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40 CFR Parts 9, 260, 261, et al.
Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9, 260, 261, and 271

[RCRA–2004–0010; FRL–8203–1]

RIN 2050–AE52

Hazardous Waste Management System; Modification of the Hazardous Waste Program; Cathode Ray Tubes

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: A cathode ray tube (CRT) is the glass video display component of an electronic device (usually a computer or television monitor). In this rule, the Environmental Protection Agency (EPA) is amending its regulations under the Resource Conservation and Recovery Act (RCRA) to streamline management requirements for recycling of used CRTs and glass removed from CRTs. The amendments exclude these materials from the RCRA definition of solid waste if certain conditions are met. This rule is intended to encourage recycling and reuse of used CRTs and CRT glass. EPA proposed this rule on June 12, 2002 (67 FR 40508).

DATES: This final rule is effective on January 29, 2007.

ADDRESSES: EPA has established a docket for this action under Docket ID No. RCRA–2004–0010. All documents in the docket are listed on the *http://www.regulations.gov* Web site. Although listed in the index, some information may not be publicly available, such as confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *http://www.regulations.gov* or in hard copy at the RCRA Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the RCRA Docket is (202) 566–0270.

FOR FURTHER INFORMATION CONTACT: Ms. Marilyn Goode, Office of Solid Waste, Mail Code 5304W, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, (703) 308–8800, electronic mail: *goode.marilyn@epa.gov.*

SUPPLEMENTARY INFORMATION: The contents of this final rule are listed in the following outline:

Contents of the Final Rule

I. General Information

A. Does This Rule Apply to Me?

This rule potentially affects all persons who send used cathode ray tubes (CRTs) and CRT glass for recycling, as well as all persons who recycle these materials. The rule does not affect households or conditionally exempt small quantity generators (CESQGs). If you have any questions about the applicability of this rule, consult the person listed under **FOR FURTHER INFORMATION CONTACT.**

B. What Are the Statutory Authorities for This Final Rule?

Today's rule is promulgated under the authority of Sections 2002(a), 3001, 3002, 3004, and 3006 of the Solid Waste Disposal Act of 1970, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), and as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. 3007, 6912(a), 6921, 6922, 6924, 6926, 6927, and 6938.

C. Acronyms Used in the Rule

CES Computers and Electronics Subcommittee
CFR Code of Federal Regulations
CRT Cathode Ray Tube
CSI Common Sense Initiative
DOT Department of Transportation
FPD Flat Panel Display
HDTV High Definition Television
LCD Liquid Crystal Display
LDR Land Disposal Restrictions
OECD Organization for Economic Cooperation and Development
OSHA Occupational Safety and Health Administration
RCRA Resource Conservation and Recovery Act
TC Toxicity Characteristic
TCLP Toxicity Characteristic Leaching Procedure
TSDF Treatment, Storage, and Disposal Facility
TV Television
UWR Universal Waste Rule
WTE Waste-to-Energy

II. Summary of This Rule and Clarification of Existing Policies

On June 12, 2002, EPA published a **Federal Register** notice seeking comment on a proposed rule change that would streamline management requirements for used CRTs and processed CRT glass (see 67 FR 40508 and following pages). In the same notice, EPA proposed to add mercury-containing equipment to the Federal list of universal wastes. This part of the proposal was finalized on August 5, 2005 (70 FR 45507).

The proposed requirements for used CRTs and processed CRT glass would exclude these materials from the RCRA definition of solid waste if they were sent for recycling under certain conditions. The purpose of the proposed amendments was to encourage increased reuse, recycling, and better management of this growing wastestream, while maintaining necessary environmental protection. The conditions proposed were intended to ensure that the materials were handled as commodities rather than as wastes.

The Agency received many comments in response to its June 12, 2002 notice. Numerous commenters supported the proposed rule, while other commenters suggested changes to all or part of our proposal. After considering all comments, we are finalizing the

proposal substantially as proposed, with two significant modifications. The final rule, similarly to the proposed rule, contains an exclusion from the definition of solid waste for used CRTs and processed glass removed from CRTs (see 40 CFR 261.4(a)(23)). The conditions for meeting the exclusion are found in 40 CFR 261.39. The first change from the proposal concerns exported CRTs. The Agency is promulgating notice and consent requirements for all used CRTs (whether broken or intact) that are exported for recycling (see 40 CFR 261.40 and 261.39(a)(5)). We are also promulgating a one-time notification requirement for used CRTs exported for reuse (see 40 CFR 261.41). The second change from the proposal concerns speculative accumulation requirements, which the final rule imposes on used, intact CRTs (see 40 CFR 261.4(a)(23)(i)).

EPA believes that today's rule will encourage recycling, protect human health and the environment, and ensure that the subject materials are handled as commodities rather than as wastes. Today's rule does not limit or constrain the Agency in exercising its discretion to promulgate additional rulemaking relating to the definition of solid waste. Specifically, the Agency maintains the discretion to promulgate additional regulations that aim to encourage legitimate recycling of waste.

Following is a brief summary of today's rule, along with some clarifications of existing policies applicable to used CRTs.

A. CRTs From Households and Conditionally Exempt Small Quantity Generators (CESQGs)

Under previously existing regulations, CRTs from households are exempt from Federal hazardous waste management requirements, even when they are sent for recycling or disposal. Non-residential generators of less than 100 kilograms (about 220 lbs) of hazardous waste in a calendar month, including CRTs, are known as conditionally exempt small quantity generators (CESQGs) and are not subject to most RCRA Subtitle C management requirements. These provisions are not changed by today's rule. For a more detailed description of requirements applicable to these generators, see the discussion in the proposal at 67 FR 40511.

B. Reuse and Repair of Used CRTs

In today's rule, we are reaffirming our long-standing policy that any user sending a CRT to a collector or reseller for potential reuse is not a RCRA generator. Materials used and taken out of service by one person are not wastes if another person uses them in the same way. Many businesses take usable CRTs out of service only because they are upgrading their systems to take advantage of rapid advances in electronic technology. These organizations do not have the technical knowledge to decide whether a unit can be reused as a computer or television.

The Agency also confirms today that used CRTs undergoing repairs (such as rewiring or replacing defective parts) before resale or distribution are not being reclaimed, and are considered to be products in use rather than solid wastes. These repairs do not constitute waste management. For a fuller discussion of this issue, see the proposal at 67 FR 40511. However, under today's rule, CRTs exported abroad for reuse are subject to a one-time notification requirement, which is discussed later in this section.

C. CRTs and CRT Glass Sent for Recycling

Many CRTs that cannot be reused are sent for recycling, which consists of disassembly to recover valuable materials from the CRTs, such as lead or glass. For a complete discussion of the different types of recycling, see the proposal at 67 FR 40510. Following is a summary of how CRTs and CRT glass sent for recycling within the United States are regulated under today's rule.

Unused CRTs

Today's rule clarifies that persons who send unused CRTs for recycling are not subject to RCRA regulations. Sometimes manufacturers of off-specification CRTs send them to glass processors, glass-to-glass manufacturers, or smelters. Although these types of recycling may constitute reclamation, EPA does not regulate unused commercial chemical products that are reclaimed. For a more detailed discussion of this issue, see the proposal at 67 FR 40511.

Used, Intact CRTs

Today's rule provides that used, intact CRTs sent for recycling (e.g., glass processing, glass manufacturing, or smelting) that occurs within the United States are not solid wastes, unless they are speculatively accumulated by a CRT collector or glass processor (see 40 CFR 261.4(a)(23)(i)).

Used, Broken CRTs

Under today's rule, used, broken CRTs (those whose vacuum has been released) are not solid wastes when sent for recycling that occurs within the United States if they are packaged and labeled or if they are stored in a building (see §§ 261.4(a)(23)(iii) and 261.39(a)(1)–(3)). Like used, intact CRTs, they may not be speculatively accumulated (see § 261.39(a)(4)).

Requirements for CRT Processing

Today's rule provides that to qualify for the exclusion from the definition of solid waste, CRT glass processing as defined in 40 CFR 260.10 must take place in a building, and no activities may be performed that use temperatures high enough to volatilize lead (see 40 CFR 261.39(b)).

Processed CRT Glass

Under today's rule, processed CRT glass (glass removed from CRTs) that is sent to a CRT glass manufacturer or a lead smelter is not a solid waste, unless it is speculatively accumulated (see 40 CFR 261.39(c)). If it is sent to other types of recycling, it may be excluded from the definition of solid waste if it meets the criteria of 40 CFR 261.2(e)(ii). All processed CRT glass legitimately used in a manner constituting disposal must be packaged and labeled and must also comply with the applicable requirements of 40 CFR part 266, subpart C (see 40 CFR 261.39(a)(1)–(4) and (d)). Subpart C applies to recycled materials placed on the land.

D. Exports of Used CRTs

Under today's rule, used, intact CRTs exported for recycling are not solid wastes provided they are not speculatively accumulated and provided the exporter notifies EPA of the export and receives a subsequent written consent from the receiving country allowing the CRTs to be imported for recycling (see 40 CFR 261.40 and 261.39(a)(5)). Used, broken CRTs exported for recycling are not solid wastes provided the exporters comply with the same notification and consent requirements applicable to used, intact CRTs. They must also be packaged and labeled, and they may not be speculatively accumulated (see § 261.39(a)(5) and (a)(1)–(4)).

Today's rule also provides that used intact CRTs exported for reuse are not solid wastes if the exporter sends a one-time notification to the EPA Regional Administrator. The notification must contain a statement that the notifier plans to export used, intact CRTs for reuse, as well as contact information (see § 261.41).

E. Disposal of CRTs

Today's rule clarifies that if a person (other than a household) decides to send used or unused CRTs directly to a landfill or incinerator, that person

would be considered the generator of a solid waste. The person making the decision must determine if the CRTs exhibit a hazardous waste characteristic under 40 CFR part 261, subpart C, either testing the CRTs or using process knowledge to make this determination. If the used or unused CRTs are determined to be hazardous and if a decision is made to dispose of them, the non-residential user, reseller, or manufacturer must comply with all applicable hazardous waste generator requirements of 40 CFR part 262. If hazardous waste CRTs are shipped to a hazardous waste landfill, they must also comply with applicable land disposal restrictions (LDRs). LDRs do not apply to CRTs generated by households or CESQGs. For a more complete description of disposal requirements for CRTs, see the proposal at 47 FR 40512.

In addition, we note the possibility of conducting research and development on CRT-related disposal and recycling technologies pursuant to the treatability study exemption under 40 CFR 261.4(e) and (f). The exemption allows researchers to store and use up to 1000 kg. of non-acute hazardous waste without triggering most Subtitle C requirements. In treatability studies, a hazardous waste is subjected to a treatment process to determine whether the waste is amenable to a treatment process, what pretreatment (if any is required), optimal process conditions, treatment process efficiency, and characteristics and volumes of residues (see 40 CFR 260.10). Examples of treatability studies that could fall under this exemption include physical, chemical, biological, or thermal treatment, solidification, volume or toxicity reduction, and recycling feasibility (see 53 FR 27290, 27293, July 19, 1988).

F. Circuit Boards

In 1992, the Agency issued a memorandum to its EPA Regional Waste Management Directors stating that used whole circuit boards are considered to be scrap metal when sent for reclamation, and therefore exempt from regulation under RCRA. The Agency also addressed circuit boards in the Land Disposal Restrictions Phase IV rulemaking (see 62 FR 25998, May 12, 1997). In that rulemaking, the Agency provided an exclusion from the definition of solid waste at 40 CFR 261.4(a)(14) for shredded circuit boards being reclaimed, provided they are stored in containers sufficient to prevent a release to the environment prior to recovery and provided they are free of mercury switches, mercury relays, nickel-cadmium batteries and lithium batteries.

Subsequently, on May 26, 1998 (63 FR 28556), the Agency clarified that the scrap metal exemption applies to whole used circuit boards that contain minor battery or mercury switch components and that are sent for continued use, reuse, or recovery. In that notice, EPA stated that it was not the Agency's intent to regulate under RCRA circuit boards containing minimal quantities of mercury and batteries that are protectively packaged to minimize dispersion of metal constituents. However, once these materials are removed from the boards, they become a newly generated waste subject to a hazardous waste determination. If they meet the criteria to be classified as a hazardous waste, they must be handled as hazardous waste; otherwise they must be managed as a solid waste.

G. Other Electronic Material

With respect to non-CRT electronic materials, the Agency uses the same line of reasoning that is outlined above for CRTs to determine that the materials are not solid wastes if they are reused or only require repair and are not sent for processing or reclamation. That is, if an original user sends electronic materials to a reseller because he lacks the specialized knowledge needed to determine whether the units can be reused as products, the original user is not a RCRA generator. The materials are not considered solid wastes until a decision is made to recycle them in other ways or dispose of them.

III. Background

Under Subtitle C of RCRA, a solid waste is a hazardous waste if it exhibits one or more of the characteristics of ignitability, corrosivity, reactivity, or toxicity in 40 CFR part 261, subpart C, or if it is a listed hazardous waste in 40 CFR part 261, subpart D. The RCRA regulations set forth requirements for hazardous waste generators, transporters, and owners and operators of treatment, storage, and disposal facilities (TSDFs). Generators are required to determine whether their waste is hazardous, either by testing the waste or applying their knowledge of the waste in light of the materials or processes used (see 40 CFR 262.11). EPA regulations also contain exclusions for certain materials from the definition of solid waste or hazardous waste (40 CFR 261.4(a) and (b)). In addition, the Agency has developed streamlined rules for particular wastes, including recyclable wastes (40 CFR part 266) and universal wastes such as batteries, pesticides, mercury-containing equipment, and lamps that are widely generated by different industries (40 CFR part 273).

CRTs are vacuum tubes, made primarily of glass, which constitute the video display components of televisions, computer monitors, and other electronic devices. Other types of CRTs include medical, automotive, oscilloscope, appliance, and military and control tower CRTs. A CRT is assembled into a monitor, which includes several other parts, such as a plastic cabinet, electromagnetic shields, circuit boards, connectors, and cabling. The preamble to the proposed rule provides more detailed information on the nature of the industry (see 67 FR 40509).

Manufacturers generally employ significant quantities of lead in the glass used to make color CRTs. Televisions and color computer monitors contain an average of four pounds of lead (the exact amount depends on the size and make). Lead is a toxic metal that can cause delayed neurological development in children and other adverse health effects in adults, including increased blood pressure, nephritis, and cerebro-vascular disease. It is reasonably anticipated to be a human carcinogen. See, e.g., Iris Database Toxicity Profile No. 0277: Lead and Compounds (Inorganic), EPA 2004 [1] and 53 FR 31522, August 18, 1988. The amount of lead used by some manufacturers appears to be decreasing. However, according to recent studies performed at the University of Florida, most color CRTs leach lead in the TCLP test at concentrations above the TC regulatory level of 5 milligrams per liter (mg/l). In one study, Musson *et al.* (2000) found that 21 of 30 color CRTs tested exceeded the TC value, with an average lead level of 22.2 mg/l in TCLP leachate.[2] In a 2004 study,[3] the average concentration of lead in leach tests of color computer

[1] *http://www.epa.gov/iris/subst/0277.htm.*

[2] Characterization of Lead Leachability from Cathode Ray Tubes Using the Toxicity Characteristic Leaching Procedure, Stephen Musson et al., Department of Environmental Engineering Sciences, University of Florida, Environmental Science and Technology, Vol. 34, no. 20, 2000. The investigators in this study also believed that variability in the subsampling technique used in the study (neck, funnel and face glass were all tested separately) led to an underestimate of lead leachability. Additional testing showed that the glass frit used to seal the face to the funnel, and which has a very high total lead concentration, was undersampled. The investigators concluded that CRT subsampling that included a representative amount of the frit would have resulted in all 30 of the color CRTs exceeding the TC regulatory value of 5 mg/l in the TCLP.

[3] *www.ees.ufl.edu/homepp/townsend/Research/ElectronicLeaching/default.asp.*

monitors [4] was 47.7 mg/l. These levels are considerably above the toxicity characteristic regulatory level of 5 mg/l that is used to classify lead-containing wastes as hazardous (40 CFR 261.24(b)). This result is not surprising because CRT glass generally accounts for over 60 percent of the weight of the monitor. The 2000 Musson *et al.* study also showed that for monochrome CRTs, the average lead leachate concentration was 0.03 mg/l. These data appear to indicate that black and white monitors do not generally fail the TC. Other hazardous constituents sometimes present in CRT glass are mercury, cadmium, and arsenic. However, these constituents are found in very low concentrations that are unlikely to exceed the TC concentration limits.

From 1994 through 1998, EPA's Common Sense Initiative (CSI) explored the environmental regulation of six industry sectors and looked for ways to make environmental regulation ''cleaner, cheaper, and smarter''. The CSI Computers and Electronics Subcommittee (CES) formed a workgroup to examine regulatory barriers to pollution prevention and electronic waste recycling. The workgroup explored the problems of managing mounting volumes of outdated computer and electronics equipment.

As a result of the finding of the CES Subcommittee, the CSI Council issued a document titled *Recommendation on Cathode Ray Tube (CRT) Glass-to-Glass Recycling.* In this document, the Council recommended streamlined regulatory requirements for CRTs to encourage recycling and better management. The recommendations included streamlined requirements for packaging, labeling, and transportation; general performance standards for glass processors; and export provisions. The CSI Council also recommended an exclusion from the definition of solid waste for processed glass that is used to make new CRT glass.

Since the recommendations of the CRT Council, the recycling of CRTs and CRT glass has evolved and various stakeholders have made occasional suggestions to the Agency about how to address changing practices.

IV. Rationale for This Rule and Response to Comments

A. Used, Intact CRTs Sent for Recycling

Used, intact CRTs are CRTs remaining within the monitor whose vacuum has not been released. In its June 12, 2002 notice, the Agency proposed to exclude these materials from the definition of solid waste, unless they were disposed. These materials, when sent for recycling, would not have been subject to regulation under RCRA Subtitle C, including the speculative accumulation limits of 40 CFR 261.1(c)(8) (see also 40 CFR 261.2(c)(4)). Under the proposal, used, intact CRTs could therefore have been held for long periods of time without being considered abandoned and thereby becoming solid wastes.

EPA determined that intact CRTs are highly unlikely to release lead to the environment because the lead is contained in the plastic housing and the glass matrix (see 67 FR 40513). Because of this low likelihood of release, EPA proposed reduced requirements for used, intact CRTs by excluding them from the definition of solid waste. Unused CRTs are already considered commercial chemical products which are excluded from the definition of solid waste when recycled, even if they are reclaimed or speculatively accumulated (see 50 FR 14219, April 11, 1985). Used and unused intact CRTs are identical in appearance. Consequently, it would be difficult to distinguish between used and unused intact CRTs destined for recycling, and there appeared to be no environmental basis for such a distinction.

The Agency continues to believe that lead contained in used, intact CRTs is generally unlikely to be released to the environment. However, views expressed by commenters have led the Agency to change the proposed speculative accumulation requirements for these materials. Today's rule provides that used, intact CRTs are subject to the speculative accumulation requirements of 40 CFR 261.1(c)(8) if they are accumulated by glass processors or collectors (see 40 CFR 261.4(a)(23)(i)). Today's rule also modifies requirements applicable to used, intact CRTs that are exported. The export requirements are discussed in a separate section below. Following are the significant comments received, and our responses.

Response to Comments

Commenters were divided about imposing speculative accumulation requirements on used, intact CRTs. Some commenters supported our proposal to impose no accumulation limits on intact CRTs. These commenters claimed that intact CRTs being recycled were more commodity-like than waste-like, and that there is virtually no possibility of environmental releases from intact CRTs. One commenter said that intact CRTs are likely to be stored in containers or buildings, at least while they have resale value.

Other commenters, particularly States, wanted to subject used, intact CRTs to the speculative accumulation provisions because they were concerned about the possibility of abandonment. However, one commenter stated that this problem might be better addressed under state solid waste authorities than under federal law.

The Agency agrees with those commenters who expressed concern about potential abandonment of used, intact CRTs, particularly by glass processors and by persons who collect CRTs for recycling. Although broken CRTs and processed CRT glass are likely to pose a greater immediate risk of environmental releases, we believe that this possibility also exists for intact CRTs that are stored for long periods of time, particularly if a collector of such materials abandons them instead of sending them for recycling. Such indefinite storage, in the Agency's view, indicates that the materials are waste-like rather than commodity-like in nature.

EPA has also reconsidered its earlier statement that it is very difficult to distinguish between unused and used intact CRTs. The two types of materials are not normally stored together. Unused intact CRTs are generally returned to the manufacturer by consumers or retailers, after which they are sent directly to recyclers. Prolonged storage of unused intact CRTs by consumers, retailers, or manufacturers is unlikely.

Nor do we agree with the commenter who stated that speculative accumulation is better addressed by state solid waste authorities, rather than

[4] The data in this study were generated using a modified version of EPA's TCLP. The authors used a modified TCLP because standard TCLP particle size reduction and waste subsampling for debris-like materials can pose difficulties. In the ''Large Scale Leaching Procedure,'' the computer monitor or television was disassembled and all the parts placed in a large leaching vessel without particle size reduction. Other aspects of the standard TCLP test design (e.g., the 20:1 liquid-solid ratio) were maintained. Particle size reduction is intended to simulate the physical breakdown of wastes over time, and also facilitate achieving equilibrium in an 18-hour leaching period. Such reduction typically increases the leaching of metals in the TCLP, because it increases the surface area exposed to the leaching fluid. However, Townsend showed earlier in this same paper that when the waste contains a significant amount of iron, particle size reduction facilitates iron oxidation and the formation of binding sites on the iron. These oxidized iron binding sites adsorb metals from the leaching solution and can result in lower leaching of metals in the TCLP. However, the CRTs from computers and color televisions contained only small amounts of iron (3% and 6% of the total, respectively) and the authors concluded that the presence of the iron was not a significant factor in the overall results. The Agency agrees with these conclusions. We note that the regular, unmodified TCLP is still the legal standard for classifying materials as hazardous wastes.

federal law. Some state definitions of solid waste are based on the federal definition, and these States would find it more difficult to use their authorities to require removal of abandoned CRTs.

For these reasons, today's rule imposes the speculative accumulation requirements of 40 CFR 261.1(c)(8) on collectors of CRTs and glass processors (see 40 CFR 261.(a)(23)(i)). Speculative accumulation requirements also apply to used CRTs that are exported for recycling (see 40 CFR 261.4(a)(23)(ii) and 261.40)).

However, we are not imposing speculative accumulation requirements on persons who use computers or televisions and then send the intact CRTs to collectors and glass processors. Such persons are not likely to accumulate CRTs in circumstances that will lead to environmental releases, nor is there an economic incentive for them to store intact CRTs indefinitely. Because of the new speculative accumulation requirement, we have also added a definition of ''CRT collector'' to 40 CFR 260.10 (''a person who receives used, intact CRTs for recycling, repair, resale, or donation'').

B. Used, Broken CRTs Sent for Recycling

Labeling and Storage

Some users and collectors of CRTs separate the CRT from its housing and release the vacuum. They then send the monitor with its broken glass to a recycler (often a glass processor). This practice saves shipping costs and enables the glass processor to pay more for the broken CRTs received. At other times, the CRTs are first broken by the processor or other recycler. CRTs whose glass has been broken by releasing the vacuum are non-reusable and non-repairable and therefore could potentially be solid wastes at the time such breakage occurs.

In the proposal, EPA proposed to add a new section (40 CFR 261.39(a)) which provided that used, broken CRTs sent for recycling would not be solid wastes if they were stored in a building with a roof, floor, and walls, or if they were stored in a container (*i.e.*, a package or a vehicle) which was constructed, filled, and closed to minimize identifiable releases of CRT glass (including fine solid materials) to the environment. The containers were to be labeled or marked clearly with one of the following phrases: ''Waste cathode ray tube(s)—contains leaded glass,'' or ''Used cathode ray tube(s)—contains leaded glass.'' The containers must also be labeled ''do not mix with other glass materials.'' When transported, the broken CRTs would have had to be in a container meeting the conditions described above. Used, broken CRTs destined for recycling could not be speculatively accumulated as defined in 40 CFR 261.1(c)(8).

The Agency stated that, if these materials are properly containerized and labeled when stored or shipped prior to recycling, they resemble articles in commerce or commodities more than wastes. Breakage is a first step toward recycling the leaded glass components of the CRT. Also, materials held in conditions that safeguard against loss are more likely to be valuable commodities destined for legitimate recycling. In addition, the proposed packaging requirements would ensure that the possibility of releases to the environment from the broken CRTs is very low. For these reasons, an exclusion from the definition of solid waste was considered appropriate if the broken CRTs were handled under the conditions proposed.

The Agency has decided to promulgate the regulations applicable to storage and labeling of used, broken CRTs substantially as proposed. EPA has determined that used, broken CRTs are not solid wastes if they are sent for recycling within the United States under the conditions specified in 40 CFR 261.39(a)(1)–(4). However, the Agency has made certain modifications to the proposed conditions in response to comments received. These changes are described below. Today's rule also modifies the proposed requirements applicable to used, broken CRTs that are exported. The export requirements are discussed in a separate section below, along with requirements for imports.

Response to Comments

Several commenters suggested changes to our proposed labeling requirements for used, broken CRTs being transported or stored. Some commenters wanted requirements which they believed were more accurate or specific than the ones proposed. For example, under our proposal, processed glass going to certain types of recycling would have to be packaged and labeled identically to used, broken CRTs (see proposed 40 CFR 261.39(d), 47 FR 40525). One commenter pointed out that processed glass can no longer be considered a ''cathode ray tube.'' This commenter therefore suggested that applicable labeling requirements for processed glass be changed to ''processed cathode ray tube glass'' or ''glass removed from cathode ray tubes.'' Similarly, another commenter stated that used broken CRTs may be in such small pieces that the materials might not be recognizable as ''cathode ray tubes.'' This commenter suggested that a useful alternative requirement (which could be used in addition to our proposed language) would be to label containers of broken CRTs with the phrase ''leaded glass'' and some indication of the source of the glass—e.g., ''leaded glass from televisions.'' Another commenter pointed out that one of our proposed alternative labeling phrases (''waste cathode ray tubes—contains leaded glass'') was not necessary, since the cathode ray tubes would not be wastes if they were packaged and labeled in accordance with the regulations.

The Agency agrees that these suggestions are more accurate than our proposed regulations, and has modified the final rule accordingly. Section 261.39(a)(2) of today's rule specifies that each container in which a used, broken CRT is contained must be labeled or marked clearly with one of the following phrases: ''used cathode ray tubes—contains leaded glass'' or ''leaded glass from televisions or computers.''

One commenter urged complete flexibility in labeling requirements. Another suggested that the Agency not specify the exact wording of labels in the regulations, but instead should require that contents be ''marked with words that identify the contents of the containers.'' This latter commenter believed that labelers would then have more discretion and would not be subject to enforcement actions for failing to use the precise words specified in the regulations.

The Agency does not agree with these comments. Requiring no specified words or phrases for labeling in the regulations does not provide sufficient legal notice to either regulators or the regulated community, and could, if anything, lead to more enforcement actions than a precisely worded requirement.

Other commenters believed that several of our proposed requirements were unnecessary. For example, some commenters objected to EPA's proposed requirement that broken CRTs be stored either in a container or a building. One commenter believed that these materials should not be classified as solid wastes if they were stored on a concrete pad or the equivalent, since this practice should be adequate for a coarse solid material which is insoluble in water. Other commenters suggested replacing our proposed requirements with a requirement that storage of CRT glass must take place in ''environmentally contained areas (water and particle containment)'' or must be ''stored in a manner that meets other environmental

regulations that control or limit release to the environment.''

EPA disagrees with these comments. In the first place, storing broken CRTs outdoors prior to processing is inconsistent with the premise that these materials are commodity-like, because they can easily be damaged if exposed to excessive wind or moisture, unless they are packaged. Language requiring storage in ''environmentally contained areas'' is too vague to provide guidance to the regulated community on the measures required to ensure appropriate handling of commodity-like materials. Similarly, a requirement that materials be ''stored in a manner that meets other environmental regulations'' would be redundant, since they are required to comply with all applicable environmental regulations in any event. Therefore, the final rule does not contain these suggested requirements.

One commenter pointed out that containers holding used, broken CRTs may also hold other portions of electronic equipment such as the plastic housing that contains the CRT. This commenter requested that the Agency clarify that these other associated materials need not be segregated from CRTs during storage. We agree with this commenter that such segregation was not our intent and the rule does not require such segregation.

Speculative Accumulation

In our June 12, 2002 notice, we proposed to require that used, broken CRTs and processed CRT glass be subject to the speculative accumulation provisions of 40 CFR 261.1(c)(8). These provisions generally specify that materials are speculatively accumulated, unless 75 percent of the materials (calculated by weight or by volume) are recycled within a calendar year. We inquired whether a longer accumulation period (such as two or more years) should be provided for CRTs to allow recycling markets to grow, especially since there appeared to be few environmental concerns with storage if these materials are properly packaged and labeled. After evaluating comments received on this issue, we have decided to finalize the speculative accumulation requirements as proposed for used, broken CRTs and processed CRT glass. The comments received, and our responses, are described below.

Response to Comments

Some commenters (principally states) supported the current speculative accumulation provisions for broken CRTs (or, in some cases, the one-year accumulation period of the universal waste rule). These commenters were concerned about the possible environmental effects of a longer accumulation time, and generally believed that the one-year time frame allowed in 40 CFR 261.1(c)(8) was enough to accumulate sufficient quantities for recovery and find outlets for recycling.

Other commenters (generally representing industry) supported extending speculative accumulation requirements for broken CRTs. Some supported extensions of two or more years, and a few wanted no limits at all. These commenters argued that longer time limits would allow persons handling used CRTs to accumulate the materials in larger numbers, which would make shipping less expensive. They also believed that extended speculative accumulation times would allow markets to develop more fully, thus encouraging recycling.

EPA agrees with those commenters who stated that markets are likely to increase for CRT glass. Although some commenters were concerned about lack of markets, these commenters did not submit quantitative data that would be sufficient, in the Agency's view, to justify treating these materials differently from other materials that are excluded from the definition of solid waste on condition that they not be speculatively accumulated. We note that markets for all of these materials frequently fluctuate. For these reasons, we believe that used broken CRTs and processed CRT glass should be subject to the usual requirements that they not be speculatively accumulated.

One commenter suggested extending the speculative accumulation period for processed glass, stating that processed glass must sometimes be stored at glass manufacturing facilities for long periods of time due to the lack of current need for glass with the particular lead content found in the stored glass. However, another commenter supported the use of variances under 40 CFR 260.30(a) to extend accumulation times when necessary for persons developing new glass technologies. We agree with this commenter. Such variances are available on a case-by-case basis if the applicant can demonstrate that sufficient amounts of the material in question can be recycled or transferred for recycling within the following year. The variances can be renewed annually by filing a new application. We note that these variances are available not only to glass processors and to persons developing new glass technologies, but also to any person storing used CRTs who needs additional storage time. Because they are site-specific and allow individual circumstances to be taken into account, the variances are more appropriate than an extension covering many different kinds of facilities.

One commenter stated that since most facilities will rarely encounter broken CRTs, it would be burdensome to try to distinguish them from intact CRTs; therefore, they should be subject to the same speculative accumulation requirements. EPA does not agree with this commenter. If CRTs are to be recycled, they must be broken at some point in order to be disassembled. Nor is it difficult to determine visually whether the vacuum tube on a CRT has been released. In any event, we note that the importance of distinguishing between broken and intact CRTs is not relevant for purposes of speculative accumulation, since under today's rule both are subject to the requirements of 40 CFR 261.1(c)(8).

Another commenter stated that the purpose of the original speculative accumulation provisions was to alleviate concerns about sham recycling and to provide a way to determine storage periods and turnover rates for materials that did not have well-defined markets. Since there are current markets for CRT glass, this commenter reasoned that the speculative accumulation provisions should not apply to these materials. We disagree with this commenter; the speculative accumulation provisions have never been limited to materials with particular types of markets. In any event, markets for most commodities usually change over time.

A few commenters suggested a period shorter than one year for accumulation of used CRTs. Two commenters said that 180 days should be sufficient to allow CRTs to be recycled, and that longer periods could encourage sham operations. These commenters who suggested shorter accumulation times, such as 180 days, did not submit data indicating that CRTs could be effectively recycled in such a short time period. Therefore, we are not adopting these suggestions.

EPA notes that a few commenters may have been confused about the relationship between the current speculative accumulation provisions and the classification of CRTs as solid wastes. The speculative accumulation provisions apply to materials that are not solid wastes at the beginning of the accumulation period; if they are not recycled in sufficient quantities within the specified period, they become solid wastes (and, if they are hazardous waste, subject to all applicable Subtitle C requirements). If used CRTs were classified as spent materials as soon as they were taken out of service, they

would instead be subject to the shorter accumulation times (90 or 180–270 days) allowed for generators of hazardous wastes pursuant to 40 CFR 262.34, rather than the one-year period allowed under 40 CFR 261.1(c)(8).

Use Constituting Disposal

In our June 12, 2002 notice, we proposed a condition prohibiting land placement of processed CRT glass, unless it met the use constituting disposal requirements of Part 266, Subpart C. We solicited comment on whether to impose the same prohibition on broken CRTs as well. We asked for information about the current uses for broken CRTs or processed CRT glass that involved use constituting disposal. We received very little data on this issue, although a few commenters mentioned the use of processed glass in road building materials. Because we have no information about this practice that would justify distinguishing it from use constituting disposal of processed CRT glass, today's rule imposes the same prohibition on both kinds of materials (see 40 CFR 261.39(a)(4) and (d)). We also note that for materials to be used in a manner constituting disposal, such recycling must be legitimate rather than a form of treatment. For guidance in determining such legitimacy, see the Memorandum entitled ''F006 Recycling'' from Sylvia K. Lowrance to Hazardous Waste Division Directors, April 26, 1989.

C. Used CRT Processing

Requirements for CRT Processors

The Agency also proposed an exclusion from the definition of solid waste for used CRTs undergoing glass processing, if certain conditions were met (see proposed 40 CFR 261.39(b)). CRT glass processing was defined in proposed 40 CFR 260.10 as the receiving of intact or broken used CRTs, intentionally breaking them, sorting or otherwise managing glass removed from CRT monitors, and cleaning coatings from the glass. CRT users and collectors sometimes break CRTs before sending them to a processor. Therefore, under the proposal, breaking used CRTs would not by itself subject a facility to the CRT glass processing conditions. In order to be classified as a CRT glass processor, the facility would have to perform all of the enumerated activities.

Under the proposal, used, broken CRTs undergoing glass processing would not have been solid wastes if they were stored in a building with a roof, floor, and walls. If they were not stored inside a building, they would have to be packaged and labeled under conditions identical to those proposed for used, broken CRTs prior to processing, including the prohibition on speculative accumulation. All glass processing activities would have to be conducted in a building with a roof, floor, and walls. In addition, no activities could be performed during glass processing that used temperatures high enough to volatilize lead from CRTs.

The CSI Council had recommended that glass processors install and maintain systems sufficient to minimize releases of glass and glass particulates via wind dispersal, runoff, and direct releases to soil. We solicited comment in the proposal on whether to require additional performance standards for glass processors. However, we did not propose the general performance standard recommended by the CSI Council, citing the Council's statement that storing broken CRTs and CRT glass in buildings or closed containers (as we proposed) were examples of ways to control wind dispersal, runoff, and direct releases to soil.

We also did not propose the CSI Council recommendation that glass processors implement a procedure for advising local communities of the nature of their activities, including the potential for resident and worker exposure to lead or chemical coatings. We stated our belief that matters of local notice and public participation are generally best decided at the state, county, or municipal level. However, we solicited comment on whether to require such procedures under federal regulations in the case of CRT recycling, and the reasons why these procedures would be needed.

EPA stated, at the time of proposal, that the conditions proposed for used, broken CRTs being processed indicate that the materials in question are more commodity-like than waste-like. Used, broken CRTs that are not managed in accordance with these requirements would not be valuable, product-like materials. The opportunity for loss or releases of the materials would indicate that they are wastes. As specifically recommended by the CSI Council, we also proposed that processors be required to conduct their activities without using temperatures high enough to volatilize lead from broken CRTs. Besides increasing the risk of releases to the environment, such practices could be a sign of waste management rather than production.

EPA has determined that used, broken CRTs being processed under these conditions resemble commodities more than wastes. For this reason, we are finalizing these conditions substantially as proposed. However, we have revised some of our proposed language in response to comments received. Significant comments, our responses, and the changes are discussed below.

Response to Comments

Several commenters believed that our proposed temperature requirement was unnecessary, noting that workers' exposure to lead was already covered by OSHA requirements at 29 CFR part 1910, and that a high temperature (or thermal processing) is not by itself an indication that waste management is occurring. Several commenters stated that lead volatilization and other lead releases would also be covered by applicable provisions of the Clean Air Act and the Clean Water Act. Other commenters supported the proposed temperature requirements, in part because they believed that use of high temperature requirements are in fact an indication of waste management. Some commenters asked EPA to specify a particular temperature, beyond which processing would be prohibited.

EPA agrees with those commenters who believed that CRT processing conducted with high temperatures may indicate waste management, because high temperatures are more likely to release lead and other contaminants into the environment, thereby leading to possible loss of materials. Such waste management could occur even if OSHA requirements apply. We are therefore retaining our prohibition on using temperatures high enough to volatilize lead, as proposed. However, we are not adding a specific temperature to the prohibition because the relevant scientific literature reveals differing temperatures for volatilization of lead, possibly depending on various conditions (see, e.g., Volatilization Studies of a Lanthanide Lead Borosilicate Glass, WSRC–MS–98–00240, R.F. Schumacher, D.S. McIntyre, D.K. Peeler, J.M. Parteizs; [5] and Effect of Heating on the Sintering Behavior and the Piezoelectric Properties of Lead Zirconate Titnate Ceramics, Jungho Ryu, Jong-Jin Choi, and Hyoun-EeKim, Journal of the American Ceramic Society, Vol. 84, No. 4, pp. 902–904, April 2001). We therefore believe that this requirement is more appropriately expressed as a performance standard than as a numeric value.

Some commenters mistakenly thought that the proposed temperature requirement would apply to ''end users'' of recycled CRT glass such as glass furnaces or smelters. One commenter

[5] *http://sti.srs.gov/fulltext/ms9800240/ms9800240.html.*

asked EPA to impose a performance standard on both CRT processors and glass manufacturers (and presumably smelters as well) that would ensure that no temperatures would be employed that released toxic metals into the work environment or the surrounding air. Another commenter suggested requiring that CRT processors be required to monitor for fugitive emissions of lead, silica, and mercury. The Agency does not agree with those commenters who suggested additional requirements for glass manufacturers and smelters, or emissions monitoring for CRT processors. EPA did not solicit comment on any of these measures and they are inappropriate for commodity-like materials. They could also be duplicative of requirements that are already applicable under OSHA, the Clean Air Act, the Clean Water Act, and RCRA.

One commenter stated that EPA's proposed requirement that CRTs undergoing processing be stored (unless packaged) in a building ''with a roof, floor, and walls'' could lead to placing CRTs in locations with inadequate containment. This commenter suggested replacing the Agency's proposed requirement with a provision calling for ''storage within a permanently constructed building consisting of at least a roof and three walls permanently affixed to an impermeable floor placed on the ground.''

We remain unconvinced that such requirements are necessary for buildings where CRTs are processed. For example, it is not clear that CRT processing would pose environmental risks (or that CRTs would be handled as wastes instead of commodities) if such processing work took place in a temporary building, since no liquids are involved in the processing. We also note that spills or releases would in any event be considered solid wastes.

One commenter disagreed with EPA's statement in our proposal that persons who break CRTs before sending them to processors should not be subject to our proposed conditions for CRT glass processing. Breaking CRTs and separating components constitute reclamation and should require a permit, according to this commenter.

EPA disagrees that breaking CRTs and separating components should require a permit. These actions may be performed by almost anyone sending a CRT to a recycler. The requirements of 40 CFR 261.39(a) concerning storage, transportation, labeling, and speculative accumulation are adequate to ensure that broken CRTs are handled as commodities; there is no need to impose other subtitle C requirements required under 40 CFR parts 264 and 265. Nor is there a need to subject persons who merely break CRTs to the provisions concerning high temperature activities. The Agency does not necessarily disagree with the commenter that breaking CRTs and separating the components constitutes reclamation. Nevertheless, when a person receives broken CRTs that are packaged and labeled in accordance with today's rule, the materials are commodity-like and the person or facility in question should not have to comply with the provisions of a hazardous waste storage permit. Moreover, EPA generally does not regulate reclamation processes themselves. States are of course free to impose more stringent requirements if they believe such requirements are justified.

Some commenters urged that EPA impose environmental management standards, emissions and ventilation standards, notification requirements, recordkeeping and tracking of wastes, employee training, and worker health and safety protections. Some of these commenters suggested that these requirements should also be applicable to persons sending CRTs for recycling, as well as processors. Some suggestions were substantially identical to certain practices required under the universal waste rule, such as employee training, container standards, notification, and tracking. Other commenters, however, suggested requirements that were much more stringent than those applicable to universal waste handlers. For example, a few commenters said that additional worker health and safety provisions were needed under our rule, and one commenter expressed concerns that the OSHA permissible exposure limits (PELs) at 29 CFR part 1910 do not apply to handlers of materials that are not solid wastes.

We have responded elsewhere in this notice to those commenters who argued that the Agency should impose the universal waste requirements of notification, tracking, and employee training on CRT processors. With respect to OSHA requirements, we disagree with the commenter who said that the worker health and safety provisions of that statute do not apply to people handling materials that are not solid wastes; the permissible exposure limits (PELs) of section 1910 of the OSHA regulations are not tied to EPA's RCRA definitions. Additional worker health and safety requirements are not necessary.

Some commenters, on the other hand, believed that several of our proposed requirements were unnecessary. For example, some commenters objected to EPA's proposed requirement that broken CRTs be stored either in a container or a building. One commenter believed that these materials should not be classified as solid wastes if they were stored on a concrete pad or the equivalent, since this practice should be adequate for a coarse solid material which is insoluble in water. We continue to believe, however, that storing broken CRTs outdoors prior to processing is inconsistent with the premise that they are commodity-like, since they can easily be damaged by excessive moisture or wind unless they are packaged. The same is true for processing CRTs outdoors, even if the processing takes place on a concrete pad. However, we note that under today's rule, intact CRTs may be stored on concrete pads or on the ground without packaging and labeling (see 40 CFR 261.4(a)(23)). In the case of intact CRTs, packaging or storage in a building is generally not necessary to minimize releases to the environment, since the CRTs are contained in their housing. However, if prolonged storage outdoors renders the CRTs unfit for recycling, they would become solid wastes, subject to full Subtitle C regulation provided they were also hazardous wastes. In addition, the exclusion in today's rule does not affect the obligation to respond to and remediate any releases of hazardous wastes that may occur.

Other commenters suggested replacing our proposed requirements with a requirement that processing and storage of CRT glass must take place in ''environmentally contained areas (water and particle containment)'' or must be ''stored in a manner that meets other environmental regulations that control or limit release to the environment.'' EPA disagrees with this suggestion because requiring processing to be conducted in ''environmentally contained areas'' is too vague to provide guidance to the regulated community on the measures required to ensure that they are handled in a commodity-like manner. Similarly, a requirement that materials be ''stored in a manner that meets other environmental regulations'' would be redundant, since they are required to meet other applicable environmental regulations in any event.

With respect to public notice requirements (which we did not propose), many commenters argued that such notice for CRT processing operations should be conducted pursuant to pre-existing state and local requirements, and should not be imposed as a function of our proposed conditional exclusion. Some commenters pointed out that local notice and public meetings are governed

by various state or local requirements concerning siting, zoning, or licensing. They believed that matters of local notice and public participation are generally best decided at the state, county, or municipal level. One commenter pointed out that additional opportunities for public involvement are also afforded under existing federal laws, such as the Emergency Planning and Community Right-to-Know Act and, in the case of potential worker exposures, the Occupational Safety and Health Act. This commenter feared that imposing additional requirements for public notice could increase costs for CRT processors, thereby undermining the goal of CRT recycling.

Other commenters, however, supported the CSI Council recommendation that glass processors be required to notify local communities of their activities. They thought that a federal public notice requirement was important for the health and well-being of communities that house CRT glass processors. They also believed that workers at these facilities should know of any health or safety risks involved with their daily activities. One commenter stated that it was not sufficient to defer to local authority to provide notice, and that such notice was a federal responsibility that must be retained.

In response to these comments, EPA continues to believe that federal public notice requirements for CRT recycling are unnecessary. In general, we have not mandated such requirements for hazardous waste recycling facilities, unless they obtain RCRA permits for storage of hazardous waste prior to recycling. Since glass processors are managing materials that are commodity-like if handled pursuant to today's conditions, it would be inappropriate to impose the same public notice requirements that are imposed on facilities that store hazardous wastes. In addition, the public may learn of these facilities through other notices or filings at the state, county, or municipal level.

Some commenters appeared to believe (incorrectly) that our proposal would have required processed glass to be packaged or stored in a building. However, we note that under the proposal (and under today's final rule) processed CRT glass sent to a CRT glass manufacturer or to a lead smelter would not have to be either packaged or stored in a building (see 40 CFR 261.39(c)). Under today's final rule, processed glass sent to other kinds of recycling need not be packaged or labeled if it is legitimately reused as an effective substitute for a commercial chemical product (this exclusion is explained further later in today's notice).

Even though we are not significantly modifying our proposed requirements for glass processors, we believe that some of our proposed language could benefit from clarification. We are therefore revising some of this language. First, we note that the proposed storage requirements for broken CRTs prior to processing (storage in a building or in a properly labeled container) would also have applied under our proposal to CRTs actually undergoing processing. This application was not our intent because CRTs cannot physically remain in a container while being processed. Therefore, we are revising proposed 40 CFR 261.39(b) to remove the reference to labeling and placement in a container. Used broken CRTs undergoing processing need only be stored in a building, and may not be speculatively accumulated.

Second, we note that one of the activities encompassed in today's definition of ''CRT processing'' at 40 CFR 260.10 (''receiving broken or intact CRTs'') generally need not (and sometimes cannot) take place in a building. We are therefore removing our proposed requirement that all CRTs be ''processed within a building.'' Instead, today's rule requires that ''all activities specified in paragraphs (2) and (3) of the definition of ''CRT processing'' in 40 CFR 260.10 must take place within a building.'' This means that only breaking or separating CRTs, or sorting or otherwise managing glass removed from CRT monitors, must be performed in a building. Actual receipt of the CRTs may occur outside.

Exclusions for Processed CRT Glass

Under the proposal, processed glass from used CRTs would be excluded from the definition of solid waste if it were sent for recycling to a CRT glass manufacturer or a lead smelter (40 CFR 261.39(c)). If it were sent to any other kind of recycling, it would be excluded if it were stored, labeled, and transported similarly to used, broken CRTs (40 CFR 261.39(d)). In neither case could the processed glass be speculatively accumulated. If it were used in a manner constituting disposal, all processed glass from used CRTs would have to comply with the storage, labeling, and transportation requirements applicable to used, broken CRTs and the applicable requirements of 40 CFR part 266, subpart C.

In the proposal, we explained that processed glass from used CRTs destined for a CRT glass manufacturer or a lead smelter meets the regulatory criteria in 40 CFR 260.31(c) for a variance from the definition of solid waste. Accordingly, the Agency decided that the resulting material is commodity-like and should be excluded from the definition of solid waste. In particular, the Agency tentatively found that processed CRT glass sent to glass manufacturers or lead smelters needs minimal further processing and has economic value and strong end markets. We also found that processed CRT glass is similar to materials that glass manufacturers and lead smelters use as feedstock, and that it is handled to minimize loss. For a more complete discussion of these criteria and the Agency's findings, see the proposal at 67 FR 40514. As noted below, no comments on these findings have caused the Agency to change them, so we are adopting them as final. We also believe that recycling CRT glass at lead smelters appears to be just as legitimate as glass-to-glass recycling, and that an exclusion for this material could turn out to be useful if the growing use of flat screens decreases the potential for glass-to-glass recycling.

The Agency solicited comment on whether processed glass destined for lead smelters should be eligible for the exclusion. Processed glass is sent to lead smelters for reclamation of lead and also for use as a flux agent (to promote fusing of metals or to prevent the formation of oxides). The Agency also solicited comment on whether to exclude processed glass from the definition of solid waste without packaging and labeling requirements if it were sent to copper smelters for use as a flux agent. In addition, we solicited comment on an identical exclusion for processed glass sent for recycling into other glass materials, such as optical beads, decorative objects, radiation shielding materials, and acoustic barriers. We requested information from commenters about whether processed CRT glass sent for these glass uses or to copper smelters was commodity-like.

After evaluating all comments received, the Agency is retaining our exclusion for processed CRT glass sent to glass-to-glass manufacturers and lead smelters as proposed. Processed glass sent to copper smelters and other glass uses is not a solid waste if it is legitimately used or reused without reclamation as an effective substitute for a commercial product, or as an ingredient in an industrial process to make a product pursuant to 40 CFR 261.2(e)(1)(i) or (ii)). Processed glass sent for any of these types of recycling may not be speculatively accumulated. If it is used in a manner constituting disposal, all processed glass from used CRTs must comply with the storage,

labeling, and transportation requirements applicable to used, broken CRTs and the applicable requirements of 40 CFR part 266, subpart C. In order to be eligible for today's exclusion, importers of processed glass from used CRTs must comply with these requirements as soon as these materials enter the United States.

The significant comments received on this issue and our response to them are described below.

Response to Comments

Commenters who addressed the issue of CRT glass sent to lead smelters generally supported our proposed exclusion from the definition of solid waste for processed glass sent to this destination (without packaging and labeling requirements). These commenters thought that CRT glass sent to lead smelters (for reclamation and use as a flux agent) is commodity-like. Because the Agency agrees with these comments, and for the reasons stated in the proposal (see 67 FR 40514), we find that processed CRT glass is commodity-like and we are finalizing the exclusion at 40 CFR 261.39(c) as proposed.

One commenter believed that the Agency should allow processed glass to be sent to glass manufacturers or lead smelters without any conditions, including those for speculative accumulation. This commenter noted that processed glass sent for these uses already fit the criteria for a ''partially reclaimed'' variance from the definition of solid waste under 40 CFR 260.31(c); hence, no conditions should be required. The Agency disagrees with this commenter. Even if the processed glass meets the criteria for the variance in question, the speculative accumulation requirement is necessary to ensure that the materials are actually recycled and not abandoned. We also note that the conditions under which such variances are granted are site-specific and vary according to circumstances. They frequently include conditions relating to storage and land disposal.

A few other commenters believed that our proposed exclusions for processed CRT glass were unnecessary, since processed glass sent to a lead smelter is used directly as an ingredient in a production process, and would therefore qualify for the use/reuse exclusion at 40 CFR 261.2(e). Alternatively, they said that if reclamation is required, the glass would be a characteristic by-product destined for reclamation, which again would not be a waste, unless speculatively accumulated (see 40 CFR 261.2(c)(3) and (4)).

Although the Agency has not specifically addressed the regulatory status of processed CRT glass sent to smelters, we note that these commenters' interpretations do not appear to be consistent with previous regulatory interpretations or with regulatory definitions (see the Response to Comment document in the rulemaking record for further discussion of the regulatory interpretations and definitions). In any event, the more specific regulatory exclusions promulgated today for CRT glass provide greater clarity to the regulated community than the more general provisions cited by the commenter.

Some commenters, on the other hand, objected to allowing CRT glass to go to smelters without additional controls. One commenter cited financial and environmental problems caused by smelters located in the commenter's state, and another believed that CRT glass should be restricted from going to smelters because it could lead to an increase in lead air emissions or lead content in the slag from these facilities.

EPA does not agree with the commenter who cited general concerns about smelters as a rationale for restricting processed CRT glass sent to these facilities. The commenter was concerned about financial and environmental problems caused by smelters in one state and did not tie these concerns to the use of processed CRT glass. EPA believes that these concerns are outside the scope of this rulemaking, and that they should be addressed, if necessary, in the context of rulemakings applicable specifically to smelters.

Many commenters supported allowing a similar exclusion for processed glass sent to copper smelters. They pointed out that such glass is used as a flux agent in a very similar manner at copper smelters, and that it seems unjustified to impose different conditions on materials destined for virtually identical uses. One commenter noted that at least one copper smelter has product specifications for recycled flux materials spelled out in its authority to operate issued by the relevant government agency. The specification includes a minimum flux value and maximum contaminant level. The commenter stated that CRT glass met these criteria.

Another commenter pointed out that virgin copper concentrate already contains approximately 1% lead. Therefore, lead is a constituent that is already present in the copper smelting process and is already being managed in process residues. According to this commenter, the use of processed CRT glass will not significantly increase the amount of lead already resulting from the copper smelting process and being managed in the slag or air pollution control sludge.

Some commenters were also concerned about the capacity of CRT glass manufacturers to absorb the large volume of CRT glass that is generated in this country. They urged the Agency to take this concern into account and encourage recycling by allowing similar exclusions for processed CRT glass sent to glass manufacturing, lead smelting, or copper smelting.

The Agency agrees with those commenters who pointed out that the degree of processing that is required for use in a copper smelter appears to be the same as that required for use in a lead smelter. The economics also may be similar for fluxes used in both kinds of smelters. Processed glass is composed mainly of silica, which is useful as a flux, although lead is not recovered when CRT glass is used as a flux at a copper smelter. Nevertheless, the Agency has been unable to confirm that CRT glass is accepted at actual copper smelters. For this reason, we cannot currently make a finding that CRT glass sent to copper smelters is commodity-like, and we are not finalizing our proposed exclusion. However, we note that if the processed CRT glass were legitimately used or reused without reclamation 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)(ii) (see letter from Michael Shapiro to Christian Richter of the American Foundrymen's Society, March 8, 1995).

With respect to processed CRT glass sent for recycling into other glass uses, commenters were divided. Some believed that these uses were likely to be commodity-like; others disagreed. Commenters submitted very little data about these uses. Since the Agency has at present very little information about their status as commodities, we are not finalizing our proposed exclusion. However, similarly to the case of processed glass sent to copper smelters, if the glass is legitimately used or reused as an effective substitute for a commercial chemical product, or used as an ingredient in an industrial process to make a product (provided the materials are not being reclaimed), it could be excluded from the definition of solid waste under 40 CFR 261.2(e)(i) or (ii).

D. Exports and Imports

Under the June 12, 2002 proposal, exporters of used CRTs for reuse or

recycling would not have been required to submit any notifications prior to export. Processed glass imported into the United States would be excluded if it complied with the proposed conditions. Because the imported processed glass would not be a hazardous waste if it met the conditions of the exclusion, it would not be subject to the hazardous waste import requirements of subpart F of 40 CFR part 262. The CSI Council had recommended that entities exporting CRT and CRT glass be subject to various notice and consent provisions, depending on whether the CRT glass was coated or uncoated and on the destination of the materials (for a complete description of the CSI recommendations, see the proposal at 67 FR 40516). For example, the CSI Council recommended that CRTs and coated CRT glass should be subject to the same notice and consent provisions as exporters of hazardous waste in subparts E or H of 40 CFR part 262.

In our proposal, the Agency stated its belief that we did not have legal authority to require notification under 40 CFR part 262, subparts E and H, or the authority to require additional notifications, for CRTs or CRT glass that were not solid wastes because they were in compliance with our proposed conditions. We noted that if used CRTs were added to the universal waste program, we would have the authority to require notification at least for exported broken CRTs. We solicited comment on whether the need for export notification requirements recommended by the CSI would warrant adding used CRTs to the universal waste program, and whether these requirements would be unduly burdensome.

EPA's proposal elicited many comments and some additional data on the export of CRTs for recycling. These comments and data convinced us that exported CRTs often are not handled as valuable commodities. For this reason, we have reconsidered our earlier position about imposing notification requirements on exports. Therefore, today's rule requires exporters of CRTs for recycling to comply with the notice and consent requirements that are similar to those found in 40 CFR part 262, subparts E and H for exports of hazardous waste. The rule also requires exporters of CRTs for reuse to submit a one-time notification to EPA. In order to be eligible for today's exclusion, importers of used, broken CRTs must comply with the packaging, labeling, and speculative accumulation requirements of 40 CFR 261.39(a)(1)–(4) as soon as the materials enter the United States.

The new export requirements, significant comments received, and our responses to the comments are described in more detail below.

Response to Comments

Many commenters who addressed this question expressed concern about exporting CRTs and other electronics for recycling, especially to developing countries. These commenters argued that our proposed rule would exacerbate the effects of market dynamics, lack of existing regulatory controls, and the absence of a domestic recycling infrastructure and would increase the amount of electronic waste that is shipped abroad and managed inappropriately (see also the report entitled Exporting Harm: The High-Tech Trashing of Asia, prepared by the Basel Action Network and the Silicon Valley Toxics Coalition, February 25, 2002). One commenter further argued that our proposal would prevent the growth of a domestic electronics recycling industry by making it easier to export electronics.

To address such concerns, some commenters suggested that the Agency adopt notice and consent procedures for exported CRTs similar to those currently found at 40 CFR part 262, subparts E and H for exports of hazardous waste. Some of these commenters said that EPA should impose notification requirements on exported CRTs as an additional condition of the exclusion from the definition of solid waste. They believed that the Agency has adequate authority to impose such conditions without adding these materials to the universal waste rule.

After evaluating these comments, the Agency has decided to impose notice and consent requirements as a condition of today's exclusion from the definition of solid waste on CRTs exported for recycling. The comments, and data submitted by the commenters, have convinced us that unfettered export of CRTs for recycling could lead to environmental harm. Information in the record shows that exported electronics may not be handled as valuable commodities in foreign countries. In fact, there is documentation that they are sometimes managed so carelessly that they pose possible human health and environmental risks from such practices as open burning, land disposal, and dumping into rivers. Notice and consent requirements mean that the receiving country will be informed of the proposed export, after which the country may consent or not, based on its analysis of whether the receiving facility can properly recycle the CRTs as commodities in an environmentally sound manner. EPA has therefore decided to ensure that the importing countries are able to consent (or withhold consent) when CRTs are proposed to be recycled within their borders.

EPA believes that sections 2002, 3002, 3007, and 3017 of RCRA provide authority to impose this condition, because used CRTs sent abroad are sufficiently waste-like to justify this requirement, and because notice and consent help ensure that the CRTs are not discarded. We have therefore reconsidered our earlier position (discussed in the preamble of our proposed rule at 67 FR 40516) about imposing notice and consent requirements on CRTs exported for recycling. EPA has the authority to ensure that CRTs exported for recycling are handled in a manner consistent with commodity-like status.

EPA considered simply requiring exporters of CRTs for recycling to comply with the current notice and consent requirements in 40 CFR part 262. These requirements, however, rely on the hazardous waste manifest and other Subtitle C provisions that EPA is not imposing on used CRTs. Consequently, we are promulgating separate (although very similar) export requirements that will apply exclusively to conditionally exempt CRTs exported for recycling. In addition, the notice and consent requirements promulgated today do not apply to processed glass that is exported, since there is no information available to us indicating that this material is not handled as a commodity when exported.

Under today's rule, used CRTs exported for recycling are not solid wastes provided the exporter notifies EPA and obtains a subsequent written consent forwarded by EPA from the receiving country. The provisions that we are promulgating today in 40 CFR 261.39(a)(5)(i)–(ix) and 40 CFR 261.40 require exporters of used CRTs destined for recycling (whether broken or intact) to notify EPA of an intended export 60 days before the initial shipment is intended to be shipped off-site. The notification may cover export activities extending over a 12 month or shorter period. The notification must include contact information about the exporter and the recycler, including any alternate recycler. The notification must include a description of the manner in which the CRTs will be recycled. It must also include the frequency and rate at which CRTs will be exported, the period of time over which they will be exported, the means of transport, the estimated total quantity of CRTs, and information

about transit countries through which the CRTs will pass. Notifications must be sent to EPA's Office of Enforcement and Compliance Assurance, which will notify the receiving country and any transit countries. When the receiving country consents in writing to the receipt of the CRTs, EPA will forward the written consent to the exporter. The exporter may proceed with shipment only after he has received a copy of the written consent from EPA. If the receiving country does not consent 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. Exporters must keep copies of notifications and consents for a period of three years following receipt of the consent.

EPA has decided to require exporters of used, intact CRTs sent abroad for recycling to meet the same requirements as those applicable to exporters of used, broken CRTs. Although used, intact CRTs are more commodity-like than used, broken CRTs, they are more likely to be exported, and information in the record does not indicate that they are less likely to be discarded or handled as low-value materials abroad. We believe that used, intact CRTs are sufficiently waste-like when exported for recycling to be subject to a condition requiring notice and consent prior to export. Notice and consent help ensure that the CRTs are not discarded.

Some commenters urged EPA to forbid all exports of CRTs to developing countries. EPA does not agree with this suggestion because RCRA does not provide the authority to unconditionally ban exports of solid and hazardous wastes if the exporter complies with the existing regulatory requirements governing the export of these materials. We also disagree with this suggestion for practical reasons. Such a ban would prevent even the safe recycling of hazardous wastes abroad and would discourage resource recovery and reuse.

Some commenters believed that our proposed rule was inconsistent with various international agreements involving the export of hazardous waste. In particular, one commenter stated, the proposal is inconsistent with legal obligations under the treaty law of the Organization for Economic Cooperation and Development (OECD), the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and the Stockholm Declaration. As noted above, the Agency is sympathetic to concerns about the potential risks of exporting CRTs for recycling. Therefore, to ensure that CRTs exported for recycling are handled in a manner consistent with commodity-like status, we are requiring that these materials be subject to the notice and consent requirements described in detail above. We believe that these requirements address most of this commenter's concerns. The Response to Comment document in the record to this rulemaking addresses these concerns in more detail.

Other commenters argued that notice and consent requirements, besides being unnecessary, were likely to discourage the export of CRTs for desirable recycling by making such export more burdensome. Another commenter noted that glass recyclers need to sell recovered CRT glass to developing countries, because the volume of obsolete CRT equipment will increase just as the domestic demand for CRT glass parts will be reduced because of new technology such as flat panel screens.

We disagree with those commenters who said that an export notification and consent requirement would be burdensome. The Agency estimates that these requirements will impose a burden of approximately four hours per year (on average) per respondent. We believe that this burden is not excessive especially since it helps ensure that exported CRTs are handled in ways consistent with an exclusion from the definition of solid waste. We also do not believe that these requirements will significantly affect the quantity of CRTs or CRT glass exported for recycling, since the relative amount of such materials recycled domestically and abroad depend principally on other economic factors.

One commenter suggested (in lieu of a notice and consent procedure) that EPA require exporters to keep records, such as shipping papers, that would allow tracking of CRT shipments or the amount paid by the shipper for the material. The Agency has rejected this approach because it would not give notice to the receiving country, nor would it give the country the opportunity to refuse consent to a shipment. It is therefore not sufficient to ensure that the material is treated as a commodity. The receiving country should be notified to help ensure that the CRTs will be recycled in an environmentally sound manner. Requiring an exporter to show evidence of payment would not involve the receiving country, and would thus not be a sufficient requirement.

The Agency notes that intact CRTs exported for reuse are identical in appearance to those exported for recycling. Consequently, to help ensure that the intact CRTs are actually reused abroad, we are requiring persons who export used, intact CRTs for reuse to submit a one-time notification to the Regional Administrator with contact information and a statement that the notifier plans to export used, intact CRTs for reuse. These notifications will allow regulatory authorities to contact the notifier, when appropriate, to ask for verification that the CRTs are exported for reuse instead of recycling or disposal. These persons must keep copies of normal business records demonstrating that each shipment of exported CRTs will be reused, and this documentation must be retained for three years from the date the CRTs were exported. Examples of normal business records include those that document the transfer of used equipment to the consignee for reuse, including name and address of the consignee, description of the shipment, and conformance with any product specifications, as well as the amount paid (if any) for the exported material. We believe that our right to require such basic notification is inherent in our authority to regulate discarded materials, and in our RCRA section 3007 authority to obtain information pertaining to materials that may become solid or hazardous wastes. Because a one-time notification is adequate to give the Regional Administrator notice about persons who are exporting for reuse, additional notifications are not necessary each time CRTs are exported for this purpose.

E. Universal Waste

In our June 12, 2002 notice, the Agency proposed a conditional exclusion from the definition of solid waste for used CRTs and CRT glass being recycled. However, we also solicited comment on the alternative approach of adding these materials to the universal waste rule. In particular, we requested comment on whether various universal waste requirements would be appropriate or burdensome for glass processors, or collectors who send used CRTs or CRT glass to these processors. The universal waste requirements in question were employee training, notification of universal waste management activities, and tracking of shipments sent and received. After evaluating all comments, the Agency has decided to retain the proposed conditional exclusion from the definition of solid waste for used CRTs and processed CRT glass, instead of adding these materials to the universal waste rule. Significant comments, our responses, and the rationale for the final rule are explained below.

Response to Comments

Some states and many industry commenters (such as those from the electronics industry) supported the proposed conditional exclusion and did not want EPA to add used CRTs to the universal waste rule. These commenters agreed with the Agency that used CRTs, when managed under the proposed conditions, resemble commodities more than wastes. They argued that adding CRTs to the universal waste scheme would harm the developing infrastructure for electronics recycling by imposing greater burdens and reducing flexibility. According to these commenters, classifying CRTs as hazardous waste would create a ''stigma'' that would make retailers or collectors reluctant to participate in recycling programs. One state said that adding used CRTs to the universal waste rule would make virtually any business with computers or televisions a potential hazardous waste generator, with negative implications for program implementation and enforcement.

They also believed that the universal waste requirements mentioned above were unnecessary for used CRTs because these materials pose minimal environmental risks. A few commenters feared that glass processors could be classified as ''destination facilities'' which could possibly need a RCRA storage permit, thereby frustrating CRT recycling goals. Finally, they questioned whether processed glass met the criteria for addition to the universal waste rule because it is not ''widely generated.''

On the other hand, other commenters, including several states, supported these requirements and suggested that EPA add used CRTs to the universal waste rule. These commenters generally noted that CRTs fit the regulatory criteria for universal waste at 40 CFR part 273, and cited the familiarity of stakeholders with this rule. Some of these commenters argued that keeping CRTs within the universe of hazardous waste would ensure better oversight by regulatory authorities than would a conditional exclusion from the definition of solid waste.

One commenter pointed to the significant amounts of lead contained in many CRTs, and disputed the Agency's assertion that leaded glass from CRTs resembled a commodity more than a waste. This commenter believed that the universal waste rule would ensure more responsible management of such a potentially harmful substance. In particular, this commenter urged imposing the requirements in the universal waste rule for employee training, release response, packaging, labeling, notification, and accumulation time limits. Some states were also concerned about speculative accumulation, and supported the one-year accumulation limit for universal waste. Others preferred the universal waste requirements because 40 CFR 273.17 and 273.37 require universal waste handlers to contain all releases.

According to several commenters, the streamlined requirements of the universal waste rule would also encourage recycling. One commenter believed that adding CRTs to the universal waste rule would facilitate improved voluntary management of CRTs from households or CESQGs, since the universal waste rule specifically allows wastes from these sources to be managed as universal wastes.

After considering these comments, EPA has decided to finalize the proposed conditional exclusion from the definition of solid waste for CRTs and CRT glass being recycled. We agree with the commenters who pointed out that intact or broken CRTs largely fit the regulatory criteria for universal wastes (see 40 CFR 273.81). For example, they are frequently generated in a wide variety of settings and are present in significant volumes in the municipal wastestream. Commenters are also correct that stakeholders are familiar with the universal waste scheme, although they are also quite familiar with the concept of conditional exclusions. However, we disagree with the commenter who implied that the presence of lead in CRT glass prevents this material from being commodity-like. As discussed elsewhere in this notice, there are demonstrated markets for CRTs and CRT glass, and it is generally the presence of lead that contributes to its value to glass manufacturers and smelters. An exclusion is more suitable for materials that resemble commodities more than wastes, especially if conditions are promulgated to ensure that they will be stored and handled as objects of value. In support of our decision, we note that many of the provisions of the conditional exclusion are similar to the provisions suggested by commenters, and recommended by the CSI for CRTs sent for recycling. For example, the packaging and labeling requirements for CRTs are nearly identical. In addition, we are also imposing notice and consent requirements for CRTs exported for recycling, as would be required under the universal waste rule.

Although some commenters believed that regulating CRTs sent for recycling under the universal waste program would ensure greater regulatory oversight, materials destined for the types of recycling addressed in today's rule do not need as much regulatory oversight as other waste materials because, when handled consistently with the specified conditions, they are commodity-like. Furthermore, the requirements of the universal waste rule for employee training, notification of waste management activities, and tracking of shipments are not necessary as a matter of federal law for these materials, when they are not being sent for disposal. The packaging and labeling conditions for broken CRTs that are promulgated today will ensure that the possibility of releases to the environment is very low. In addition, intact CRTs sent for recycling also pose a minimal risk of releases while being transported, since the glass is unlikely to be released unless the vacuum is broken. Lead from CRTs is therefore not readily available to the environment as long as the CRTs are intact. Similarly, we note that under today's rule, the speculative accumulation requirements of 40 CFR 261.1(c)(8) apply to used CRTs (whether broken or intact) and processed CRT glass. These requirements will be as effective in preventing extended accumulation periods as the accumulation limits of 40 CFR 273.15 and 273.35. In addition, processed CRT glass sent for many kinds of recycling is commodity-like. This material fits the criteria for the variance from the definition of solid waste for ''partially reclaimed'' materials under 40 CFR 260.30(c) and 261.31(c) (see the discussion of this issue in the preamble to our proposal at 67 FR 40514). This variance is specifically designed for commodity-like materials. We agree with the commenter who noted that processed glass does not actually fit the regulatory criteria for the universal waste rule (because it is not widely generated by different types of facilities) and that glass processors might technically be considered destination facilities under the universal waste rule (because they are recyclers).

Under the universal waste approach, CRTs destined for recycling would still be classified as hazardous wastes, although subject to reduced regulation. We agree with those commenters who argued that in the case of CRTs, this classification could discourage recycling. We are concerned that nonprofit organizations might refuse to help collect used CRTs because of this hazardous waste classification. Without their participation, CRT recycling would be greatly inhibited.

A few commenters also believed that adding CRTs to the universal waste rule

would alleviate the need for our proposed distinctions between used and unused or intact and broken CRTs. The Agency does not agree with these commenters. Adding used CRTs to the universal waste rule would not eliminate the need for these distinctions. Unused, intact computers and televisions are often returned to the manufacturer, or they may be sold or donated for use. Long-standing rules define unused materials as products rather than wastes, and products would not be subject to the universal waste rule. Similarly, even if intact and broken CRTs were added to the universal waste rule, the same universal waste requirements would not be appropriate for both categories of materials, since there is a greater possibility of releases from broken CRTs.

It is true that 40 CFR 273.17 and 273.37 require universal waste handlers to contain all releases. Under a conditional exclusion, on the other hand, if a person failed to respond to a release, EPA or the State could take action, including an enforcement action, which is a reactive rather than preventive measure. However, in the case of CRTs and CRT glass, the possibility of immediate environmental harm from a release is expected to be sufficiently low to be outweighed by the benefits from fostering increased recycling.

Some commenters urged us to adopt the universal waste approach because, unlike the conditional exclusion approach, it does not require use of the hazardous waste manifest for materials sent to disposal. Existing universal waste rules are intended to promote safer disposal of waste generated by households and small quantity generators, who are currently exempt from Subtitle C regulation. These commenters wanted this benefit for CRTs sent to disposal; one commenter stated that having similar requirements for recycling and disposal reduces complications for enforcement authorities by eliminating the need to discern the waste handler's intent. Other commenters, however, argued that used CRTs should be fully regulated when sent for disposal, and that such full regulation was necessary to protect human health and the environment.

Even though requiring no manifest for CRTs could simplify the regulations applicable to CRTs, we believe that today's conditional exclusion will foster the equally important goal of collecting CRTs, conserving resources, and minimizing negative impacts on the environment. We anticipate that it will lead to increased recycling and less disposal of CRTs, including those from households and CESQGs, because municipalities and other entities can consolidate CRTs from all sources more easily than if some CRTs were classified as hazardous wastes. In addition, as described earlier in this notice, the Agency and many states are engaged in several efforts to increase the rate of CRT and electronics recycling, including electronics from households and CESQGs. We believe that these efforts, as well as many others at the state and local level, will ultimately bring about a considerable improvement in the rate of voluntary electronics recycling.

With respect to disposal, materials sent to landfills or incinerators under the universal waste rule need not be accompanied by a hazardous waste manifest. Under our proposed conditional exclusion, the manifest would have to accompany CRTs sent for disposal. A few states said the universal waste rule was therefore less stringent (in this respect) than a conditional exclusion. These states were therefore concerned that if a state had already added CRTs to its universal waste program, it would have to amend its rules and seek authorization from EPA to remain equivalent to the federal program. This conclusion is incorrect; the Agency has concluded that adding CRTs to a state universal waste program is permissible under state authorization rules. As commenters pointed out, the universal waste rule is in other respects more stringent than today's conditional exclusion. In addition, the Agency's longstanding position is that under a state universal waste program, individual wastes and management standards are not subject to the authorization revision provisions in 40 CFR 271.21, since the state is already authorized for the universal waste regulations and the regulation of hazardous wastes (see the preamble to the universal waste rule at 60 FR 25537, May 11, 1995). Therefore, states are free to add CRTs to their universal waste programs without seeking authorization from EPA.

F. Definitions

Several commenters suggested changes to some of EPA's proposed definitions. The following is a summary of these suggested changes, with our responses.

''Cathode Ray Tube''

The Agency's proposed definition of ''cathode ray tube'' was a ''vacuum tube, composed primarily of glass, which is the video display component of a television or computer monitor.'' Some commenters said that our proposed definition did not make clear whether we intended to include such devices as scanning equipment, multichannel analyzers, medical, automotive, oscilloscope, military, aircraft, and appliance CRTs. These commenters apparently believed that these types of CRTs did not fall within the definition of a television or computer monitor. One commenter said that the use of the term ''video display'' was misleading, since that phrase is associated with television monitors. This commenter suggested that ''video or visual display component'' would be a better definition. Another commenter suggested that EPA confine the regulatory definition to color CRTs, since monochrome CRTs generally do not exhibit the toxicity characteristic for lead.

The Agency agrees with those commenters who desired a more general definition that would encompass various types of CRTs; we believe that such a definition would provide more clarity to the regulated community and would better reflect the intent of our proposal (see 67 FR 40509). We also agree with the commenter who said that ''video or visual display component'' would be a more precise definition. For these reasons, we are changing our proposed definition of ''cathode ray tube'' in 40 CFR 260.10 to read as follows: ''cathode ray tube means a vacuum tube, composed primarily of glass, which is the video or visual display component of an electronic device''. This definition would encompass all the different types of CRTs mentioned by the commenters.

The Agency does not agree with the commenter who suggested that the definition of ''cathode ray tube'' be limited to color CRTs, since we are not certain that all color CRTs exhibit the toxicity characteristic for lead, or that no monochrome CRTs exhibit this characteristic. For this reason, we are not revising our proposed definition to include a reference to color or monochrome CRTs. If CRTs do not exhibit the toxicity characteristic for lead, they are not regulated under any of the hazardous waste regulations, including the exclusion promulgated today.

''Intact'' and ''Broken'' CRTs

In our proposal, EPA had defined an ''intact'' CRT as one remaining within the monitor whose vacuum has not been released. A ''broken'' CRT, on the other hand, was defined as ''glass removed from the monitor after the vacuum has been released''. Some commenters pointed out that our proposed

definitions did not take into account two categories of CRTs: those removed from a monitor without release of the vacuum (i.e., ''bare'' CRTs) or CRTs remaining within the monitor after being inadvertently broken. One commenter believed that intact CRTs removed from the monitor were commodity-like, and should therefore be completely excluded from the definition of solid waste, especially since they presented very little potential for environmental releases. However, another commenter suggested that intact CRTs removed from the monitor should be treated the same as broken CRTs. Some commenters stated that the proposed rule did not address broken CRTs remaining within a monitor because of inadvertent breaking of the glass.

Another commenter pointed out that his company considered CRTs with released vacuum tubes to be intact because they have not been mechanically altered so as to increase the potential release of heavy metals.

After reviewing the comments, the Agency agrees that its proposed definitions did not adequately address at least one category of CRTs. With respect to intact CRTs that are removed from the monitor with the vacuum still unbroken, we understand that these materials must normally be packaged before being shipped for repair or reuse. It would therefore be unnecessary and redundant to subject these materials to the same conditions as broken CRTs sent for recycling. They resemble products more than wastes, and should not be considered solid wastes, unless disposed. In today's rule, therefore, we are clarifying the status of these materials by including them within the definition of ''intact CRT,'' and we are revising that definition to read: ''an intact CRT means a CRT whose vacuum has not been released.''

However, the Agency is not changing the definition of ''broken CRT'' to specifically address inadvertently broken CRTs, since such breakage is accidental and does not occur routinely. If some CRTs within a shipment of intact CRTs are accidentally broken, such occurrences are most appropriately addressed on a case-by-case basis by the appropriate regulatory authorities.

One commenter suggested that the definition of ''broken CRT'' should refer to glass removed from any ''housing'' or ''casing,'' rather than glass removed from a ''monitor.'' The Agency agrees that the language suggested by the commenter is more descriptive. The same commenter noted that our proposed definition assumed that CRT vacuums are released before the CRT is removed from the monitor, whereas in actuality the CRT is sometimes removed from the monitor, after which the vacuum is released. EPA agrees with the commenter that our intent was not to draw distinctions based on the timing of the vacuum release. We have therefore revised our proposed definition of ''broken CRT'' to read: ''glass removed from its housing or casing whose vacuum has been released.''

One commenter noted that EPA did not present data showing that a CRT is not reusable as a product after the vacuum has been released and the glass removed. A few commenters suggested that EPA revise its definition of ''broken CRT'' to refer to CRTs that were no longer reusable, or to specify that CRTs become wastes when they will no longer be used for the purpose for which they were manufactured. In response to these comments, we note that the Agency specifically requested comment in the preamble to our proposed rule about whether it was possible to repair and reuse a CRT after the vacuum was released. No commenters submitted information or explanations about how this phenomenon might occur. With respect to broken CRTs, a released vacuum facilitates glass breakage and makes subsequent environmental releases more likely, even if these materials have not been substantially altered mechanically. We also believe that it would be much more difficult to implement the definition if regulators or the regulated community were required to ascertain whether a computer, television, or other electronic device could be used again. Such a determination would require considerably more technical expertise than merely examining a CRT to see if the vacuum had been released. Therefore, under today's rule, a CRT will still be considered broken if the vacuum is released.

One commenter suggested that we should change the definitions of ''intact'' and ''broken'' CRTs in proposed 40 CFR 260.10 to read ''used, intact CRTs'' and ''used, broken CRTs'' (presumably to be consistent with the language in our proposed exclusions). EPA agrees and has added this language to the definitions in today's final rule.

A few commenters objected to the Agency's regulatory distinctions between ''unused'' and ''used'' or ''intact'' and ''broken'' CRTs. These commenters believed that most CRTs in all of these categories should be treated the same (presumably because the environmental risks were similar).

Although classifying all CRTs in the same regulatory category would undoubtedly lead to simplified program implementation, EPA does not believe that eliminating our proposed distinctions is desirable. Intact CRTs present very little risk of releases, unless they are accumulated for long periods of time; therefore, subjecting them to the same conditions as broken CRTs is not appropriate.

''CRT Processing''

EPA received several comments on the proposed definition of ''CRT processing.'' Specifically, the proposed regulation stated that CRT processing meant conducting all of the following activities: (1) Receiving broken or intact CRTs; (2) intentionally breaking intact CRTs, or further breaking or separating broken CRTs; (3) sorting or otherwise managing glass removed from CRT monitors; and (4) cleaning coatings off the glass removed from CRTs. Some commenters believed that it was not necessary to perform all of these activities in order to be considered a CRT processor. In particular, commenters pointed out that some CRT recyclers do not clean coatings from CRT glass, and that there is an increased market for glass with the coating still on it. These commenters recommended that the definition of ''CRT processing'' be revised to specify that performing the first three activities listed above, or cleaning coatings from glass removed from CRTs, should be sufficient to classify a person or facility as a CRT processor.

EPA agrees with these commenters. As one commenter stated, coatings do not have to be removed from CRT glass sent to a smelter. We are therefore revising our proposed definition of ''CRT processing'' to mean 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. Since any CRT recycler cleaning coatings from CRT glass would necessarily be performing the first three activities, we believe it is unnecessary to refer to such cleaning in the regulations. This revised definition will be more consistent with the current activities of CRT recyclers.

''Processed CRT Glass''

In our proposal, we did not include a definition of ''processed CRT glass.'' One commenter noted that if EPA revised its definition of ''CRT processing'' to remove the reference to coating, the Agency should then promulgate a definition of ''processed CRT glass'' that would ensure that only CRT glass with the coatings removed

would be subject to the requirements of proposed 40 CFR 261.39(c) (i.e., no packaging or labeling for the processed glass). This commenter believed that only glass with the coating removed could properly be considered commodity-like. EPA disagrees with this suggestion, because we believe that whether CRT glass is coated or uncoated has little to do with whether the glass resembles a commodity. As stated above, CRT glass sent to smelters does not need to have coatings removed, and we believe that such materials are commodity-like. We believe that the destination of the glass is a more reliable indicator of its nature as a commodity than its coated or uncoated condition.

''CRT Glass Manufacturing''

Finally, one commenter pointed out that our proposed definition of ''CRT glass manufacturing facility'' could cause confusion because 40 CFR 260.10 defines a ''facility'' as ''land, etc. used for treating, storing, and disposing of hazardous waste,'' which is not true of CRT glass manufacturers. The Agency agrees with this commenter that the use of the word ''facility'' could be misinterpreted and has changed the definition in today's rule to read: ''CRT glass manufacturer means an operation or part of an operation that uses a furnace to manufacture CRT glass.''

G. Disposal

In the preamble to our proposed rule, EPA solicited comment on whether to allow CRTs sent for disposal in hazardous waste facilities (i.e., landfills or incinerators) to comply with streamlined packaging and labeling requirements similar to the ones we proposed for broken CRTs sent for recycling, rather than comply with the full Subtitle C requirements, including use of the hazardous waste manifest.

Some commenters said that disposal of CRTs should be subject to streamlined requirements similar to those applicable to broken CRTs sent for recycling. These commenters generally believed that CRTs presented very low environmental risks, even in landfills. They cited what they believed to be the benefits of simplified program implementation (presumably including facilitation of inspections and enforcement) if CRTs sent for recycling and disposal were subject to the same regulatory requirements. Other commenters supported the application of the full Subtitle C requirements to CRTs sent for disposal. These commenters believed that CRTs sent for disposal presented greater environmental risks; they also supported this approach because they believed it would encourage recycling.

After evaluating these comments, the Agency has concluded that the arguments for streamlining requirements for CRTs sent for disposal do not appear to be justified. As noted by some commenters, the volume of these materials will increase in future years because of evolving computer and television technology. We have not conducted a separate analysis of disposal issues as part of this rulemaking. In addition, we wish to encourage the environmentally sound recycling of this rapidly growing wastestream to conserve resources and raw materials, and we do not want to promulgate regulations that are inconsistent with this policy. For this reason, we are not promulgating streamlined packaging and labeling requirements for CRTs sent for disposal.

H. Enforcement

Under today's rule, CRTs and CRT glass destined for recycling and CRTs exported for reuse are excluded from RCRA Subtitle C regulation if certain conditions are met. Persons that handle CRTs and CRT glass that are subject to this exclusion will be responsible for maintaining the exclusion by ensuring that all of the conditions are met. If the CRTs are not managed as specified by these conditions, they are not excluded. The CRTs would then be considered hazardous waste (if they exhibit a hazardous waste characteristic) for Subtitle C purposes from the time they were ''generated'', i.e., from the time the decision was made to dispose of them or to release the vacuum for recycling, rather than to send them to facilities where they may be reused.

Persons taking advantage of the exclusion that fail to meet one or more of its conditions may be subject to enforcement action and the CRTs may be considered to be hazardous waste from the point of their generation. EPA could choose to bring an enforcement action under RCRA Section 3008(a) for all violations of the hazardous waste requirements occurring from the time a decision was made to dispose of the CRTs or to release the vacuum for recycling, through the time they are finally disposed of or reclaimed.

EPA believes that this approach, which treats CRTs exhibiting a hazardous waste characteristic that do not conform to the conditions of the exclusion as hazardous waste from their point of generation, provides all handlers with an incentive to handle the CRTs consistent with the conditions. It also encourages each person to take appropriate steps to ensure that CRTs are safely handled and legitimately reused or recycled by others in the management chain.

Persons managing CRTs before they become wastes are not considered generators and are not subject to RCRA requirements. For example, charitable organizations, municipalities, retailers, or manufacturers who collect intact CRTS are not generators when they send CRTs to facilities that decide whether they will be reused, recycled, or disposed.

V. State Authority

A. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize a qualified state to administer and enforce a hazardous waste program within the state in lieu of the federal program, and to issue and enforce permits in the state. A state may receive authorization by following the approval process described in 40 CFR 271.21 (see 40 CFR part 271 for the overall standards and requirements for authorization). EPA continues to have independent authority to bring enforcement actions under RCRA Sections 3007, 3008, 3013, and 7003. An authorized state also continues to have independent authority to bring enforcement actions under state law.

After a state receives initial authorization, new federal requirements promulgated under RCRA authority existing prior to the 1984 Hazardous and Solid Waste Amendments (HSWA) do not apply in that state until the state adopts and receives authorization for equivalent state requirements. In contrast, under RCRA Section 3006(g) (42 U.S.C. 6926(g)), new federal requirements and prohibitions promulgated pursuant to HSWA provisions take effect in authorized states at the same time that they take effect in unauthorized states. As such, EPA carries out HSWA requirements and prohibitions in authorized states, including the issuance of new permits implementing those requirements, until EPA authorizes the state to do so.

Authorized states are required to modify their programs only when EPA enacts federal requirements that are more stringent or broader in scope than existing federal requirements. RCRA Section 3009 allows the states to impose standards more stringent than those in the federal program (see also 40 CFR 271.1(i)). Therefore, authorized states are not required to adopt federal regulations, both HSWA and non-HSWA, that are considered less stringent than previous federal regulations.

B. Effect on State Authorization

Today's rule will have a different effect on authorized state programs, depending on how the state is currently regulating CRTs. In the proposal to today's rule, EPA clarified its views on how the current RCRA regulations most appropriately applied to CRTs sent for recycling (see 67 FR 40508 at 40511, June 12, 2002), and we proposed to revise the regulations to clarify any confusion and to set a clear federal floor. In the case of used CRTs going for recycling, EPA at the time encouraged states to implement approaches consistent with the proposal. Today's final rule modifies the proposal in three principal respects: (1) Speculative accumulation requirements for used, intact CRTs; (2) one-time notification requirement for used CRTs exported for reuse; and (3) notice and consent requirements for CRTs exported for recycling. These requirements are more stringent than the approach that EPA, in the proposed preamble, recommended that states adopt under the current regulations. Therefore, states that adopted the approach recommended in the proposed rule must amend their programs so that they are no less stringent than the federal approach. States currently regulating CRTs as hazardous waste, including under the universal waste rule, would not have to amend their programs, since their programs are more stringent than the federal requirements.

The limitations on speculative accumulation for intact CRTs are issued under RCRA authority, and therefore will not go into effect (in states not currently managing intact CRTs as hazardous waste) until states have adopted today's rule. The one-time notification for intact CRTs exported for reuse and notice and consent requirements for CRTs exported for recycling are implemented under HSWA authority (section 3017 of RCRA, which governs notice and consent) and therefore go into effect six months after the publication date of this rule. The Agency is adding the rule to Table 1 in 40 CFR 271.1(j), which identifies the federal program requirements that are promulgated pursuant to the statutory authority that was added by HSWA.

C. Interstate Transport

Because some states may choose to regulate CRTs or processed CRT glass under the universal waste or other hazardous waste rules, there will probably be cases when used CRTs or processed CRT glass will be transported to and from states with different regulations governing these wastes.

First, a waste which is subject to an exclusion from the definition of solid waste in the state where it is generated may be sent to a state where it is subject to the hazardous waste regulations. In this scenario, for the portion of the trip through the originating state, and any other states where the waste is excluded, neither a hazardous waste transporter with an EPA identification number per 40 CFR 263.11 nor a manifest would be required. However, for the portion of the trip through the receiving state, and any other states that do not consider the waste to be excluded, the transporter must have a manifest, except as provided by the universal waste rules, and must move the waste in compliance with 40 CFR Part 263. In order for the final transporter and the receiving facility to fulfill the requirements concerning the manifest (40 CFR 263.20, 263.21, 263.22; 264.71, 264.72, 264.76 or 265.71, 265.72, and 265.76), the initiating facility should complete a manifest and forward it to the first transporter to travel in a state where the waste is not excluded. The receiving facility must then sign the manifest and send a copy to the initiating facility.

Second, CRTs or processed CRT glass generated in a state which regulates them as hazardous waste may be sent to a state where they are excluded. In this scenario, the material must be moved by a hazardous waste transporter, while the material is in the generator's state or any other states where it is not excluded, except as provided by the universal waste rules. The initiating facility would complete a manifest and give copies to the transporter as required under 40 CFR 262.23(a). Transportation within the receiving state and any other states that exclude the material would not require a manifest and need not be transported by a hazardous waste transporter. However, it is the initiating facility's responsibility to ensure that the manifest is forwarded to the receiving facility by the transporter and sent back to the initiating facility by the receiving facility (see 40 CFR 262.23 and 262.42).

VI. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), federal agencies must determine whether this regulatory action is ''significant'' and therefore subject to review by the Office of Management and Budget (OMB) and to the requirements of the Executive Order. The Order defines ''significant regulatory action'' as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; (2) create serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, the Agency has determined that today's rule is a significant regulatory action because it contains novel policy issues. As such, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations are documented in the docket to today's rule.

To estimate the cost savings, incremental costs, economic impacts and benefits from this rule to affected regulated entities, we completed an economic analysis for the rulemaking. Copies of this analysis have been placed in the RCRA docket for public review (see ''Economic Analysis of Cathode Ray Tube Management, Final Rulemaking,'' March 19, 2004).

1. Methodology

To estimate the cost savings, incremental costs, economic impacts and benefits of this rule, the Agency estimated both the affected volume of cathode ray tubes (CRTs) and regulated entities. The Agency has evaluated two baseline (pre-regulatory) scenarios: (1) A scenario which models a distribution of affected monitors as if all affected entities followed standard Subtitle C regulations, and (2) a scenario which models a high percentage of CRTs being discarded untreated in municipal solid waste landfills. This latter scenario is being analyzed to evaluate the possible real-world effect of this rule on affected entities.

The Agency then modeled a post-regulatory scenario that simulates management of CRTs after the regulation promulgated today is implemented. In our economic analysis, we have calculated administrative, storage, transportation and disposal/recovery costs for both baselines and the post-regulatory scenarios and estimated the net cost savings and economic

impacts for each combination of the two baselines and the post-regulatory scenario. The first baseline and post-regulatory scenario is the pairing that we are using to meet our administrative requirements following this section.

2. Results

a. Volume

We have estimated the affected volume of CRTs (including both previously regulated and diverted volumes of monitors) under the post-regulatory scenario to be 54,000 tons. We believe that approximately 10,000 tons of CRTs would be diverted from export or hazardous waste landfill to CRT glass manufacturing under the post-regulatory alternative.

b. Cost/Economic Impact

We estimate that the rule will save CRT handlers $5.0 million per year compared to the scenario which assumed that all affected entities followed the standard Subtitle C regulations. This cost savings comes from reduced administrative, transportation and disposal/management cost.

To estimate the economic impact of the rule on CRT handlers, the Agency evaluated the cost savings or incremental costs as a percentage of firm sales. In virtually all cases, economic impacts are cost savings of less than one percent of firm sales. Under the first scenario, the average savings for a previously regulated small quantity generator is $520 per year; for a previously regulated large quantity generator, the average savings is $1,091 per year.

c. Benefits

EPA has evaluated the qualitative benefits and to a lesser extent, the quantitative benefits of the rule for CRTs. Some of the benefits resulting from today's rule include conservation of landfill capacity, increase in resource efficiency, growth of a recycling infrastructure for CRTs, and possible reduction of lead emissions to the environment from CRT recycling. EPA estimates that approximately 3,690 tons or 545,000 cubic feet of CRTs per year would be redirected away from landfills towards recycling under today's rule. In addition, as mentioned above, the use of processed CRT glass benefits the manufacturer in several ways, such as improving heat transfer and melting characteristics in the furnaces, lowering energy consumption, and maintaining or improving the quality of the final product. This rule may facilitate the growth and development of the CRT glass processing industry by reducing regulatory barriers to the establishment of new glass processing firms. Finally, this rule will encourage reuse and recycling by diverting CRTs from municipal landfills and waste-to-energy facilities.

B. Paperwork Reduction Act

The Office of Management and Budget (OMB) has approved the information collection requirements contained in this rule under the provisions of the *Paperwork Reduction Act,* 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2050–0053.

The information requirements established for this action, and identified in the Information Collection Request (ICR) supporting today's rule, are largely self-implementing, except for the notice and consent requirements for CRTs exported for recycling. This process will ensure that: (i) Regulated entities managing CRTs are held accountable to the applicable requirements; (ii) state inspectors can verify compliance when needed; and (iii) CRTs exported for recycling or reuse are actually handled as commodities abroad.

EPA has carefully considered the burden imposed upon the regulated community by the regulations. EPA is confident that those activities required of respondents are necessary and, to the extent possible, has attempted to minimize the burden imposed. EPA believes strongly that if the minimum requirements specified under the regulations are not met, neither the facilities nor EPA can ensure that used CRTs are being managed in a manner protective of human health and the environment.

For the requirements applicable to CRTs, the aggregate annual burden to respondents over the three-year period covered by this ICR is estimated at 5,400 hours, with a cost of approximately $269,100. Average annual burden hours per respondent are estimated to be between 3.4 and 4.1 hours (the latter figure is for respondents who are exporters). There are an estimated 3,775 respondents. However, this represents a reduction in burden to respondents of approximately 17,306 hours, or $878,034. The estimated operation and maintenance costs are $100 (including the cost of postage and envelopes). There are no start-up costs and no costs for purchases of services. Administrative costs to the Agency are estimated to be 371 hours per year, or $11,173. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose, or provide information to or for a federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9. In addition, EPA is amending the table in 40 CFR Part 9 of currently approved OMB control numbers for various regulations to list the regulatory citations for the information requirements contained in this final rule.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.,* generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business that is defined by the Small Business Administration by category of business using the North American Industrial Classification System (NAICS) and codified at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's rule on small entities, I hereby certify that this action will not have a significant adverse impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a

substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives ''which minimize any significant economic impact of the rule on small entities.'' 5 U.S.C. 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive effect on all of the small entities subject to the rule.

The small entity analysis conducted for today's rule indicates that streamlining requirements for CRTs would generally result in savings to affected entities compared to baseline requirements. Under the full compliance scenario, the rule is not expected to result in a net cost to any affected entity.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for federal agencies to assess the effects of their regulatory actions on state, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for the proposed and final rules with ''federal mandates'' that may result in expenditures by state, local, and tribal governments, in the aggregate, or to the private sector, of $100 million or more in any one year. Before promulgating a rule for which a written statement is needed, Section 205 of the UMRA requires federal agencies to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted.

This final rule does not include a federal mandate that may result in expenditures of $100 million of more to state, local, or tribal governments in the aggregate, because the UMRA generally excludes from the definition of ''federal intergovernmental mandate'' duties that arise from participation in a voluntary federal program. States are not legally required to have or maintain a RCRA authorized program. Therefore, today's final rule is not subject to the requirements of Sections 202 or 205 of UMRA. In addition, this final rule contains no regulatory requirements that might significantly or uniquely affect small governments under Section 203 of UMRA. Therefore we have determined that today's rule is not subject to the requirements of sections 202, 203, or 205 of UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications. ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.'' This rule does not have federalism implications. It streamlines RCRA management requirements for CRTs and CRT glass being recycled, and will affect primarily those persons who are engaged in CRT recycling. It will not have substantial direct effects on the states, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132.

Although Section 6 of Executive Order 13132 does not apply to this rule, EPA consulted with representatives of the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) in developing this rule prior to finalization.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' This final rule does not have tribal implications, as specified in Executive Order 13175. It does not impose any new requirements on tribal officials nor does it impose substantial direct compliance costs on them. This rule does not create a mandate for tribal governments, nor does it impose any enforceable duties on these entities. Thus, Executive Order 13175 does not apply to this rule.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risk

''Protection of Children From Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997) applies to any rule that EPA determines (1) is ''economically significant'' as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potential effective and reasonably feasible alternatives considered by the Agency.

This rule is not subject to Executive Order 13045 because it is not an economically significant rule as defined by Executive Order 12866 and because it does not concern an environmental health or safety risk that the Agency has reason to believe may have a disproportionate effect on children.

H. Executive Order 13211

This rule is not a ''significant energy action'' as defined in Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Today's rule streamlines hazardous waste management requirements for used cathode ray tubes. By encouraging reuse and recycling, the rule may save energy costs associated with manufacturing new materials.

I. National Technology Transfer and Advancement Act of 1995

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (''NTTAA''), Public Law 104–113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, though OMB, explanations when the Agency decides

not to use available and applicable voluntary consensus standards. This rule does not establish technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

J. Environmental Justice

Executive Order 12898, ''Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations'' (February 11, 1994) is designed to address the environmental and human health conditions of minority and low-income populations. EPA is committed to addressing environmental justice concerns and has assumed a leadership role in environmental justice initiatives to enhance environmental quality for all citizens of the United States. The Agency's goals are to ensure that no segment of the population, regardless of race, color, national origin, income, or net worth bears disproportionately high and adverse human health and environmental impacts as a result of EPA's policies, programs, and activities. In response to Executive Order 12898, EPA's Office of Solid Waste and Emergency Response (OSWER) formed an Environmental Justice Task Force to analyze the array of environmental justice issues specific to waste programs and to develop an overall strategy to identify and address these issues (OSWER Directive No. 9200.3–17). To address this goal, EPA conducted a qualitative analysis of the environmental justice issues under this rule. Potential environmental justice impacts are identified consistent with the EPA's Environmental Justice Strategy and the OSWER Environmental Justice Action Agenda.

Today's rule would streamline hazardous waste management requirements for used cathode ray tubes sent for recycling. Facilities that would be affected by today's rule include those generating hazardous waste computers and televisions sent for recycling. Also affected would be facilities which recycle these materials. Disposal facilities themselves would not be affected by today's rule.

The wide distribution of affected facilities throughout the United States does not suggest any distributional pattern around communities of concern. Any building in any area could be affected by today's rule. Specific impacts on low income or minority communities, therefore, are undetermined. The Agency believes that emissions during transportation would not be a major contributor to communities of concern through which used CRTs may be transported. Any such material broken during transport would be contained in the required packaging. Overall, no disproportional impacts to minority or low income communities are expected.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register.** A major rule cannot take effect until 60 days after it is published in the **Federal Register.** This action is not a ''major rule'' as defined by 5 U.S.C. 804(2). This rule will be effective January 29, 2007.

List of Subjects

40 CFR Part 9

Environmental protection, Reporting and recordkeeping requirements.

40 CFR Part 260

Environmental protection, Administrative practice and procedure, Confidential business information, Hazardous waste, Reporting and recordkeeping requirements.

40 CFR Part 261

Environmental protection, Hazardous waste, Recycling, Reporting and recordkeeping requirements.

40 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indians-lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

Dated: July 19, 2006.

Stephen L. Johnson,

Administrator.

■ For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 9—[AMENDED]

■ 1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 *et seq.*, 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 *et seq.*, 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 *et seq.*, 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

■ 2. In § 9.1 the table is amended by adding new entries in numerical order under the indicated heading to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

* * * * *

40 CFR citation	OMB control No.
* * * * *	
Identification and Listing of Hazardous Waste	
* * * * *	
261.39	2050–0053
261.40	2050–0053
261.41	2050–0053
* * * * *	

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

■ 3. The authority citation for part 260 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921–6927, 6930, 6934, 6935, 6937, 6938, 6939, and 6974.

Subpart B—Definitions

■ 4. Section 260.10 is amended by adding in alphabetical order the definitions of ''Cathode ray tube,'' ''CRT collector,'' ''CRT glass manufacturer,'' and ''CRT processing'', to read as follows:

§ 260.10 Definitions.

* * * * *

Cathode ray tube or CRT means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.

* * * * *

CRT collector means a person who receives used, intact CRTs for recycling, repair, resale, or donation.

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.

* * * * *

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

■ 5. The authority citation for part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, 6924(y), and 6938.

Subpart A—General

■ 6. Section 261.4 is amended by adding a new paragraph (a)(22), to read as follows:

§ 261.4 Exclusions.

(a) * * *

(22) Used cathode ray tubes (CRTs)

(i) Used, intact CRTs as defined in § 260.10 of this chapter are not solid wastes within the United States unless they are disposed, or unless they are speculatively accumulated as defined in § 261.1(c)(8) by CRT collectors or glass processors.

(ii) Used, intact CRTs as defined in § 260.10 of this chapter are not solid wastes when exported for recycling provided that they meet the requirements of § 261.40.

(iii) Used, broken CRTs as defined in § 260.10 of this chapter are not solid wastes provided that they meet the requirements of § 261.39.

(iv) Glass removed from CRTs is not a solid waste provided that it meets the requirements of § 261.39(c).

* * * * *

■ 7. Part 261 is amended by adding subpart E to read as follows:

Subpart E—Exclusions/Exemptions

Sec.

Subpart E—Exclusions/Exemptions

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

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 and any alternate recycler.

(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 submitted by mail should 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 notifications 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. In both cases, the following shall be prominently displayed on the front of the envelope: ''Attention: Notification of Intent to Export CRTs.''

(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 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.

(vi) When the conditions specified on the original notification change, the exporter must provide EPA with a written renotification of the change, 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 (a)(5)(i)(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.

(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.

§ 261.40 Conditional Exclusion for Used, Intact Cathode Ray Tubes (CRTs) Exported for Recycling.

Used, intact CRTs exported for recycling are not solid wastes if they meet the notice and consent conditions of § 261.39(a)(5), and if they are not speculatively accumulated as defined in § 261.1(c)(8).

§ 261.41 Notification and Recordkeeping for Used, Intact Cathode Ray Tubes (CRTs) Exported for Reuse.

(a) Persons who export used, intact CRTs for reuse must send a one-time notification to the Regional Administrator. The notification must include a statement that the notifier plans to export used, intact CRTs for reuse, the notifier's name, address, and EPA ID number (if applicable) and the name and phone number of a contact person.

(b) Persons who export used, intact CRTs for reuse must keep copies of normal business records, such as contracts, demonstrating that each shipment of exported CRTs will be reused. This documentation must be retained for a period of at least three years from the date the CRTs were exported.

■ 8. Section 261.38 of subpart D is moved to subpart E.

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

■ 9. The authority citation for part 271 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), and 6926.

■ 10. Section 271.1(j) is amended by adding the following entries to Table 1 in chronological order by date of publication in the **Federal Register**, to read as follows:

§ 271.1 Purpose and scope.

* * * * *

(j) * * *

TABLE 1.—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Promulgation date	Title of regulation	**Federal Register** reference	Effective date
* * * * *		*	*
July 28, 2006	Final Rule for Cathode Ray Tubes	[Insert FR page numbers] ..	Jan. 29, 2007.
* * * * *		*	*

[FR Doc. 06–6490 Filed 7–27–06; 8:45 am]

BILLING CODE 6560–50–P