

**INITIAL STATEMENT OF REASONS
ELECTRONIC HAZARDOUS WASTE REGULATIONS
Department Reference Number R-01-06**

EFFORT TO AVOID DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

The proposed State regulations will neither duplicate nor conflict with the federal regulations because cathode ray tube (CRT) materials or consumer electronic devices (CEDs) are not included in the federal Universal Waste Rule at this time. DTSC adopted these standards for CRT materials as emergency regulations in August 2001. At that time, the United States Environmental Protection Agency (U.S. EPA) stated that it was about to propose a rulemaking for CRTs at the federal level. DTSC has readopted the emergency regulations on several occasions while awaiting the proposed federal rulemaking. U.S. EPA's CRT rules were recently published in the Federal Register on June 12, 2002 (67 Fed. Reg. 40508). DTSC has reviewed the proposed federal rules and has confirmed that this proposed rulemaking for CRT materials does not conflict with or duplicate the proposed federal regulations should they be finalized in their current form.

Consumer electronic devices are not currently proposed by the U.S. EPA for inclusion under the federal universal waste program. DTSC is not aware that U.S. EPA has any future plans to include this category of wastes in the federal program.

STUDIES RELIED ON

On January 1, 2000, the Florida Center for Solid and Hazardous Waste Management (a University of Florida adjunct) published "Characterization of Lead Leachability from Cathode Ray Tubes using the Toxicity Characteristic Leaching Procedure", in the journal Environmental Science and Technology. The article presented the results of TCLP analysis for monochrome and color CRTs. This study concluded that color CRTs contain lead exceeding the U.S. EPA hazardous waste characteristic threshold level of 5.0 milligrams per liter (the average concentration was 18.5 milligrams per liter). Therefore, CRTs are hazardous waste when discarded under both the federal and the State's hazardous waste criteria.

In February 2002, the Basel Action Network and the Silicon Valley Toxics Coalition published a report, "Exporting Harm--The High-Tech Trashing of Asia," that highlighted the critical situation caused by the exportation of electronic wastes to China and other developing countries. This report revealed that in the western United States 50 to 80 percent of the electronic wastes collected for recycling are not recycled domestically, but rather are shipped to China and other foreign destinations. Much of this waste is "recycled" under extremely hazardous conditions, where worker health and safety is

ignored, and contamination of air, water and soil results from the burning and dumping of electronic waste components. The results of this investigation demonstrated that consumer electronic waste must be regulated in this State in a way designed to prevent its future mismanagement.

In July 2001, U.S. EPA published "Municipal Solid Waste in The United States: 1999 Facts and Figures," which for the first time included a subcategory called "consumer electronics" within the nondurable goods category. This new subcategory was reported to create nationally an estimated 1.8 million tons or about 1% to 2% of the municipal solid waste stream.

DTSC also used the Initial Study that was prepared as part of this rulemaking effort.

ALTERNATIVES CONSIDERED

Alternative 1: Selected Alternative--Universal Waste Regulations

Establish universal waste management standards in regulations to foster collection and recycling of waste CRT materials and waste CEDs. The regulations establish a new article (article 7) that allows management of CRT materials in a similar way as other universal wastes. The regulations also modify the Universal Waste Rule as necessary to allow management of CEDs pursuant to the Universal Waste Rule. Some treatment (e.g., removal of the CRT from the housing) is allowed without authorization. Disposal in a Class I hazardous waste landfill is allowed, but CRT materials destined for disposal must be managed as hazardous waste (i.e., must be manifested) if they are not recycled. The requirements for most handlers are minimal in an effort to achieve greater compliance. The regulations allow recycling of CRT materials without a hazardous waste permit.

Development of Chosen Alternative

DTSC has identified four possible alternatives. Of the four, DTSC has chosen the universal waste option (**Alternative 1**). This section of the Initial Statement of Reasons will briefly explain why DTSC has chosen the universal waste option over the other alternatives. For additional information on the universal waste approach in general please refer to the Final Statement of Reasons for California's Universal Waste Rule (February 2002) and the Federal Registers accompanying the federal Universal Waste Rule [58 Fed. Reg. 8102 (February 11, 1993): Proposed Universal Waste Rule; 59 Fed. Reg. 38288 (July 27, 1994): Proposed Lamps Rule; 60 Fed. Reg. 25492 (May 11, 1995): Final Universal Waste Rule; 64 Fed. Reg. 36466 (July 6, 1999): Final Rule - Hazardous Waste Lamps].

In 2001, DTSC became aware of new peer-reviewed scientific data¹ indicating that computer monitors exhibited the toxicity characteristic of a hazardous waste. Subsequently DTSC obtained samples of computer monitors and televisions from municipal solid waste landfills in California and confirmed the conclusions of that report. At that time, DTSC determined that there were two main reasons that CRT monitors and televisions were not being properly managed (as hazardous waste), but were instead being disposed to municipal solid waste landfills in California. The first was that households and businesses were not aware that the CRTs contained lead and were hazardous wastes when discarded. The second was that there was little available recycling capacity for CRTs in the state. In May 2001, only about 1,000 pounds of CRTs were being recycled monthly in the state.

In August 2001, California adopted emergency regulations for CRTs. Those emergency regulations were developed to change the way CRTs were managed in California. The regulations focused on the two reasons cited above by streamlining the hazardous waste permitting requirements for CRT recyclers. In addition, the emergency regulations applied the universal waste management requirements to the CRT materials in lieu of the traditional hazardous waste management requirements. The emergency regulations had the desired effect. Within six months of adoption, California recycled over 500,000 pounds of CRTs monthly, and disposal of CRTs to municipal solid waste landfills had diminished significantly.

The emergency regulations achieved the desired goal of helping to protect the environment by removing the CRTs from the landfills. To a large extent, the universal waste approach that has been proposed in these regulations (with a few minor changes) for CRT materials and CEDs has been chosen because it has already been demonstrated that it will successfully achieve DTSC's goal of protecting human health and the environment while ensuring the regulatory requirements are kept to a minimum. Also, because CRT materials and CEDs are generated in small quantities by a wide variety of entities, these waste are more appropriately managed under the universal waste regulations.

The universal waste approach is not an alternative to the "do nothing," full hazardous waste regulation approach. The proposed rule is not mutually exclusive with that approach, but is instead an alternative set of management standards that generators may apply to the management of these wastes. There can be no doubt that the "do nothing" approach ensures maximum protection of the environment. However, DTSC believes that the universal waste regulations are as protective as are the full hazardous waste requirements for the vast majority of the generators of CRTs and CEDs. This is the main reason that DTSC has rejected the "do nothing" alternative.

¹ See "Characterization of Lead Leachability from Cathode Ray Tubes using the Toxicity Characteristic Leaching Procedure," Timothy G. Townsend, Environmental Science & Technology, January 2000.

The other two rejected alternatives both involve maintaining the hazardous waste status of electronic wastes but exempting the wastes from some or all of the hazardous waste management standards. Either of these approaches could have been used to achieve levels of protection of the environment similar to the universal waste alternative. However, neither of these alternatives could have facilitated collection and recycling to the same extent as the universal waste approach. For this reason and because the universal waste approach has been demonstrated to be successful, DTSC has selected the universal waste alternative over the other two alternatives.

Why is DTSC proposing to add CRT materials and CEDs to the universal waste category?

Discarded computer monitors, televisions, CEDs, and components thereof, (e.g., the circuit boards and power supplies inside the televisions and monitors) can be characteristically hazardous. However, generators of these wastes frequently are not aware that they are hazardous and often dispose of them in the municipal solid waste stream. Once in the landfill, the hazardous constituents in these devices (primarily heavy metals such as lead and cadmium) can leach into and contaminate the ground water. DTSC believes that placing these wastes in the universal waste category will facilitate the segregation, collection, and proper recycling and disposal of these wastes. Furthermore, DTSC believes that these wastes fit the criteria that the U.S. EPA set forth for designating waste as universal wastes.

DTSC has the responsibility to implement, maintain, and enforce the hazardous waste regulations in California. CRTs are and some CEDs may be hazardous waste pursuant to existing laws and regulations. Because of the large number of generators and volume of CRTs and CEDs produced in this State, DTSC finds it necessary to adopt the proposed universal waste standards for these wastes that (1) create a regulatory scheme that is tailored to these waste streams, and (2) is permissible under the State's RCRA authorization. The universal waste approach proposed is the only regulatory scheme that is allowed under RCRA authorization (until U.S. EPA's CRT final rule is adopted) and that is practical.

Criteria for Addition to the State's Universal Waste Rule

Following are criteria set forth in 40 C.F.R. sections 273.80 and 273.81 that DTSC must use to determine whether a waste can be managed as universal waste.

- A. The waste is a hazardous waste that is generated by a wide variety of generators.

CRT materials and other CEDs are generated in the common household and in virtually every category of business, governmental and other entity in the state. A list of these devices includes computer monitors, televisions, oscilloscopes, computing and test equipment, communication equipment, and entertainment devices. Typically, the devices are hazardous because they contain a circuit board that contains lead solder (i.e., some of these devices may exhibit the hazardous waste toxicity characteristic for lead). However, in the case of the CRT materials, they are hazardous because they contain several pounds of lead. DTSC is limiting the scope of the proposed regulations to apply to only those devices that are hazardous solely because they exhibit the characteristic of toxicity.

- B. The waste should not be exclusively generated by one particular industry or group of industries, but should be generated by a wide variety of sectors of society.

CRT materials and other CEDs are generated by businesses of all types including: industrial and retail establishments, and office complexes. They are also generated by municipalities, universities, hospitals and households.

- C. The waste should be generated by a large number of generators and should be generated frequently, but in small quantities.

Electronic wastes would meet this criterion even if DTSC considered CRTs alone. It has been estimated that Californians dispose of 5,000 to 10,000 computer monitors per day. Therefore, overall, the wastes are generated in large quantities. However, individual generators typically generate these wastes sporadically in limited quantities. For example, a real estate office might generate 10 to 20 waste computers when they replace their existing systems every few years. This dictates that the risks posed by one specific generator who may mismanage the waste is relatively small (as opposed to the traditional industrial process-generated hazardous waste that is routinely generated in significant volumes by a generator), but the risk posed by the aggregate volume of the waste stream over time is significant, (perhaps even more significant than the traditional hazardous waste stream) and, therefore, cannot be ignored.

- D. Systems used for collecting the waste should ensure close stewardship of the waste.

DTSC believes that the universal waste requirements will ensure that the CRT materials and CEDs are not mismanaged. As mentioned above, the emergency regulations for CRTs have been in effect since August 2001 and have provided a means to educate the public on the proper management of these wastes. Because of better public outreach, more CRTs have been properly managed (i.e., sent for recycling or Class I disposal) since the emergency regulations were adopted. The proposed regulations require recycling of the CRT to ensure that the primary hazardous component of the CRT material is properly

controlled (i.e., the leaded glass tube). In addition, the proposed regulations contain labeling, transportation, and export requirements to ensure proper stewardship of the waste categories.

- E. The risks posed by the waste during accumulation and transport should be relatively low compared to the risks posed by other hazardous waste, and specific management standards would be protective of human health and the environment during accumulation and transport.

DTSC believes electronic wastes such as CRT materials and CEDs are low risk compared to most other hazardous wastes. In fact, most people routinely handle these intact devices on a daily basis without any special precautions. The electronic devices are often portable and are routinely carried and moved about without breakage. Typically, the hazardous constituents in the electronic devices are encased in some sort of component or components, which are then enshrouded by a plastic housing that further minimizes the chance of a release of the hazardous constituents. In the case of the CRTs, which pose the greatest threat of all the electronic wastes because they each contain several pounds of lead (as compared to grams of lead for the other devices), the lead has been vitrified into the glass. The vitrified lead is virtually not bioavailable, except through long-term leaching and migration, as may occur when improperly disposed.

This proposed rulemaking applies the same packaging standards to CRT materials that U.S. EPA applied to universal waste lamps. However, there is a great difference between the acute hazards of managing florescent lamps and CRT materials. The acute hazards associated with florescent lamps are greater when a florescent lamp is broken and the hazardous mercury contained in the tube is immediately released to the environment (i.e., through vaporization). In contrast, when a CRT is broken, the hazardous lead remains encapsulated in the glass and it can be swept up and completely recovered. As for the CEDs, the component parts are in a form that minimizes the potential for any release during normal handling. Therefore, DTSC believes that because of the relatively low acute hazards associated with handling electronic hazardous wastes, the proposed management standards (e.g., packaging standards that minimize breakage and ensuring proper handling and immediate response to releases) provide more than adequate protection to human health and the environment. These standards apply to the wastes through all phases of handling, collection and recycling, including accumulation and transport.

The proposed regulations for electronic wastes apply the same standards for transport of universal wastes. Handlers can only transport the wastes to approved destination facilities or to another handler. If the handler sends a waste off-site that is a hazardous material under U.S. Department of Transportation (DOT) requirements, then the handler must comply with all applicable DOT requirements for the shipment. If a universal waste shipment is rejected, then the originating handler must take-back the shipment or arrange

with the rejecting facility/handler to send the waste to another destination. DTSC is concerned that some electronic devices are being exported from California to developing countries where the waste is inappropriately managed. For this reason, DTSC has proposed to apply the full export requirements that currently apply to non-RCRA hazardous waste(s) to the universal waste CRT materials and CEDs to further ensure the protection of human health and the environment.

- F. Regulation of the waste will increase the likelihood that the waste will be diverted from the non-hazardous waste management systems (e.g., the municipal solid waste stream) to recycling or proper disposal.

Currently, generators of these CEDs (as hazardous waste) can only transport the waste to a permitted facility (using a hazardous waste manifest and a registered hazardous waste transporter), or they can take it to a household hazardous waste collection event. Once classified as universal waste, the generators of these CEDs will be considered handlers of universal waste rather than generators of hazardous waste. Thus, the collection and consolidation options for these wastes would be more plentiful and more readily available (any handler could ship to any other handler via common carrier). More importantly, business entities will arise that can serve as consolidation points for the wastes prior to their ultimate recycling or disposal. Collecting the wastes at such consolidation points and reducing the cost of proper transportation will make it less likely that the wastes will be mismanaged in the municipal solid waste stream.

- G. Regulation of the waste as universal waste will improve the implementation and overall compliance with the hazardous waste regulatory program.

DTSC expects increased compliance to continue for some time into the future. The trend can be attributed to two main factors. First, many local governments have developed local collection programs at landfills, transfer stations, and county yards in response to the greater flexibility provided under the universal waste standards. Second, the number of CRT and consumer electronic device recyclers in and around California has grown significantly since the emergency regulations were adopted. These facilities collect and consolidate the wastes, thus diverting them from the municipal landfills and funneling them to more environmentally protective destinations, such as lead smelters.

The proposed regulations will also increase compliance simply by raising awareness. Many generators are still unaware of the fact that many common CEDs are hazardous waste when they are discarded. By designating these wastes as universal waste and by defining the words "CRT materials" and "consumer electronic devices" in regulation, many generators will be alerted that these materials require proper handling. If these wastes are not designated as universal wastes, the words "CRT materials" and "consumer electronic devices" will not be defined in regulations and these wastes will only be defined under the

general term “characteristic hazardous waste.” Also, these words appearing in regulations will provide increased clarity. The universal waste standards are confined to a comparatively brief chapter in the regulations and they are more easily applied by the diverse community of generators that this rule effects. Therefore, DTSC believes the universal waste standards themselves will help encourage and achieve increased compliance with the hazardous waste program.

Alternative 2: Non-RCRA Hazardous Waste Exclusion for CRTs

Exclude from hazardous waste management all discarded CRT materials pursuant to Health and Safety Code section 25143.2. Health and Safety Code section 25143.2, subdivision (d)(5) exempts non-RCRA hazardous wastes from the hazardous waste requirements when they are recycled in certain manners. Some CRT materials are RCRA hazardous waste, while other CRT materials are not (i.e., non-RCRA hazardous waste). In order to exclude all CRT materials under the federal hazardous waste management standards [pursuant to the recycling exemption of 40 C.F.R. sections 261.2 (e)(1)(i) and (e)(1)(ii)] an interpretation would need to be made that the CRT materials are not being reclaimed. This interpretation would be inconsistent with current interpretations of this federal exemption.

However, if this federal recycling exclusion *could* be applied, all CRT materials would become non-RCRA hazardous waste. Under this non-RCRA hazardous waste designation, the recycling exclusion of Health and Safety Code section 25143.2 could be applied to the recycling of CRT materials. However, prior interpretations by DTSC of section 25143.2 to other non-RCRA hazardous wastes recycling activities would be inconsistent with the interpretation that CRT materials could be excluded under section 25143.2.

Because the electronics industry is moving from CRTs to flat panel monitors, the market for leaded glass will diminish over time, ultimately resulting in a glut of glass on the market because of lack of recycling capacity. This will drive both intact CRTs and CRT glass to hazardous waste disposal rather than to recycling. Therefore, while it is desirable to reduce the regulatory requirements placed on persons legitimately recycling CRTs, it may not be protective of the environment to adopt a novel interpretation of Health and Safety Code section 25143.2.

In addition, persons claiming recycling exclusions pursuant to the current hazardous waste control law incur greater regulatory duties than the proposed universal waste standards. Therefore, persons choosing to manage CRTs and CEDs under this alternative would not realize a substantial decrease in the regulatory requirements. For instance, if this alternative were chosen, all persons managing CRTs and CEDs would be required to submit a notification to local authorities, recyclers would be required to have secondary

containment, and persons managing these wastes would have to keep records pursuant to Health and Safety Code sections 25143.9 and 25143.10. Therefore, this alternative was rejected.

Alternative 3: Do Nothing

Under existing hazardous waste control laws, all CRT materials and CEDs are hazardous waste when discarded. This current law subjects generators of these wastes to the hazardous waste generator standards, transporters to the manifesting and registration requirements, and facilities to the hazardous waste permit standards. Although, theoretically, this alternative ensures the greatest protection of the environment, the regulatory requirements this alternative places on recyclers of CRT materials and CEDs could be construed as a disincentive to recycling.

If CRTs and CEDs were to remain subject to full hazardous waste requirements, the issuance of ID numbers to all generators of these waste categories, the registration of all transporters, the inspection and enforcement activities involved, and the issuance of hazardous waste permits to all recycling facilities would require massive augmentation of both DTSC's and the CUPAs' resources. Thus, it is not feasible to choose the "do nothing" alternative.

This alternative also fails to establish waste management standards for CRTs and CEDs that are commensurate with the risks of these materials. DTSC has concluded that, because CRT materials and CEDs are low risk and generated by a wide segment of society, the application of universal waste management standards for these wastes provides appropriate protection of the environment.

In addition, this alternative was rejected because it does not address the inconsistencies between California's hazardous waste program, hazardous waste programs in other states, and the federal Universal Waste Rule, which may cause confusion for the regulated community.

Alternative 4: Conditional exemption from the definition of hazardous waste OR total exclusion from the definition of solid waste for CRTs destined for recycling

DTSC creates, by regulation, an exemption (in sections 66261.4 or 66261.6) similar to the exemption for scrap metal with the added caveat that the CRT materials must be destined for recycling. Necessary conditions could be applied directly as conditions for obtaining the exemption. This alternative could effectively reduce or remove the regulatory requirements placed on the generators and transporters of CRT materials. However, this

alternative would not alleviate the requirement for a CRT recycler to have a full hazardous waste permit. For this reason, this alternative was rejected (i.e., DTSC does not believe that simple, volume-reduction of CRTs should require a hazardous waste facility permit).

This total exclusion approach is similar to U.S. EPA's recent proposed rulemaking for CRTs. (Note that U.S. EPA does not require a hazardous waste facility permit for recycling, as does California.) While this approach would completely eliminate all regulatory requirements and, therefore, encourage recycling, it would also allow unregulated export of CRTs. In the past few years, the exportation of CRTs to China and other less developed countries has become a concern to the environmental community. Although DTSC has no jurisdiction outside of California, DTSC has rejected this alternative in an effort to maintain the ability to enforce the existing requirements for exports of hazardous waste (i.e., receipt of export notifications).

This alternative was rejected for CEDs for the same reasons discussed above.

DETAILED STATEMENT OF REASONS/NON-CONTROLLING PLAIN ENGLISH SUMMARY

A detailed statement of reasons for each section follows.

Amend Table of Contents:

Add the new sections to the Table of Contents for California Code of Regulations, title 22, division 4.5: chapter 10, sections 66260.22 and 66260.23; chapter 23, sections 66273.3 and 66273.6; and chapter 23, article 7. This amendment is made for clarity and consistency.

Add Chapter 10, Article 3, Section 66260.22, Petitions to Include Other Wastes under Chapter 23:

This proposed section creates a petition process for adding additional hazardous waste or a category of hazardous waste to the universal waste category in the future. This section is added so that the regulated community and DTSC have the flexibility to add additional universal wastes. This section is added to chapter 10, and not to chapter 23, in order to make the petition process easier to locate and to maintain consistency with the current structure of division 4.5, where the requirements for petitions are placed in chapter 10, article 3. This section parallels 40 C.F.R. section 273.80 and is added so that DTSC may seek and maintain authorization for the Universal Waste Rule and to obtain authorization for the petition process. Without the petition process, additional hazardous wastes cannot be designated as universal wastes, including the proposed inclusion of CRT materials and CEDs made in this rulemaking.

Subsection (a): This subsection requires any person, who requests that a hazardous waste or a category of hazardous waste be considered for inclusion in the Universal Waste Rule contained in chapter 23, to follow the petition process outlined in this section and in Government Code section 11340.6. The procedures referenced in the Government Code are the same procedures that are used for submitting and reviewing all petitions for regulatory amendments. Use of the term “category of waste” allows petitioners to submit a group of wastes such as “hazardous waste batteries” instead of petitioning for each type of hazardous waste battery individually (e.g., hazardous waste nickel-cadmium batteries, hazardous waste lithium batteries). This subsection is necessary to clarify the applicable petition process and implementing Government Code sections.

Subsection (b): This subsection establishes that a petitioner must include in a petition a demonstration to the Director of DTSC that a hazardous waste or category of hazardous waste would be appropriately managed under the provisions of chapter 23. For a petitioner to be successful, the petitioner must demonstrate that regulation of the hazardous waste or category of hazardous waste as a universal waste (1) is appropriate for the waste or category of waste; (2) will improve management practices for the waste or category of waste; and (3) will improve implementation of the hazardous waste program. This subsection clarifies the standards that the Director will use to make decisions on petitions and DTSC’s goals for the universal waste program (which the petition is supposed to address).

Subsection (c): This subsection requires that the petition be submitted in writing, as is required by Government Code section 11340.6. This subsection is necessary so that the petition process for universal waste complies with the statutes that govern the process and procedures that State agencies must comply with for the review and granting or denial of a regulatory petition.

Subsection (d): This subsection requires that the petition address as many of the factors listed in proposed section 66260.23 as are appropriate for the waste or category of waste addressed in the petition. DTSC recognizes that it may not be possible or appropriate to address each of the factors for any particular waste or category of waste. This subsection is necessary to clarify that an individual waste would not be disqualified from inclusion under chapter 23 merely because every factor was not addressed in the petition.

Subsection (e): This subsection describes the procedures that the Director will use to evaluate and grant or deny a petition made under subsection (a). The time limits for reviewing and granting or denying a petition are required to be consistent with Government Code section 11340.7. In making the decision on each petition, the Director will consider the overall weight of the evidence demonstrating that the goals of the Universal Waste Rule will be met. DTSC recognizes that although quantitative data are desirable, due to the

nature of the wastes likely to be appropriate for the Universal Waste Rule, quantitative data may not be available. Thus, quantitative data are not necessarily required for a successful petition. This subsection clarifies that quality of the data used to support a petition is more important than the quantity of data.

Add Chapter 10, Article 3, Section 66260.23, Factors for Petitions to Include Other Wastes under Chapter 23:

This proposed section is added to establish the factors that the Director will use in the evaluation of a petition made pursuant to section 66260.22. The proposed section clarifies that the Director will consider the overall weight of evidence presented in determining whether regulation under the Universal Waste Rule is appropriate for the waste, and whether the chapter 23 regulation will further DTSC's goals of improving management practices for the waste and improving implementation of the hazardous waste program. This section is added to chapter 10, and not to chapter 23, in order to make the petition process easier to locate and to maintain consistency with the current structure of division 4.5, where the requirements for petitions are placed in chapter 10, article 3. This section parallels 40 C.F.R. section 273.81 and is added so that DTSC may seek and maintain authorization for the federal Universal Waste Rule.

Subsection (a): This subsection requires that waste that is considered for inclusion under the Universal Waste Rule be a hazardous waste, either through listing or by exhibiting one or more characteristics of hazardous waste. This subsection is added to clarify that the Universal Waste Rule is part of the hazardous waste regulations, and that only wastes that are hazardous are regulated. This is further clarified by the fact that these proposed regulations also add a definition of the term "universal waste" (see sections 66260.10 and 66273.9), that specifically identifies only hazardous waste as potential universal waste (e.g., hazardous waste batteries). For example, some battery types exhibit one or more characteristics and are hazardous, while other battery types may not. Using a generic term makes the Universal Waste Rules flexible, so that the regulations do not have to be revised every time a waste (such as a particular type of battery) either becomes hazardous or is no longer hazardous due to changes in manufacturing practices or technology.

Subsection (b): This subsection establishes that wastes that are good candidates for the Universal Waste Rule are not generated solely by a specific industry or group of industries, and would commonly be generated by a wide variety of types of establishments (e.g., households, retail and commercial businesses, service businesses, office complexes, conditionally exempt small quantity generators, small businesses, governmental organizations, or large industrial facilities). This factor clarifies that wastes appropriate for

inclusion to the Universal Waste Rule should be wastes generated by a wide variety of types of establishments. This factor will assist petitioners and DTSC in determining whether a waste is appropriate for addition to the Universal Waste Rule. Wastes that are generated primarily in large industrial facilities settings are not appropriate for inclusion under the Universal Waste Rule, as these facilities typically generate large quantities of wastes that are more suitably managed under the current hazardous waste management regulations. Such facilities are usually structured to comply with the applicable hazardous waste regulations.

Subsection (c): This subsection specifies that universal waste should be generated by a large number of generators and that the universal waste should be frequently generated in relatively small quantities by each generator. The goal of the universal waste program is to capture wastes that due to their widespread nature are difficult to manage under current hazardous waste regulations. Hazardous waste to be considered under the Universal Waste Rule must be generated by a large number of generators and generated in relatively small quantities. DTSC will consider wastes that are generated in relatively small quantities regardless of the total amount of hazardous wastes generated by each generator. Although large industrial facilities may generate large volumes of hazardous wastes, these facilities may also generate relatively small quantities of a certain waste or category of wastes (e.g., batteries). The term “relatively” is used to distinguish between small quantities of universal wastes and large volumes of hazardous wastes (e.g., tens of thousands of pounds or gallons per month). This subsection is necessary to establish a petition evaluation factor that considers the number of generators and the frequency of generation for a waste or waste category.

Subsection (d): This subsection establishes a petition evaluation factor to require that collection systems that will collect the waste will provide close stewardship. Any collection system that would ensure good stewardship would be considered favorably, regardless of the organizations that run the collection system. This subsection is necessary to establish a petition evaluation factor that considers the types of collection systems in place to ensure that wastes or categories of waste are closely managed.

Subsection (e): This subsection establishes a petition evaluation factor that requires that the risks posed by the waste or category of waste be relatively low during accumulation and transport. The subsection requires petitioners to suggest or reference waste management requirements specific for the candidate waste. The petitioner is also required to show that any management requirements proposed or referenced in the petition will be protective of human health and the environment during accumulation and transport. This subsection is necessary to clarify that good candidate wastes or categories of wastes for the Universal Waste Rule should pose low risks compared to other hazardous wastes during accumulation and transport. This subsection is necessary to establish a petition evaluation factor that considers the accumulation and transport management

standards for candidate wastes or categories of waste and requires that these management standards be protective of human health and the environment.

Subsection (f): This subsection establishes a petition evaluation factor that takes into consideration whether regulation of the waste or category of waste under the Universal Waste Rule will increase the likelihood that the waste will be diverted from the non-hazardous waste management systems to more appropriate recycling, treatment or disposal systems in compliance with division 4.5 or division 20 of the Health and Safety Code. This subsection is necessary to require petitions to contain information that shows that candidate wastes are actually being managed in the non-hazardous waste management system.

Subsection (g): This subsection establishes a petition evaluation factor that requires the petition to demonstrate that regulation of the waste or category of waste under the Universal Waste Rule will improve implementation of and compliance with the hazardous waste management program. This subsection is necessary to clarify that it is important that a new waste or category under the Universal Waste Rule will improve implementation of the hazardous waste management program.

Subsection (h): This subsection establishes a petition evaluation factor that allows the petitioner to submit additional information that may be appropriate for consideration. This factor is included because it is likely that any particular waste or category of waste may present unique factors that could demonstrate that regulation under the Universal Waste Rule (1) is appropriate for the waste or category of waste; (2) will improve management practices for the waste or category of waste; and (3) will improve the implementation of the hazardous waste program. This subsection is necessary to clarify that it is important for a petitioner to identify and for the Director to be able to consider unique factors during the petition process, if such factors exist.

Amend Section 66261.9, Requirements for Universal Waste:

This section provides an exemption for certain wastes or categories of wastes from the requirements of chapter 6.5 of division 20 of the Health and Safety Code if those wastes or categories of wastes are managed in accordance with the Universal Waste Rule established in chapter 23. Several of these waste categories are managed under the standards established in statute (i.e., aerosol cans), while others are managed under the standards that are or will be established in regulations (CRT materials). This proposed non-substantive amendment establishes the single list of waste categories that are considered universal wastes and provides the regulated community with one section of regulations that shows an inclusive list of all universal waste.

Subsection (a): This subsection is amended to include CRT materials, CEDs, aerosol cans, and mercury-containing motor vehicle switches as exempt from regulation under chapter 6.5 of the Health and Safety Code, if these wastes are handled in accordance with management standards for universal waste found in chapter 23 in lieu of existing hazardous waste management standards. This amendment is necessary because in order for a waste to be managed under the Universal Waste Rule contained in chapter 23, a waste must be specifically exempted from regulation under chapter 6.5 of the Health and Safety Code (except as specified in chapter 23). It is necessary to exempt these wastes from the “full” hazardous waste requirements so that these wastes may be managed solely pursuant to chapter 23 and are not subject to two sets of requirements. Please note however, that if a handler fails to properly manage universal waste pursuant to chapter 23, the waste is regulated as hazardous waste under chapter 6.5 of the Health and Safety Code and must be managed and disposed of accordingly.

Amend Section 66264.1, Purpose, Scope, and Applicability:

This section established the purpose, scope and applicability of standards for permitted hazardous waste facilities, specifically treatment, storage, and disposal facilities.

Subsections (g)(12)(A) through (g)(12)(C): These subsections are amended by deleting the waste types listed in subsections (g)(12)(A) through (g)(12)(C), and deleting the phrases “the below listed universal.” New language has been added to clarify that the universal waste handlers and transporters shall only handle the wastes listed in California Code of Regulations, title 22, division 4.5, section 66261.9, which lists those hazardous wastes that are specifically exempted from management under “full” hazardous waste management standards when they are managed under the provisions of chapter 23.

Subsection (h): A grammatical change has been made to this section for clarity.

Amend Section 66265.1, Purpose, Scope, and Applicability:

This section established the purpose, scope and applicability of standards for interim status hazardous waste facilities, specifically treatment, storage, and disposal facilities.

Subsections (d)(15)(A) through (d)(15)(C): These subsections are amended by deleting the waste types listed in subsections (d)(15)(A) through (d)(15)(C), and deleting the phrases “the below listed universal.” New language has been added to clarify that the universal waste handlers and transporters shall only handle the wastes listed in California Code of Regulations, title 22, division 4.5, section 66261.9, which lists those hazardous wastes that are specifically exempted from management under “full” hazardous waste management standards when they are managed under the provisions of chapter 23.

Amend Section 66268.1, Purpose, Scope, and Applicability:

This section established the purpose, scope and applicability of standards for wastes that are restricted from land disposal.

Subsections (j)(1) through (j)(3): These subsections are amended by deleting the waste types listed in subsections (j)(1) through (j)(3). New language has been added to clarify that the universal waste handlers and transporters shall only handle the wastes listed in California Code of Regulations, title 22, division 4.5, section 66261.9, which lists those hazardous wastes that are specifically exempted from management under “full” hazardous waste management standards when they are managed under the provisions of chapter 23.

Amend Section 66270.1, Purpose and Scope of These Regulations:

This section establishes the provisions for the issuance and administration of hazardous waste facility permits.

Subsections (c)(2)(E)1 through (c)(2)(E)3: These subsections are amended by deleting the waste types listed in subsections (c)(2)(E)1 through (c)(2)(E)3. New language has been added to clarify that the universal waste handlers and transporters shall only handle the wastes listed in California Code of Regulations, title 22, division 4.5, section 66261.9, which lists those hazardous wastes that are specifically exempted from management under “full” hazardous waste management standards when they are managed under the provisions of chapter 23.

Amend Section 66273.1, Scope:

This section establishes chapter 23 requirements for the management of universal wastes. Chapter 23 management standards are an alternative to the existing hazardous waste management regulations found in chapters 10 through 21.

This section parallels the language found in 40 C.F.R. section 273.1, except that several hazardous wastes have been added that are not presently included in the federal rule. Hazardous wastes that have been added to the State Universal Waste Rule by inclusion in this section are CRT materials, CEDs, aerosol cans, and mercury-containing motor vehicle light switches.

Subsection (a): This subsection is amended to add CRT materials, CEDs, aerosol cans, and mercury-containing motor vehicle light switches to the Universal Waste Rule. Each of these waste categories is defined in the sections specified in the regulation. In each case, only those wastes that exhibit a hazardous waste characteristic can be included in the Universal Waste Rule. Inclusion of each waste category is contingent on whether the

regulation of that waste as a universal wastes meets the goals of the Universal Waste Rule. Those goals are that regulation under the Universal Waste Rule (1) is appropriate for the waste or category of waste, (2) will improve management practices for the waste or category of waste, and (3) will improve the implementation of the hazardous waste program. This subsection is amended to clarify that wastes that exhibit a hazardous waste characteristic and are included in any of these waste categories (CRT materials, CEDs, aerosol cans, and mercury-containing motor vehicle light switches) can be managed under the requirements of chapter 23.

Add Chapter 23, Article 1, Section 66273.3, Applicability--Consumer Electronic Devices:

This proposed section applies the chapter 23 requirements to persons managing CEDs as described in section 66273.9, unless: (1) the CEDs are not yet wastes as described in chapter 11, or (2) the CEDs are not hazardous wastes exhibiting one or more of the hazardous waste characteristics identified in chapter 11.

Subsection (a): This subsection requires persons who manage CEDs, as described in section 66273.9, to manage those wastes in accordance with the applicable requirements for those wastes contained in chapter 23. This subsection clarifies who must comply with the requirements of chapter 23 when they manage specifically-defined CEDs (i.e., those that are hazardous solely because the device exhibits the characteristic of toxicity).

Subsection (b): This subsection clarifies and establishes the circumstances under which a person is not required to comply with the requirements of chapter 23 when that person manages CEDs. Management of CEDs under chapter 23 is not required when (1) the CEDs are not yet wastes as described in chapter 11, or (2) the CEDs are not hazardous wastes based on the characteristic of toxicity identified in chapter 11.

Subsection (c): This subsection establishes the circumstances under which a consumer electronic device is considered a waste. Once it is considered a waste, the generator must determine whether it is a hazardous waste (i.e., by demonstration that the waste is a listed waste or that it exhibits one or more hazardous waste characteristics) and, subsequently whether it meets one of the universal waste categories. This section is necessary to clarify at what time a generator must decide that a consumer electronic device has become a waste. This determination is necessary to ensure that the waste is properly managed under the applicable and appropriate waste management system (i.e., "full" hazardous waste management or universal waste management).

Amend Section 66273.4, Applicability--Mercury Thermostats.

This section applies the chapter 23 management standards to persons who manage hazardous waste mercury thermostats.

Subsection (a): The section reference has been changed from “Section 66273.6” to “section 66273.9” because the current reference is incorrect. The new reference provides the correct citation to the definitions found in section 66273.9 of chapter 23. This amendment is a non-substantive change.

Add Chapter 23, Article 1, Section 66273.6, Applicability--CRT Materials:

This proposed section applies the chapter 23 management standards to persons who manage CRT materials (CRTs, CRT devices and CRT glass). This section describes the conditions under which CRT materials become a waste.

Subsection (a): This subsection requires that persons who manage CRT materials, as described in section 66273.9, to manage those wastes in accordance with the applicable requirements for those wastes contained in chapter 23. This subsection clarifies who must comply with the requirements of chapter 23 when they manage specifically-defined CRT materials.

Subsection (b): This subsection clarifies and establishes the circumstances under which a person is not required to comply with the requirements of chapter 23 when that person manages CRT materials. The requirement for the management of CRT materials under chapter 23 is not applicable when (1) the CRT materials are not yet wastes as described in chapter 11; (2) the CRT materials are not hazardous wastes exhibiting one or more of the hazardous waste characteristics identified in chapter 11; (3) the CRT materials are managed as hazardous waste under chapter 10 through 22 when sent for disposal; (4) the CRT materials are managed as hazardous wastes under chapter 10 through 22; (5) the CRT materials are managed in accordance with the exemptions provided in section 66273.8; or (6) the CRT materials were previously waste but are no longer waste (e.g., a CRT device that has been refurbished and returned to service).

Subsection (c): This subsection clarifies and establishes the circumstances under which a CRT material is considered a waste. Once it is considered a waste, the generator must determine if it is a hazardous waste (i.e., by demonstration that the waste is a listed waste or that it exhibits one or more hazardous waste characteristics) and, subsequently, whether it meets one of the universal waste categories. This subsection is necessary to clarify (1) at what time a generator must decide that a CRT material becomes a waste; and (2) to ensure that a generator understands when it becomes subject to regulation under chapter 23.

Amend Section 66273.8, Exemptions:

This section establishes exemptions for universal wastes. These proposed regulations reformat the existing section and amend it to clarify that certain disposal exemptions are allowed for certain universal wastes and that households are exempt if certain management practices are followed. Non-substantive grammatical changes have been made throughout the section for clarity.

Subsection (a)(1): This subsection allows a temporary disposal exemption for universal wastes produced by a household. Under this exemption, households may continue to dispose of the universal wastes listed under this subsection as non-hazardous solid waste. This existing exemption is offered through February 8, 2006 to allow time for the development of collection systems. The title to this subsection has been added for clarity and for structural organization.

This subsection has been amended to include “hazardous waste consumer electronic devices” in the list of universal wastes specified in this subsection. This amendment is necessary to clarify that CEDs are included in this temporary exemption.

This subsection has also been amended to include the phrase “batteries, universal waste lamps, universal waste mercury thermostats” which is language added to this subsection by the emergency CRT regulation. This amendment is necessary to maintain clarity concerning the specific universal waste categories for which households are allowed the disposal exemption offered under this subsection.

Subsection (a)(2): This subsection has been amended to reflect the reorganization of this section, where (b) has been changed to (a)(2). Similar amendments have been made within this subsection for the references cited. The term “100 kilograms” has been added and the term “220 pounds” has been changed to the parenthetical, so that both System International (metric) and U.S. Customary units of measure can be used for generation limit calculations. These amendments are necessary for clarity and to maintain the structural organization of this section.

Subsection (a)(3): This subsection is amended to reflect the reorganization of this section, where (c) has been changed to (a)(3). Similar amendments have been made within this subsection for the subsequent subparagraphs. These amendments are non-substantive and are necessary for clarity and to maintain the structural organization of this section.

This subsection has also been amended to include the phrase “batteries, universal waste lamps, universal waste mercury thermostats” which is language added to this subsection

by the emergency CRT regulations. This amendment is necessary to maintain clarity concerning the specific universal waste categories for which households are allowed the disposal exemption offered under this subsection.

Subsection (a)(4): This subsection has been added to allow a temporary disposal exemption for conditionally exempt small quantity universal waste generators of CEDs. This exemption is similar to the temporary disposal exemption provided in subsection (a)(2) for other waste categories. This exemption is necessary because there is insufficient infrastructure in place to collect the CEDs from the generators at the present time.

Subsection (a)(5): This subsection is amended to reflect the organizational changes made to subsection (a). These amendments are non-substantive and are necessary for clarity and to maintain the structural organization of this section.

Subsection (b): This subsection has been added to provide an exemption to households from the universal waste requirements, such as use of a bill of lading, accumulation time limits, and labeling/marketing, which are not germane to households. This subsection is necessary to clarify that household generators may take their universal wastes to a collection facility in the usual manner without having to meet the requirements of the Universal Waste Rule.

Subsections (b)(1)(A) through (b)(1)(C): These subsections have been added to clarify the conditions under which a household is exempt from the requirements of chapter 6.5 for the management of their universal wastes. These conditions are that the wastes are exempt under subsection (a) of this section, the person does not disassemble or otherwise treat the waste, and all waste generated by the person are transported to an appropriate facility (universal waste handler or destination facility). These handling conditions are necessary to ensure that universal wastes generated by households are managed in a manner protective of human health and the environment.

Subsection (b)(2)(A): This subsection has been added to clarify that universal waste CRT materials generated by a household are only exempt from the requirements of chapter 6.5 of the Health and Safety Code when those wastes are sent for recycling. This section is necessary to clarify the provisions of statute that prohibit disposal of wastes in certain universal waste categories. Subsections (b)(2)(B) through (b)(2)(K) are reserved for the inclusion of future waste categories.

Subsection (c): This subsection is amended to reflect the organizational changes made to this section. These amendments are non-substantive and are necessary for clarity and to maintain the structural organization of this section.

Subsection (f): This subsection has been repealed because the standards contained in subsection (f) have been reformatted and are now included in the new subsection (b), “Household exemptions.” The provisions for an “electronic product generator” are no longer necessary because of the household exemption offered in subsection (b) of this section.

Amend Section 66273.9, Definitions:

This section defines the terms used in chapter 23. The definitions added to this section are consistent with those added to chapter 10 of this division, where applicable.

Add the definition of “Cathode ray tube or CRT”: The definition is added to the section to clarify the use of the term for purposes of this chapter.

Amend the definition of “Conditionally exempt small quantity universal waste generator”: The management of CRT materials, including handling requirements and generation limits, is addressed in article 7 of chapter 23 which is being added by this rulemaking. This definition is amended to clarify that CRT materials are not included in the generation limits for this category of generator. Non-substantive grammatical changes have also been made to this section for clarity.

Add the definition of “Consumer Electronic Device”: The definition is added to the section to clarify the use of the term for purposes of this chapter.

Add the definition of “CRT device”: The definition is added to the section to clarify the use of the term for purposes of this chapter.

Add the definition of “CRT glass”: The definition is added to the section to clarify the use of the term for purposes of this chapter.

Add the definition of “CRT material”: The definition is added to the section to clarify the use of the term for purposes of this chapter.

Add the definition of “CRT material handler”: The definition is added to the section to clarify the use of the term for purposes of this chapter.

Add the definition of “Off-site”: The definition is added to the section to clarify the use of the term for purposes of this chapter.

Amend the definition of “Universal Waste”: The definition is amended to clarify that universal wastes are any wastes listed in section 66261.9, subsection (a). The language

that is deleted contains an incorrect reference and the wastes listed in subsections (a), (b), and (c) are being deleted for clarity and consistency with the amended language in sections 66264.1, 66265.1, 66268.1, and 66270.1.

Amend the definition of "Universal Waste Handler": The definition is amended to clarify that universal waste handlers exclude CRT materials handlers.

Amend Section 66273.13, Waste Management:

This section specifies the management requirements that apply to small quantity handlers of universal waste. Universal waste must be managed in a manner that prevents any releases to the environment.

A small quantity handler of universal waste, who, in the course of handling universal wastes under this section, generates other solid waste that exhibits characteristics of hazardous waste, is required to manage those wastes in compliance with the applicable hazardous waste requirements of this division.

Subsection (b)(3)(B): This subsection is being amended to remove language that is grammatically incorrect. This amendment is consistent with identical language found in section 66273.33, subsection (a)(3)(A) regarding the management of battery electrolyte that exhibits a characteristic of hazardous waste. This amendment is non-substantive and is necessary for clarity.

Subsection (e): This new subsection establishes the waste management requirements for small quantity handlers of CEDs. This language is similar to the requirements for handlers of the other waste categories contained in this section. The subsection is added to clarify the management methods that are required to ensure that releases to the environment are prevented and to clarify that the management standards for small quantity handlers of CEDs are consistent with the requirements for the other waste categories covered under this section.

Amend Section 66273.14, Labeling/Marking:

This section requires that a small quantity handler of universal waste label or mark the universal waste or the containers of universal waste. This section establishes the labeling and marking descriptions for each universal waste category.

Subsection (e): This subsection specifies the labeling and marking descriptions for CEDs. Each consumer electronic device or each container or package that holds such an item is required to be clearly labeled or marked with the waste description using one of the following phrases: "Universal Waste--Consumer Electronic Device." This subsection is

necessary to establish and maintain a consistent labeling and marking requirement for each universal waste category.

Amend Section 66273.20, Exports.

This section requires a small quantity handler of universal waste (batteries, thermostats, and lamps) who sends universal waste to a foreign destination to comply with exporter requirements found in sections 66262.53, 66262.56, subsections (a)(1) through (4), (6), and subsection (b) and section 66262.57. Sections 66262.53, 66262.56, subsections (a)(1) through (4), (6), and subsection (b) and section 66262.57 state that an exporter of RCRA hazardous waste or non-RCRA hazardous waste shall concurrently notify U.S. EPA and DTSC of an intended export of RCRA hazardous wastes, or notify only DTSC of an intended export for non-RCRA hazardous waste 60 days before the intended date of shipment. This requirement applies if the foreign destination is not an Organization for Economic Cooperation and Development (OECD) country specified in 40 C.F.R. section 262.58.

The small quantity handler of universal waste (batteries, thermostats, and lamps) must also provide the transporter with the EPA Acknowledgment of Consent for the shipment pursuant to 40 C.F.R. section 273.20. This section has been amended to apply more rigorous notification requirements for the export of CEDs. This amendment is necessary to help curtail the export of CEDs to persons that will mismanage the waste. Exporters of CEDs will be subject to the export notification requirements that apply to non-RCRA hazardous waste. These requirements are discussed below.

The report published by the Basel Action Network and the Silicon Valley Toxics Coalition "Exporting Harm--The High-Tech Trashing of Asia," provides more details of the hazards associated with the export and mismanagement of electronic wastes. This report is described in the previous section of this document titled **Studies Relied On**.

Subsection (d): This subsection requires a small quantity universal waste handler who sends CEDs to a foreign destination to notify DTSC and concurrently send a copy to the CUPA of an intended export of CEDs. The notification must be submitted at least four weeks prior to the intended shipment date and can cover exporting activities extending over a 12-month or lesser period of time. The notification process is not intended to preclude the exportation of CEDs to foreign destinations, thus there is no exportation approval process proposed for DTSC in this rulemaking. This subsection is necessary to institute the notification requirements for exports and to provide DTSC and/or the local CUPA with a tracking mechanism for CEDs exports.

Subsection (e): This subsection establishes the contents of the notification made under subsection (d). The notification must be in writing, signed by the universal waste handler and must include:

- the name, mailing address, and telephone number of the universal waste handler
- the foreign destination where each type of consumer electronic device will be shipped
- the estimated frequency at which each type of consumer electronic device will be exported
- the time period over which the exporting activities will take place
- all points of entry and departure from each transit foreign country
- the transportation mode for each shipment
- the name and site address of the foreign consignee

This subsection is necessary to define the contents of the notification made under subsection (d) and to provide the exporter with the items that must be included for a notification to be deemed complete by DTSC.

Subsection (f): This subsection provides the mailing address for the submittal of the export notification made under subsection (d). This subsection is necessary to provide the exporter with an accurate means for submitting an export notification made under subsection (d).

Amend Section 66273.33, Waste Management:

This section specifies the waste management requirements with which large quantity handlers of universal waste must comply. A large quantity handler of universal waste, who, in the course of handling universal wastes under this section, generates other solid waste that exhibits characteristics of hazardous waste, is required to manage those wastes in compliance with the applicable hazardous waste requirements of this division.

Subsection (e): This new subsection establishes the waste management requirements for large quantity handlers of CEDs. This language is similar to the requirements for handlers of the other waste categories contained in this section. The subsection is added to clarify the management methods that are required to prevent releases to the environment and to make the management standards for large quantity handlers of CEDs consistent with the requirements for the other waste categories covered under this section.

Amend Section 66273.34, Labeling/Marking:

This section requires a large quantity handler of universal waste to label or mark universal waste or the containers of universal waste. This section establishes the labeling and marking descriptions for each universal waste category.

Subsection (e): This subsection specifies the labeling and marking descriptions for CEDs. Each consumer electronic device or each container or package that holds such an item is required to be clearly labeled or marked with the waste description using one of the following phrases: "Universal Waste--Consumer Electronic Device." This subsection is necessary to establish and maintain a consistent labeling and marking requirement for each universal waste category.

Amend Section 66273.40, Exports.

This section requires a large quantity handler of universal waste (batteries, thermostats, and lamps) who sends universal waste to a foreign destination to comply with exporter requirements found in sections 66262.53, 66262.56, subsections (a)(1) through (4), and (6), and subsection (b) and section 66262.57. Sections 66262.53, 66262.56, subsections (a)(1) through (4) and (6), and subsection (b) and section 66262.57 state that an exporter of RCRA hazardous waste or non-RCRA hazardous waste shall concurrently notify U.S. EPA and DTSC of an intended export of RCRA hazardous wastes, or notify only DTSC of an intended export for non-RCRA hazardous waste 60 days before the intended date of shipment. This requirement applies if the foreign destination is not an OECD country specified in 40 C.F.R. section 262.58.

The large quantity handler of universal waste (batteries, thermostats, and lamps) must also provide the transporter with the EPA Acknowledgment of Consent for the shipment pursuant to 40 C.F.R. section 273.40. This section has been amended to apply more rigorous notification requirements for the export of CEDs. This amendment is necessary to help curtail the export of CEDs to persons that will mismanage the waste. Exporters of CEDs will be subject to the export notification requirements that apply to non-RCRA hazardous waste. These requirements are discussed below.

The report published by the Basel Action Network and the Silicon Valley Toxics Coalition "Exporting Harm--The High-Tech Trashing of Asia," provides more details of the hazards associated with the export and mismanagement of electronic wastes. This report is described previously in the section of this document titled **Studies Relied On**.

Subsection (d): This subsection requires a large quantity universal waste handler who sends CEDs to a foreign destination to notify DTSC and concurrently send a copy to the CUPA of an intended export of CEDs. The notification must be submitted four weeks prior to the intended shipment date and can cover exporting activities extending over a 12-month or lesser period of time. The notification process is not intended to preclude the

exportation of CEDs to foreign destinations, thus there is no exportation approval process proposed for DTSC in this rulemaking. This subsection is necessary to institute the notification requirements for exports and to provide DTSC and/or the local CUPA with a tracking mechanism for CED exports.

Subsection (e): This subsection establishes the contents of the notification made under subsection (d). The notification must be in writing, signed by the universal waste handler and must include:

- the name, mailing address, and telephone number of the universal waste handler
- the foreign destination where each type of consumer electronic device will be shipped
- the estimated frequency at which each type of consumer electronic device will be exported
- the time period over which the exporting activities will take place
- all points of entry and departure from each transit foreign country
- the transportation mode for each shipment
- the name and site address of the foreign consignee

This subsection is necessary to define the contents of the notification made under subsection (d) and to provide the exporter with the items that must be included for a notification to be deemed complete by DTSC.

Subsection (f): This subsection provides the mailing address for the submittal of the export notification made under subsection (d). This subsection is necessary to provide the exporter with an accurate means for submitting an export notification made under subsection (d).

Amend Section 66273.60, Applicability:

This section subjects a destination facility, as defined in section 66273.9, to the applicable requirements of chapters 14 through 16, 18, and 20, which include the standards for: (1) operators of hazardous waste transfer, treatment, storage, and disposal facilities; and (2) land disposal restrictions, and permit requirements. This section parallels the language found in 40 C.F.R. section 273.60.

A non-substantive punctuation change has been made at the end of subsection (a) to replace the colon with a period.

Add Chapter 23, Article 7, Standards for CRT Material Handlers:

This proposed article is being added to California Code of Regulations, title 22, division 4.5, chapter 23 to establish the organizational structure for the CRT materials standards. The article closely follows the organizational structures of articles 2 and 3 within chapter 23.

Add Chapter 23, Article 7, Section 66273.80, Applicability:

This proposed section applies the requirements of article 7 to CRT material handlers, as defined in section 66273.9. This section is necessary to clearly establish that the standards contained in article 7 apply persons who handle CRT materials.

Add Chapter 23, Article 7, Section 66273.81, Prohibitions:

This proposed section prohibits a handler of CRT material universal waste from disposing of, diluting, or treating universal waste except in certain instances such as responding to releases (section 66273.37) or managing universal waste pursuant to section 66273.33. As used here, “disposing” means the generator disposing directly onto land, into the trash or into a non-hazardous landfill. It does not mean a handler cannot send or take waste offsite for proper disposal or recycling.

Subsection (a): This subsection prohibits CRT handlers from disposing, as defined above, of CRT materials. This section is necessary to establish the disposal prohibition. The prohibition ensures that CRT materials are not disposed to land or improperly disposed by other means (e.g., incineration), so that the handling of CRT materials is protective of human health and the environment.

Subsection (b): This subsection prohibits CRT material handlers from diluting or treating CRT materials, except as described further. Prohibitions on dilution have been included with the treatment prohibition because dilution is a form of treatment. It is further clarified that dilution or treatment may occur when the CRT material handler is responding to a release (as specified in section 66273.87) or the handler is managing specific wastes (in compliance with section 66273.83).

Add Chapter 23, Article 7, Section 66273.82, Notification Requirements for CRT Material Handlers:

This proposed section establishes a notification requirement for certain CRT material handlers who accept CRT materials from off-site sources or who generate large quantities of CRT materials. The requirement to notify DTSC of CRT material handling activities is contingent on the amount of CRT materials that a person accepts or generates. This section specifies when the notification is required, what is contained in the notification, and how often the notification is submitted. Under this section, CRT materials handlers who

accept large quantities of CRT materials (> five (5) CRTs, > five (5) CRT devices or > 100 kilograms of CRT glass) are subject to this notification requirement.

In addition, a CRT materials handler who generates 5,000 kilograms or more of CRT materials must submit a notification to DTSC under this section. The amount of CRT materials that a facility accepts or generates is a good indicator of the quantities of waste that the facility is handling, is easily verified by regulating agencies through an inspection of the facility, and is a good indicator of the risk posed by the management of CRT materials at the facility.

This section is necessary so that DTSC may obtain accurate information describing the operations of the persons who handle CRT materials in the State. This information is necessary to ensure that CRT materials are managed appropriately, to provide persons who wish to transport their waste CRT materials with locations of such handlers, and to assist DTSC with compliance assistance.

Subsection (a): This subsection states that a CRT material handler who accepts five or less CRTs, five or less CRT devices, or 100 kilograms or less of CRT glass per calendar year from off-site sources is not required to submit a notification under this section. Note that given an average weight of 40 pounds per CRT, five CRTs weigh approximately 100 kilograms, which is the generation limit for CESQGs as described in 40 C.F.R. section 261.5. This will not require households and small businesses that generate small quantities of CRT materials to submit a notification. This subsection is necessary to clarify the quantity limits for each type of CRT material that a handler can accept without being required to submit a notification pursuant to subsection (c).

Subsection (b): This subsection establishes the notification requirements for CRT handlers who accept the specified quantities of CRT materials. This subsection also requires notifications to be made by November 1 of each year and submitted in writing or via electronic notification. The notifications must contain CRT handling activities for the previous calendar year, specifically October 1 to September 30. This time frame was established in the emergency regulation package for CRT materials and was chosen based on a reasonable time to compile the notification information once the emergency regulations become effective (August 2001). DTSC has chosen to maintain the November 1 submittal date for consistency with the emergency regulation notifications dates, but has added clarification on the "previous year" designation to mean October 1 through September 30. This designation provides the CRT handlers with a reasonable time, approximately 30 days, from the end of the reporting period (October 1) to the submittal date (November 1) to compile the necessary information needed for a complete notification.

This section also allows Household Hazardous Waste Collection Facilities to submit the CRT material handler notification information on the Form 303, which is required under Health and Safety Code section 25218.9. This requirement will give these types of facilities a reduced reporting option if they choose to submit only the Form 303.

This section is necessary to clarify that notification of CRT material handling is required for handlers who accept specific amounts of CRT materials.

Subsection (c): This subsection requires a CRT material handler who generates 5,000 kilograms or more of CRT materials per calendar year (CRTs, CRT devices and CRT glass, cumulative) to notify DTSC of its handling activity annually. The notification is made under the same reporting date and covers the same “previous year” dates discussed under subsection (b) of this section. This notification requirement is equivalent to the requirement for large quantity universal waste handlers under 40 C.F.R. section 273.32, except that CRT materials handlers are not required to obtain U.S. EPA identification numbers. This subsection clarifies that a CRT materials handler described under this subsection is required to submit a notification.

Subsection (d): This subsection establishes the contents of the notification that is required under subsections (b) or (c). The notification must include:

(d)(1): The CRT materials handler’s name and mailing address. Often times the physical location of the accumulation or generation location is not the business mailing address for a given business entity. For this reason, this information is required in order to provide DTSC with a means to contact a given CRT handler via certified mail.

(d)(2): The name and telephone number of the person who can be contacted at the handler’s site and who can address universal waste management activities. This information is necessary so that DTSC may be provided with a contact person should it be necessary to contact the facility via telephone.

(d)(3): The address or physical location of the CRT management activity. This information is necessary so that DTSC may accurately locate the CRT handler’s accumulation or generation site(s).

(d)(4): The total quantity of the CRTs, CRT devices, and CRT glass. CRTs and CRT devices quantities must be given by count (i.e., piece); however, the CRT glass quantities must be given by weight. This information is necessary so that DTSC can track the handling activities at each site.

(d)(5): The list of locations that the CRT handler shipped CRTs to during the previous year, and the number of CRTs shipped to each of these facilities. This information is necessary

so that DTSC can track CRT shipment information to determine whether CRTs are shipped to appropriate facilities.

(d)(6): The list of locations that the CRT handler shipped CRT devices to during the previous year, and the number of CRT devices shipped to each of these facilities. This information is necessary so that DTSC can track CRT device shipment information to determine whether CRT devices are shipped to appropriate facilities.

(d)(7): The list of locations that the CRT handler shipped CRT glass to during the previous year, and the total quantity of CRT glass shipped to each of these facilities. This information is necessary so that DTSC can track CRT glass shipment information to determine whether CRT glass is shipped to appropriate facilities.

Subsection (e): This subsection provides for reporting the total quantities of CRTs, CRT devices, and CRT glass in the notification required under subsections (b) or (c). If a handler uses a mass-based inventory system, the handler may convert the mass data to count data through the application of an appropriate conversion factor. An example is provided that shows a conversion of 30 pounds per CRT. If a handler uses this data conversion process, it must indicate on the notification that this data conversion method was used and it must also provide the conversion factor(s) used.

This subsection is necessary because handlers may use different inventory systems and must be able to convert their weight inventory data into measurements for notification purposes. Some systems are based on itemization (count), while other systems are based on weight (mass). The requirement that inventory data be provided as weight is consistent with other notifications required and other hazardous waste regulatory status determinations contained in California Code of Regulations, title 22, division 4.5.

Add Chapter 23, Article 7, Section 66273.83, Waste Management:

This proposed section establishes the specific handling requirements for CRT material handlers and each subsection sets forth a general performance standard that requires CRT handlers to manage CRT materials in such a way that prevents releases of any CRT materials or components of the CRT materials to the environment (e.g., handling practices for the removal of CRTs from CRT devices). Additionally, this section establishes standards for the treatment that is allowed under the Universal Waste Rule. This section creates a self-implementing grant of authorization for CRT recyclers that perform treatment (i.e., cutting, sawing, breaking, shredding, crushing, compacting, separating, or screening), and establishes a requirement for the operator of the recycling facility to submit an annual notification to DTSC of its recycling activities. This section also requires the operator of the recycling facility to perform a closure cost estimate and submit to DTSC proof of guaranteed funds for closure of the facility.

This section is necessary to ensure that CRT materials are handled to prevent releases to the environment and to prescribe a set of management standards to encourage the collection and recycling of CRT materials. This section is also necessary to establish management procedures (i.e., a self-authorizing grant of authorization) that may be employed for the recycling or treatment of CRT materials so that persons conducting these activities are not required to obtain a hazardous waste facility permit, a standardized permit, or permit-by-rule grant of authorization. The documentation requirements outlined in this section are similar in scope to the documentation requirements for hazardous waste interim status facilities and facilities operating under a permit-by-rule grant of authorization. DTSC believes that certain requirements for interim status facilities (those facilities that continue to operate until a final permit determination is made) are appropriate for CRT material treatment and recycling facilities (e.g., the requirement to ensure that the facility maintains the financial means to operate the facility and close the facility in a manner that is protective of human health and the environment).

Subsection (a): This subsection establishes the waste management requirements for CRT material handlers. This language is similar to the requirements for handlers of the other waste categories contained in this chapter. The term “foreseeable” is used to clarify that CRT materials handlers should plan for changing conditions that could affect the structural integrity of the containers used to hold CRT materials. The subsection is added to clarify the management methods that are required to prevent releases to the environment and to make the management standards for CRT handlers consistent with the requirements for the handlers of other waste categories covered under this chapter.

Subsection (b): This subsection authorizes CRT materials handlers to remove CRTs from CRT devices, and it establishes the removal procedures. Removal of the CRTs from CRT devices will reduce transportation costs (i.e., reduced weight of the device, such as large console televisions or large monitors). This subsection is necessary to ensure that the handler is removing CRTs from CRT devices in a manner designed to prevent breakage of the CRTs and to ensure proper containment of any broken CRTs.

Subsections (b)(1)(A) through (b)(1)(D): These subsections describe the procedures and provide guidance for the proper removal of CRTs from CRT devices. The procedures include removing the CRTs in such a manner to prevent breakage, conducting removals over a containment device, training the persons who remove CRTs so that removal is accomplished safely, and packaging the CRTs in adequate containers. These subsections are necessary to ensure that CRT removal is conducted in a safe and environmentally protective manner.

Subsection (b)(2): This subsection requires a CRT material handler, after removal of a CRT from a CRT device, to determine whether the remaining non-CRT material(s) of the

CRT device or any other waste generated during the removal process exhibits a hazardous waste characteristic. If any of these items are determined to be hazardous waste, the wastes must be handled in compliance with the applicable requirements of division 4.5. If the non-CRT material remaining after CRT removal is an electronic device component, as defined under “consumer electronic device” in section 66273.9, then the component may be managed as a universal waste. This subsection is necessary to clarify the applicability of the hazardous waste regulations for the remaining portions of the CRT device or any wastes generated during the removal process.

Subsection (c): This subsection creates the self-implementing authorization for low-risk recycling of CRT materials and it allows a CRT material handler to treat or recycle CRTs, CRT devices, or CRT glass as specified by the procedures set forth in this section.

Subsections (c)(1)(A)(1) and (c)(1)(A)(2): These subsections state that a CRT material handler may treat or recycle CRTs, CRT devices or CRT glass provided that the CRT material handler submits a notification of such activities to DTSC. A notification is required at least 30 days prior to beginning such activities. The notification includes: information required by section 66273.82, subsections (d)(1), (d)(2) and (d)(3); facility owner information; descriptions of the types of CRT materials treated and the treatment processes used; and documents showing that the property owner has been made aware that CRT materials treatment is occurring at the site.

This subsection is necessary to establish the contents of the notification and to provide DTSC with annual information on the entities that recycle or treat CRT materials. This information will be used to track the operations of the CRT materials recyclers/treaters and to assist DTSC with compliance assistance.

Subsections (c)(1)(A)(3) through (c)(1)(A)(5): These subsections require that a CRT material handler who treated or recycled CRT materials notify DTSC, both before and after, of the dates the facility closes or vacates the facility, the facility ceases to handle CRT materials, and the facility ceases treatment recycling activities. Notifications submitted under subsection (c)(A)(4) include the expected dates when activity changes will occur. Notifications submitted under subsection (c)(A)(5) include the last dates when activity changes occurred.

This subsection is necessary to establish the contents of these notifications and to provide DTSC with accurate information on the operational status (i.e., active or inactive) of the entities that recycle or treat CRT materials. This information will be used to track the operations of the CRT materials recyclers/treaters and to assist DTSC with compliance assistance.

Subsection (c)(1)(B): This subsection requires that the notification made under subsection (c)(1)(A) be signed in accordance with the signature provisions of existing section 66270.11 (permit applications). This subsection is necessary to clarify the certification requirements for operators of CRT material recycling and treatment facilities.

Subsection (c)(2): This subsection requires that a cost estimate for closure, as prescribed in existing section 66265.142, be submitted by persons making a notification of treatment or recycling under subsection (c)(1)(A). The closure cost estimate requirements referenced in this section are for interim status facilities, and are considered adequate for the handling practices used during CRT material treatment or recycling activities (i.e., CRT removal, crushing, shredding, breaking, separation, etc). This subsection is necessary to ensure that persons conducting such activities maintain the financial means to conduct closure activities at their site, including cleanup and waste removal activities.

Subsection (c)(3): This subsection requires that a document demonstrating financial assurance for closure, as prescribed in existing section 66265.143, be submitted by persons making a notification of treatment or recycling under subsection (c)(1)(A). The financial assurance for closure requirements referenced in this section are for interim status facilities, and are considered adequate for the handling practices used during CRT material treatment or recycling activities (i.e., CRT removal, crushing, shredding, breaking, separation, etc). This subsection is necessary to ensure that persons conducting such activities maintain the financial means to conduct closure activities at their site, including cleanup and waste removal activities.

Subsection (c)(4): This subsection requires that documentation of financial responsibility for liability, as prescribed in existing section 66265.147, be submitted by persons making a notification of treatment or recycling under subsection (c)(1)(A). The financial responsibility for liability requirements referenced in this section are for interim status facilities, and are considered adequate for the handling practices used during CRT material treatment or recycling activities (i.e., CRT removal, crushing, shredding, breaking, separation, etc). This subsection is necessary to ensure that persons conducting such activities maintain the financial means to conduct CRT materials handling activities at their site, including during normal operations and emergency situations.

Subsection (c)(5): This subsection requires that persons who treat or recycle CRT materials maintain certain operational records so that enforcement agencies may have access to these records upon request. These records include the notification made under subsection (c) of this section and any local air district permit and other permits required for the facility. DTSC understands that local agencies may regulate other aspects of the facilities' operations (e.g., business plans, air permits, sewer permits) and not every county or city regulates the same activities to the same degree; therefore, mandatory submittal of such documents may not be applicable to all CRT material treatment or recycling facilities.

This subsection is necessary to assist enforcement agencies in obtaining enforcement-related documents related to facility operations and permitting status.

Subsection (c)(6): This subsection requires CRT material handlers who treat or recycle CRT materials to submit to DTSC an annual report providing certain operational information. The annual report must be submitted by November 1, signed in accordance with existing section 66270.11 (signatures for permit applications), and cover treatment activities for the previous year. An annual report includes: facility location information, owner/operator information, facility contact person, facility EPA identification number (if applicable), number of facility operational days, total quantity of CRTs treated or recycled (delineated by handler), total quantity of CRT glass shipped off-site (delineated by handler), and the treatment or recycling method(s) used for each CRT material. This subsection is necessary so that DTSC can track treatment and recycling activities within the State.

Subsection (c)(7): This subsection prohibits persons who treat or recycle CRT materials under this section from accepting CRT materials that are managed as hazardous waste under chapters 10 through 22 of this division. The self-implementing authorization for recycling allowed under this section does not include an authorization to accept hazardous waste that is transported under a hazardous waste manifest. This subsection clarifies that persons conducting CRT management in accordance with this section are not authorized under this section to accept or manage hazardous wastes other than CRT materials.

Subsection (c)(8): This subsection requires any treatment of CRT glass for recycling purposed to be done so that the CRT glass is reclaimed only by a CRT glass manufacturer or by a primary or secondary lead smelter. Limiting CRT glass reclamation to these specific industries ensures that the glass is precluded from shipment to other glass manufacturing facilities, such as those that may produce consumer food containers. This subsection is necessary to ensure that the CRT glass is recycled appropriately and to prohibit the disposal of CRT glass to landfills.

Subsection (c)(9): This subsection requires CRT treatment to be conducted in devices that are designed to prevent the release of CRT glass. This subsection is necessary to clarify that treatment must be conducted to minimize releases and accomplished in a manner that is protective of human health and the environment.

Subsection (c)(10): This subsection prescribes the allowable treatment methods that may be used by CRT material treatment and recycling facilities operating under this section. The treatment methods allowed are processes that change the physical properties of the waste (e.g., breaking, shredding, crushing or compacting), that separate each CRT material by its physical properties (e.g., size, color, density), or that screen the separate components based on size. These physical treatment methods pose a lower risk than treatment methods that require the addition of chemicals or heat. This subsection is

necessary to clarify the specific, allowable treatment methods that can be used for CRT handlers who wish to treat or recycle CRT materials under this section and to preclude more risky types of recycling.

Subsection (c)(11): This subsection prohibits treatment processes that use the application of chemicals (including water) and of external heat (except a pinpoint torch used in certain CRT glass separation applications). This section is necessary to clarify that certain treatment processes, which may increase the risks associated with CRT material treatment, are not allowed under this section.

Subsection (c)(12): This subsection requires persons who perform treatment or recycling of CRT materials to be thoroughly familiar with the hazards of such activities. These persons are also required under this subsection to be thoroughly familiar with the procedures necessary to comply with the requirements of this section and to use the proper protective equipment when conducting treatment activities. These requirements ensure workers' safety and ensure that CRT materials are handled appropriately to protect human health and the environment. This subsection is necessary to clarify the performance requirements for persons who treat or recycle CRT materials.

Subsection (c)(13): This subsection requires facilities that undertake CRT material treatment or recycling operations to comply with all applicable local and state air pollution control laws and regulations. These requirements are important because some local air quality management districts have requirements that apply to the operations authorized under this section (e.g., crushing CRT glass). This subsection is necessary to clarify the applicability of air pollution control laws and regulations to facilities that treat or recycle CRT materials.

Subsection (c)(14): This subsection requires all materials that are generated as a result of the CRT material treatment processes (i.e., treatment residues, components of the CRT devices that are not treatable or recyclable) to be classified and managed in accordance with applicable requirements of division 4.5. This subsection is necessary to clarify the applicability of hazardous waste regulations to any materials remaining after treatment or recycling of the CRT materials is complete.

Subsection (c)(15): This subsection requires treatment activities at the facility to be conducted in accordance with applicable local zoning and land use requirements. This subsection is necessary to ensure that facilities are sited in accordance with the Tanner Act and appropriate land use planning.

Subsection (c)(16): This subsection requires facilities that treat or recycle CRT materials to comply with the location standards and seismic and precipitation standards of chapter 15 (requirements for interim status facilities). This subsection is necessary to clarify that

these facilities be located in areas and designed in ways so that the risks posed by such events as maximum credible earthquakes and 24-hour precipitation events are minimized or eliminated with operational controls.

Subsection (d): This subsection states that a CRT handler who treats or recycles CRT materials under subsection (c) of this section is not considered to be operating pursuant to the hazardous waste permitting tiers, i.e., permit-by-rule, conditional authorization, or conditional exemption. This subsection is necessary to clarify that the CRT material treatment and recycling self-implementation authorization process prescribed under this section is not subject to the requirements that are applicable to a grant of authorization described under the hazardous waste permitting tiers.

Add Chapter 23, Article 7, Section 66273.84, Labeling/Marking:

This proposed section establishes the labeling and marking descriptions for each container or pallet in or on which CRTs, CRT devices, or CRT glass must be contained. In the case of CRT materials that are palletized, or that are palletized loads that contain CRT materials and other materials that are not wastes, it is not necessary to require that each container be labeled or marked because, typically, palletized loads are shrink-wrapped in plastic (i.e., a single label may be affixed to the outermost shrink-wrap). This section parallels the language established for each of the universal waste categories regulated under section 66273.14 (small quantity universal waste handlers) and 66273.34 (large quantity universal waste handlers). This section is necessary to establish and maintain a consistent labeling and marking requirement applicable for each of the universal waste categories.

Subsection (a): This subsection specifies the labeling and marking descriptions for CRTs. Each CRT or each container or pallet that holds such an item is required to be clearly labeled or marked with the waste description using the following phrases: "Universal Waste--CRT(s)" or "UW--CRT(s)."

Subsection (b): This subsection specifies the labeling and marking descriptions for CRT devices. Each CRT device or each container or pallet that holds such an item is required to be clearly labeled or marked with the waste description using the following phrases: "Universal Waste--CRT Device(s)" or "UW--CRT Device(s)."

Subsection (c): This subsection specifies the labeling and marking descriptions for CRT glass. Each CRT glass or each container or pallet that holds such an item is required to be clearly labeled or marked with the waste description using the following phrases: "Universal Waste--CRT Glass" or "UW--CRT Glass."

Add Chapter 23, Article 7, Section 66273.85, Accumulation Time Limits:

This proposed section establishes the accumulation time requirements for CRT materials. An accumulation time limit of one year is consistent with the accumulation time limit requirements of small and large quantity universal waste handlers. The one-year time limit is based on the federal universal waste program and the limit is consistent with a statutory prohibition of the 1984 Hazardous and Solid Waste Amendments to RCRA (42 U.S. Code section 3004j) relating to land disposal restrictions. Under the federal Universal Waste Rules, the U.S. EPA simplified the prohibitions on accumulation limits. The provisions are based on the assumption that the sole reason for accumulating universal waste for up to one year was to accumulate the quantities necessary for proper recovery, treatment, or disposal. Having one accumulation time limit for all categories of universal wastes will eliminate confusion.

Subsection (a): This subsection limits a CRT material handler to an accumulation period of no longer than one (1) year from the date the universal waste is generated or received from another handler. The one-year limit gives the CRT material handler adequate time to accumulate sufficient quantities of CRT materials to allow for economies of scale for shipment or treatment purposes. This requirement is necessary so that CRT materials are not accumulated speculatively and are sent for treatment or recycling in a timely manner.

Subsection (b): This subsection states that the universal waste handler must be able to demonstrate the length of time the universal waste has been accumulated by properly labeling/marketing individual CRT material or the container that holds CRT materials. This may be accomplished by marking with the earliest date that the CRT material became a waste or was received, maintaining an inventory system, placing the CRT material in an accumulation area that is clearly marked with the accumulation start date, or any method which would clearly demonstrate accumulation time. This subsection is necessary to allow the CRT material handler to use a variety of methods to demonstrate adherence to the one-year accumulation time limit because each handler may use differing accumulation systems or locations.

Add Chapter 23, Article 7, Section 66273.86, Employee Training:

This proposed section explains the training requirements for employees of CRT material handlers. This section requires CRT materials handlers to ensure that all their employees are thoroughly familiar with the proper waste handling and emergency procedures related to their responsibilities during normal facility operations and during emergencies. This section is necessary to ensure that employees are specifically familiar with the waste handling procedures unique to CRT materials.

Subsection (a): This subsection requires a CRT material handler to ensure that employees who handle or manage CRT materials are thoroughly familiar with the proper

handling and emergency procedures relative to the types of waste handled at the facility. The training must identify the hazards associated with handling CRT materials, the requirements contained in chapter 23 for managing universal wastes, and the proper procedures for responding to and managing releases of CRT glass. This subsection is necessary to define the employee training parameters deemed appropriate for CRT material handling.

Add Chapter 23, Article 7, Section 66273.87, Response to Releases:

This proposed section requires handlers to clean up and properly handle any releases of CRT materials. This section requires CRT material handlers to immediately contain all releases of or from CRT materials, and to appropriately manage any materials resulting from a release (i.e., cleanup equipment, contaminated soils, etc.). CRT material handlers are also required under this section to determine if any of the resulting materials are hazardous waste, and if so, manage them under the “full” hazardous waste regulations. This section is necessary to ensure that releases of CRT materials are managed in such a way to protect human health and the environment.

Subsection (a): This subsection requires a CRT material handler to immediately contain any releases of CRT material and handle the residues from CRT materials appropriately. This subsection is necessary to limit the release of CRT materials to the environment.

Subsection (b): This subsection requires that any material resulting from such releases be managed in compliance with applicable requirements of chapters 10 through 20. In the case of a release, the CRT material handler is considered the generator of the material resulting from the release, and is responsible for managing it in compliance with the requirements under chapter 12 of this division. This subsection is necessary to ensure that releases of CRT materials are managed in such a way to protect human health and the environment.

Subsection (c): This subsection allows waste consisting only of residues of leaking, broken or damaged CRT material to be managed as universal waste provided that the specific residues are repackaged in accordance with the standards of section 66273.83. This subsection is consistent with the response-to-releases requirements in section 66273.37 for other universal waste categories. The requirements of this subsection are not intended to include cleanup residues (e.g., residues resulting from the use of spill-kits). These cleanup residues are regulated by subsection (b) above. This subsection is necessary to ensure that releases of CRT materials are managed in such a way to protect human health and the environment.

Add Chapter 23, Article 7, Section 66273.88, Off-Site Shipments:

This proposed section establishes the requirements for off-site shipments of CRT materials. This section prohibits a CRT material handler from shipping CRT materials to any other destination other than (1) another CRT material handler, (2) a destination facility, or (3) a foreign destination. Under this section, the shipper of CRT materials and the receiving facility share certain responsibilities for the protective handling of the CRT materials being shipped. The provisions of this section are consistent with the off-site shipment requirements in sections 66273.18 and 66273.38 for small and large quantity handlers of other universal wastes.

Subsection (a): This subsection allows a CRT material handler to send or take CRT materials only to another CRT material handler, a destination facility, or a foreign destination. The terms “sending or taking” are intended to indicate that handlers can either contract with someone else to transport their CRT materials or transport CRT materials themselves. This subsection clarifies which types of facilities can receive shipments of CRT materials to ensure that these wastes are appropriately managed to protect human health and the environment.

Subsection (b): This subsection allows a CRT material handler to self-transport universal waste off-site, but the handler must comply with the universal waste transporter requirements in article 4 of chapter 23. This subsection is necessary to clarify that universal waste transportation requirements apply to all shipments of CRT materials.

Subsection (c): This subsection requires that off-site shipments of CRT materials that meet the definition of hazardous materials under U.S. Department of Transportation (DOT) regulations, 49 C.F.R. parts 171 through 180, must be packaged, labeled, marked, placarded accordingly, and shipped with proper shipping papers listed under 49 C.F.R. part 172 requirements. This subsection clarifies that applicable DOT requirements still apply to all persons managing CRT materials.

Subsection (d): This subsection requires a CRT material handler to ensure prior to shipment that the receiving handler agrees to accept the shipment of CRT material. Because there is no standard in the Universal Waste Rule that requires a handler to accept universal waste, this section allows for circumstances when a person might choose to not accept CRT materials. This subsection is necessary to prevent or limit rejected shipments of CRT materials.

Subsection (e): If a shipment of universal waste is rejected by the receiving handler, this subsection requires that the shipment either be shipped to a destination facility or be returned to the originating handler as long as both handlers agree. This subsection is necessary to establish procedures that a shipper and a receiving facility must follow in the case of rejected loads and to clarify that both the shipper and the receiving facility are responsible for the load.

Subsection (f): If a facility receives an unsuitable shipment of CRT materials, this subsection allows the receiving facility to reject the full shipment or a portion of the shipment. Under this subsection, the receiving facility must notify the shipper of the rejection and discuss reshipment of the load. The receiving facility may send the shipment back to the original shipper or send the shipment to a mutually agreed upon destination facility. This subsection is necessary to define the procedures that a shipper and a receiving facility must follow in the case of rejected loads.

Subsection (g): This subsection requires a CRT material handler who receives a shipment of CRT material containing a hazardous waste to notify DTSC of the illegal shipment. This notification must be in writing and must include the name, address, and phone number of the originating shipper. This subsection is necessary to define the procedures that persons must follow if they receive an illegal shipment of CRT materials.

Subsection (h): This subsection requires a CRT material handler who receives a shipment of non-hazardous, non-universal waste to manage the waste in compliance with applicable federal, state and local solid waste requirements. This subsection explains that compliance with applicable federal and State solid waste regulations is mandatory when a CRT materials handler receives a shipment of non-hazardous, non-universal waste. This subsection is necessary for clarity and consistency.

Add Chapter 23, Article 7, Section 66273.89, Tracking Universal Waste Shipments of CRT Materials:

This proposed section specifies the record keeping requirements for shipments of CRT materials. This section creates a basic record keeping requirement to track CRT material shipments arriving at and leaving from CRT materials handlers. Under the Universal Waste Rule, a uniform hazardous waste manifest is not required for off-site shipments. This section is necessary to implement a tracking system for CRT material shipments and to be consistent with existing State universal waste tracking requirements contained in sections 66273.39 and 66273.62.

Subsection (a): This subsection requires a CRT material handler to maintain records of CRT material shipments sent from or received at the facility. The records of shipments received at the facility must include the name and address of the originating handler, the quantity and type of each CRT material, and the date of receipt of the CRT material shipment. No specific form is required for maintaining these records so that standard business records that would normally be kept by any business can be used to fulfill this requirement. The subsection defines the contents of the shipping record and is necessary for clarity.

Subsection (b): This subsection requires that the records of shipments sent from the facility include the name and address of the destination facility, the quantity and type of CRT material, and the date of shipment from the facility. No specific form is required for maintaining these records so that standard business records that would normally be kept by any business will fulfill this requirement. This subsection defines the contents of the shipping record and is necessary for clarity.

Subsection (c): This subsection requires that a CRT material handler retain the records of shipments for a period of at least three years from the date a shipment leaves the facility or a shipment is received at the facility. This subsection is necessary to maintain a tracking system of CRT materials shipments and to maintain consistency with the record retention requirements under existing federal and state universal waste regulations.

Add Chapter 23, Article 7, Section 66273.90, Exports:

This proposed section establishes the export requirements that are applicable to CRT materials. DTSC did not apply the universal waste export requirements of sections 66273.20 and 66273.40 to exporters of CRT materials because the recently proposed U.S. EPA regulations [Federal Register 40508 (June 12, 2002)] exclude CRTs as a solid waste and, therefore, would not require CRTs to be exported under the hazardous waste regulations or the universal waste regulations in the future. This subsection is necessary for consistency with existing non-RCRA hazardous waste exporting requirements contained in article 5 of chapter 12.

If DTSC applied the universal waste exporting requirements, exporters of CRT materials would be required to obtain a U.S. EPA Acknowledgment of Consent (AOC) prior to initiating a shipment to a foreign destination. CRTs will most likely not be regulated as federal hazardous waste because of the proposed exclusion; thus, requiring that CRT materials be shipped in accordance with an AOC would not be effective in the future. Therefore, DTSC has applied the non-RCRA export requirements under the proposed regulatory scheme for CRT materials.

Subsection (a): This subsection requires a CRT material handler who sends CRT material to a foreign destination to notify DTSC of an intended export of CRT material and concurrently send a copy to the CUPA. The notification must be submitted four weeks prior to the intended shipment date and can cover exporting activities extending over a 12-month or lesser period of time. The notification process is not intended to preclude the exportation of CRT materials to foreign destinations, thus there is no exportation approval process proposed for DTSC in this rulemaking. This subsection is necessary to institute the notification requirements for exports and to provide DTSC or the local CUPA with a tracking mechanism for CRT material exports.

Subsection (b): This subsection establishes the contents of the notification made under subsection (a). The notification must be in writing, signed by the CRT material handler and must include:

- the name, mailing address, and telephone number of the CRT material handler
- the foreign destination where each type of CRT material will be shipped
- the estimated frequency at which each type of CRT material will be exported
- the time period over which the exporting activities will take place
- all points of entry and departure from each transit foreign country
- the transportation mode for each shipment
- the name and site address of the foreign consignee

This subsection is necessary to define the contents of the notification made under subsection (a) and to provide the exporter with the items that must be included for a notification to be deemed complete by DTSC.

Subsection (c): This subsection provides the mailing address for the submittal of the export notification made under subsection (a). This subsection is necessary so that an exporter is provided with an accurate means for submitting an export notification made under subsection (a).