UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

APR 24 2013

Mr. Douglas Smith
Director, Corporate Environment, Safety and Health
Sony Electronics, Inc.
16530 Via Esprillo
San Diego, CA 92127

Dear Mr. Smith,

Thank you for your letter dated April 5, 2013, in which you request information regarding how funnel cullet from cathode ray tubes (CRTs) may be used as a fluxing agent in copper smelters under the current Resource Conservation and Recovery Act (RCRA) regulations. In short, although the CRT rule cannot be used to send CRT processed glass to copper smelters, it is possible to do so under 40 CFR 261.2(e)(1)(ii) if processed funnel cullet is used as an effective substitute for a commercial product. A complete explanation and more detailed responses to your two questions are below.

1. ***Based upon the similarities of copper and lead smelting, can the CRT rule be used to gain commodity classification for funnel cullet if consumed by copper smelting meeting genuine reuse of the leaded silicate presented here?***

   No, the CRT rule cannot be used to send CRT processed glass to copper smelters.

   Under 40 CFR 261.4(a)(22)(iv) of the RCRA regulations, processed CRT glass is excluded from solid and hazardous waste regulation, provided it meets the requirements of 40 CFR 261.39(c), that is, that the CRT glass is destined for recycling at a CRT glass manufacturer or a lead smelter and the glass is not speculatively accumulated as defined in 40 CFR 261.1(c)(8).

   In the preamble to the 2002 CRT proposed rule, EPA solicited comment regarding whether to exclude from the definition of solid waste CRT glass sent to copper smelters and whether this glass is as commodity-like as glass sent to glass-to-glass recycling or lead smelters. *(67 FR 40516, June 12, 2002)*

   In the preamble to the 2006 CRT final rule, we noted that commenters pointed out that glass is used as a flux agent at copper smelters in the same manner that it is used as a flux agent at lead smelters. Another commenter also said that virgin copper concentrate already contains approximately 1% lead and thus lead is a constituent already present in the copper smelting process and thus already managed in process residues. *(71 FR 42937, July 28, 2006)*

   The Agency agreed with those commenters who pointed out that the degree of processing that is required for use in a copper smelter appeared to be the same as that required for use in a lead smelter and that the economics also may be similar for fluxes used in both kinds of

smelters. Nevertheless, the Agency had been unable to confirm that CRT glass was accepted at actual copper smelters and thus could not make a finding that CRT glass sent to copper smelters is commodity-like. EPA, therefore, did not include CRT glass sent to copper smelters in the final CRT rule. *(71 FR 42937, July 28, 2006)*

2. ***Does EPA find replacement of virgin fluxing agent with processed funnel cullet, as described in the above scenario, to be an effective substitute for a commercial product, thereby excluded as an effective substitute for a commercial product under 40 CFR 261.2(e)(ii)?***

   Yes, EPA finds that processed CRT glass used as an effective substitute for virgin fluxing agent at copper smelters to be excluded from solid and hazardous waste regulation under 40 CFR 261.2(e)(1)(ii).

   In the preamble to the 2006 CRT final rule, EPA noted that if processed CRT glass were legitimately used or reused as an effective substitute for a commercial product (i.e., as a flux agent), it could be excluded as an effective substitute for a commercial product under 40 CFR 261.2(e)(1)(ii). *(71 FR 42937, July 28, 2006)*

   The preamble also referenced a letter from Michael Shapiro to Christian Richter of the American Foundryman's Society, in which the Agency notes that spent foundry sand (which, like CRT funnel glass, also exhibits the hazardous characteristic for lead) is not a solid waste when legitimately used or reused as an effective substitute for a commercial product. The Agency noted its understanding that some foundry sands are currently being used a substitute for virgin silica sand as a fluxing agent in primary copper smelting operations. *(RCRA Online 11900, March 8, 1995)*

Please be aware, however, that under Section 3006 of RCRA individual states can be authorized to administer and enforce their own hazardous waste programs in lieu of the Federal program. Under Section 3009 of RCRA, states retain authority to promulgate regulatory requirements that are more stringent than the Federal regulatory requirements. When states are not authorized to administer their own program, the appropriate EPA Regional office administers the program and is the appropriate contact for any case-specific determinations. You should consult with the appropriate regulatory authority for any particular facility wishing to use an exclusion.

Thank you for your interest in CRT recycling. If you have any further questions, please contact Tracy Atagi (703-308-8672, atagi.tracy@epa.gov) or Amanda Kohler (703-347-8975, kohler.amanda@epa.gov) of my staff.

Sincerely,

Suzanne Rudzinski, Director
Office of Resource Conservation and Recovery