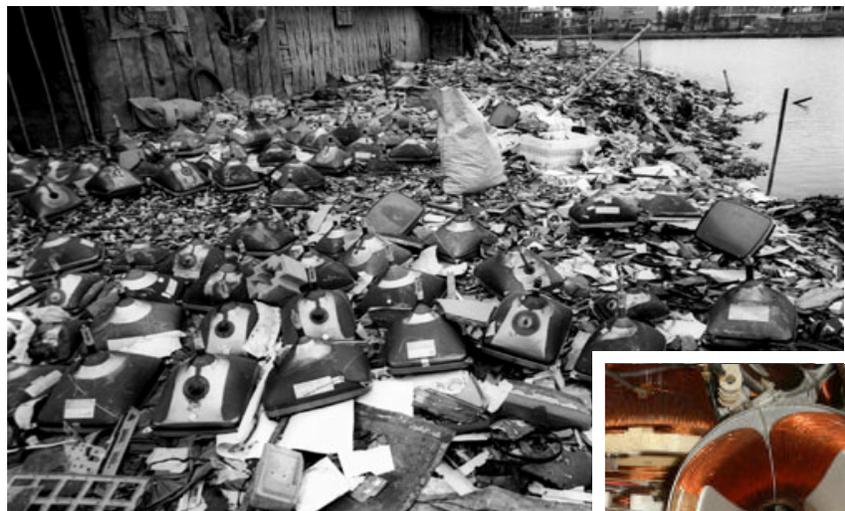


Americans are turning out by the thousands to **recycle** old TVs and computers. Unfortunately, some companies have abused our trust. Computers and televisions turned in for recycling have been tossed onto scrap barges and dumped on foreign shores.

A dud Cathode Ray Tube (CRT), loaded with toxic lead, has no more value in Asia, Africa, Latin America or Eastern Europe than in the USA. But international laws are hard to enforce. There is an **economic incentive** for foreign dumping. "Wholesalers" take legitimate exports (low end Pentiums, copper scrap, working monitors), and leave the bad CRTs as "**Toxics Along for the Ride**" (TAR).

A single copper yoke from the back of a TV can be worth an hour's wages in Asia. Some Foreign Importers accept the whole unit, break off the copper, and throw the leaded glass CRT in the river. Rudimentary, "artisan" gold recyclers soak circuit boards in acid, and pan for gold at the river's edge. Gruesome images at **Basel Action Network's** website have cast a shadow over the recycling industry.

How can a consumer, a business, or a government agency **know what is happening** with the CRTs sent for "recycling"? EPA ID numbers, certifications, recycling awards, trade memberships and press clips can provide a false comfort. Fortunately, there's a **simple mathematical test** to find out if your recycler is really a recycler (OVER).



*Left: Woman in Guiyu, China, breaks a copper yoke from a CRT (photo courtesy of Basel Action Network). Top: A CRT glass dump in Guiyu, China (BAN). Right: High grade copper scrap from back of CRTs, in high demand, carry the CRTs as "Toxics long for the Ride"*

# The CRT Glass Test

**CRT Recycling Rate:** CRTs are not made of steel, they are a complex mixture of lead, barium, and silica. Because there are relatively few glass furnaces or lead smelters recycling post-consumer CRT glass, it shouldn't be a "trade secret" **where your CRT glass goes**. With a couple of easy questions, you can get a good idea what your recycling company is up to.

**"Of your total tonnage, how much unrepairable CRT glass do you recycle? Where are you sending it?"**

The CRT typically represents **42%** of the TV or monitor's weight. Legitimate recycling companies may differ in the percentage of glass they repair or recycle. Some consolidate CRT glass from other companies, and have Rates over 75%. Others accept only repairable CRTs and TVs, or handle large volumes of cables and mainframes, and may have a rate below 25%.

While there can be a rational explanation for different CRT recycling rates, there is no "free lunch". **No one** can repair ALL of the old TVs and monitors they charge you to receive. **ANY** legitimate recycler can quickly document how **much CRT glass they recycle** domestically.

**CRT Recycling Rate =**

**Pounds of CRT glass sent to CRT glass/lead recyclers**

**Pounds of All TVs and Computers accepted for Recycling**



"Uhh.. The dog ate it."



Processed CRT Glass: A good recycler will document t CRT glass shipments, and verify the end market

**Wholesale exporters accept damaged CRTs at low prices.**

Some cannot show **any record** of CRT glass recycling... *it all goes on the shipping container, as **Toxics Along for the Ride**.*

**Many** monitors and **most** TVs are brought in for recycling precisely because they are **not worth fixing**. Consumers should get what they pay for - CRT glass recycling, not hiding the CRTs in scrap metal.

If your vendor refuses to show a **CRT glass rate**, you should be concerned. *What else is going on ? Does the recycler have insurance, bonding, or a closure plan? What if the load is randomly inspected and rejected? **EPA could hold you, the generator, liable** for cleanup of*

CRTs dumped or abandoned by a 3<sup>rd</sup> party recycler. You have a right to check the CRT glass destination. Domestic glass recycling furnaces and smelters have no incentive to cover for the wholesale exporter. **These easy questions go a long way to providing Due Diligence.**



**How many pounds of TVs and computers did you collect last year?**

**How many pounds of glass did you send for recycling? Where?**

**Answer 2 divided by Answer 1 = CRT Recycling Rate %**

**Please keep recycling your electronics.** Recycling diverts rare and heavy metals from the landfill, saves energy, and most importantly, reduces metal mining and resource depletion. Metal mining produces 47% of all toxics released by all US industries, and hard rock mining in Asia is even worse. But if we recycle on the cheap, without due diligence, we may not be recycling at all.

For more "Due Diligence" guidance documents, visit [www.retroworks.com](http://www.retroworks.com)