

1 **Expanded Options for Universal Waste CRT and CRT Glass**  
2 **Proposed Emergency Regulations**

3 Department Reference Number: R-2011-03

4 Office of Administrative Law Notice File Number:  
5  
6

7 **Legend:** Changes are shown from the existing text of California Code of Regulations,  
8 title 22, as:  
9

10 Underline underline Additions to existing text

11 Strikeout ~~strikeout~~ Deletions to existing text  
12  
13

14 For the convenience of the reader, existing text is shown as plain text and text deleted  
15 from existing text is shown as strikeout (~~strikeout~~). Added text is shown as underline  
16 (underline).

DO NOT CITE OR REFERENCE --- For Discussion Purposes Only

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop  
November 16, 2011

Page 1 of 28

1 **Amend** California Code of Regulations, title 22, division 4.5, chapter 23, section  
2 66273.6 to read:

3  
4 **§ 66273.6. Applicability-Cathode Ray Tubes (CRTs).**

5  
6 (a) CRTs covered pursuant to chapter 23. The requirements of this chapter apply  
7 to CRTs, as defined in section 66273.9, except those listed in subsection (b) of this  
8 section.

9 (b) CRTs not covered pursuant to this chapter.

10 The requirements of this chapter do not apply to the following CRTs:

11 (1) CRTs that are not yet wastes pursuant to chapter 11 as provided in  
12 subsection (c) of this section;

13 (2) CRTs that do not exhibit a characteristic of a hazardous waste as set forth in  
14 article 3 of chapter 11 of this division;

15 (3) Except as otherwise provided for in section 66273.75 of this chapter, CRTs  
16 that are destined for recycling (or are recycled) by being "used in a manner constituting  
17 disposal," as described in section 66266.20, or that are destined for disposal (or are  
18 disposed) to a class I landfill. Such CRTs shall be managed as hazardous wastes  
19 pursuant to chapters 10 through 16, 18, and 20 through 22 of this division;

20 (4) CRTs that are managed as hazardous waste pursuant to chapters 10 through  
21 16, 18, and 20 through 22 of this division;

22 (5) CRTs that were previously wastes pursuant to chapter 11 of this division, but  
23 are no longer wastes (e.g., a discarded CRT that is refurbished and is returned to  
24 service).

25 \*\*\*  
26  
27

28 Note: Authority cited: Sections 25141, 25141.5, 25150, 25150.6, 25201, 25214.9,  
29 25214.10.2, and 58012, Health and Safety Code; and Section 42475, Public Resources  
30 Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201 and 25214.9,  
31 Health and Safety Code.  
32

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 2 of 28

1 **Amend** California Code of Regulations, title 22, division 4.5, chapter 23, section  
2 66273.7 to read:

3  
4 **§ 66273.7. Applicability-Cathode Ray Tube (CRT) Glass.**

5  
6 (a) CRT glass covered pursuant to chapter 23. The requirements of this chapter  
7 apply to CRT glass, as defined in section 66273.9, except CRT glass listed in  
8 subsection (b) of this section.

9 (b) CRT glass not covered pursuant to this chapter.

10 The requirements of this chapter do not apply to the following CRT glass:

11 (1) CRT glass that is not yet a waste pursuant to chapter 11 of this division as  
12 provided in subsection (c) of this section;

13 (2) CRT glass that does not exhibit a characteristic of a hazardous waste as set  
14 forth in article 3 of chapter 11 of this division;

15 (3) Except as otherwise provided for in section 66273.75 of this chapter, CRT  
16 glass that is destined for recycling (or is recycled) by being "used in a manner  
17 constituting disposal," as described in section 66266.20, or that is destined for disposal  
18 (or is disposed) to a class I landfill. Such CRT glass shall be managed as a hazardous  
19 waste pursuant to chapters 10 through 16, 18, and 20 through 22 of this division; and

20 (4) CRT glass that is managed as a hazardous waste pursuant to chapters 10  
21 16, 18, and 20 through 22 of this division.

22  
23 \*\*\*

24  
25 Note: Authority cited: Sections 25141, 25141.5, 25150, 25150.6, 25201, 25214.9,  
26 25214.10.2, and 58012, Health and Safety Code; and Section 42475, Public Resources  
27 Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201 and 25214.9,  
28 Health and Safety Code.  
29

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 3 of 28

1 **Amend** California Code of Regulations, title 22, division 4.5, chapter 23, section  
2 66273.9 to read:

3  
4 **§ 66273.9. Definitions.**

5  
6 When used in this chapter, the terms listed in this section have the meaning  
7 given below. Unless otherwise specified, listed terms that cross-reference the  
8 definitions of other terms refer to the definitions set forth in this section for those other  
9 terms. Terms that are also defined in chapter 10 of this division are duplicated here  
10 solely for convenience of the regulated community. Terms used in this chapter that are  
11 not defined in this section but are defined in chapter 10 of this division and/or chapter  
12 6.5 of division 20 of the Health and Safety Code have the meanings given in those  
13 sources.

14 "Ampule" means an airtight vial made of glass, plastic, metal, or any combination  
15 of these materials.

16  
17 \*\*\*

18 "CESQUWG" see "Conditionally exempt small quantity universal waste  
19 generator."

20  
21 "Class I Disposal Unit" means a waste management unit as defined in California  
22 Code of Regulations, title 23, section 2531.

23 "Class II Disposal Unit" means a waste management unit as defined in California  
24 Code of Regulations, title 27, section 20250.

25 "Class III Disposal Unit" means a waste management unit as defined in California  
26 Code of Regulations, title 27, section 20260.

27 "Closure" means the act of closing a universal waste handler's facility pursuant to  
28 the requirements of article 7 of this chapter.

29  
30 \*\*\*

31 "CRT glass" means any glass released or derived from the treatment or  
32 breakage of one or more CRTs or CRT electronic devices that contain CRTs, and  
33 subsequently reclaimed at a CRT glass manufacturer, or a primary or secondary lead  
34 smelter

35 "Current closure cost estimate" means the most recent of the estimates prepared  
36 in accordance with article 7 of this chapter.

37  
38 \*\*\*

39 "Lamp" means the bulb or tube portion of an electric lighting device. A lamp is  
40 specifically designed to produce radiant energy, most often in the ultraviolet, visible, and  
41 infra-red regions of the electromagnetic spectrum. Examples of common lamps include,  
42 but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high  
43 pressure sodium, and metal halide lamps.

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

1 “Landfill” means a disposal facility or part of a facility where hazardous waste is  
2 placed in or on land and which is not a pile, a land treatment facility, a surface  
3 impoundment, an underground injection well, a salt dome formation, a salt bed  
4 formation, an underground mine, a cave, or a corrective action management unit.

5 "Management" means the handling, storage, transportation, processing,  
6 treatment, recovery, recycling, transfer and disposal of hazardous waste (including  
7 universal waste).

8 \*\*\*  
9

10  
11  
12 Note: Authority cited: Sections 25141, 25141.5, 25150, 25214.6, 25150.6, 25201,  
13 25214.9, 25214.10.2, 25219.1 and 58012, Health and Safety Code; and Section 42475,  
14 Public Resources Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201,  
15 25212, 25214.6, 25214.9, 25219, 25219.1 and 25219.2, Health and Safety Code; 40  
16 CFR Sections 261.4, 261.5 and 273.9.  
17

1 **Amend** California Code of Regulations, title 22, division 4.5, chapter 23, section  
2 66273.70 to read:

3  
4 **Article 7. Authorization Requirements for Universal Waste Handlers Who Treat**  
5 **Universal Wastes**

6  
7 **§66273.70. Applicability.**

8  
9 (a) Except as otherwise provided in subsections (b), (c), and (d) of this section, a  
10 universal waste handler, who treats universal waste, is subject to all applicable  
11 requirements of chapters 14, 15, 16, 18, 20, and 22 of this division with respect to the  
12 treatment of that universal waste.

13 (b) Except as otherwise provided in subsection (d) of this section, a universal  
14 waste handler who manages a universal waste and its integral components, or the  
15 components specified below that the handler has removed from the universal waste, for  
16 purposes of recycling it or its component(s) or for the purpose of disposing CRTs or  
17 CRT glass by performing one or more activities listed in one or more of the three  
18 categories given in subsection (c) of this section, shall be deemed authorized by the  
19 Department to conduct those activities, provided the universal waste handler complies  
20 with the applicable requirements of this article in addition to the applicable requirements  
21 of subsection (c) of section 66273.33, and to the applicable requirements of subsections  
22 (a)(1), (b)(1), and (c)(1) of section 66273.33.5. The authorization created by this  
23 subsection shall not be deemed to be any of the following:

- 24 (1) A permit-by-rule;  
25 (2) A conditional authorization; or  
26 (3) A conditional exemption.

27 (c) Activities eligible for authorization pursuant to subsection (b) of this section  
28 are any of the following:

29 (1) Removal activities. Removing user-replaceable components from electronic  
30 devices, as specified in section 66273.71.

31 (2) Disassembling/draining activities.

32 (A) Removing CRTs from electronic devices, as specified in section 66273.72,  
33 subsection (b);

34 (B) Dismantling electronic devices that are not CRT devices and/or removing  
35 yokes from CRTs, as specified in section 66273.72, subsection (c);

36 (C) Removing mercury ampules and/or mercury switches from mercury-  
37 containing equipment, as specified in section 66273.72, subsection (d); and/or

38 (D) Draining liquid mercury from pressure or vacuum gauges, as specified in  
39 section 66273.72, subsection (e).

40 (3) Treatment activities.

41 (A) Treating electronic devices and/or residual printed circuit boards, as specified  
42 in section 66273.73, subsection (a); and/or

43 (B) Treating CRTs and/or CRT glass, as specified in section 66273.73,  
44 subsection (b).

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 6 of 28

1 (d) A universal waste handler, who manages universal waste as a consequence  
2 of responding to a release in accordance with section 66273.37, is exempt from the  
3 otherwise applicable requirements of this article and of chapters 14, 15, 16, 18, 20, and  
4 22 of this division with respect to such treatment of the waste.  
5  
6

7 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.6, 25214.9,  
8 25214.10.2, 26219.1 and 58012, Health and Safety Code; and Section 42475, Public  
9 Resources Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201, 25212,  
10 25214.6, 25214.9, 25219, 25219.1 and 25219.2, Health and Safety Code.

DO NOT CITE OR REFERENCE --- For Discussion Purposes Only

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 7 of 28

1 **Amend** California Code of Regulations, title 22, division 4.5, chapter 23, section  
2 66273.72 to read:

3  
4 **§66273.72. Authorization for Disassembling/Draining Activities.**

5  
6 (a)(1) Universal waste handlers shall not conduct any activity pursuant to this  
7 section if the activity involves the use or application of:

- 8 (A) Chemicals, including water; and/or  
9 (B) External heat.

10 (2) A universal waste handler shall perform a hazardous waste determination  
11 pursuant to section 66262.11 for all residuals resulting from the activities authorized by  
12 subsection (b) or (c) of this section, and shall:

13 (A) Be deemed the generator of all residuals that are hazardous waste.

14 (B) For all residuals that are hazardous wastes, comply with all the applicable  
15 requirements of chapters 12, 14, 15, 16, 18, 20, 22 and 23 of this division and the  
16 applicable notification requirements in Health and Safety Code section 25153.6, except  
17 as otherwise provided in subsections (a)(3), (a)(4), (a)(6) or (a)(7) of this section.

18 (3) Notwithstanding section 66261.3, subsection (c) and section 66262.11,  
19 subsection (d), a handler who is deemed the generator of a residual that is a hazardous  
20 waste pursuant to subsection (a)(2)(A) of this section may manage that hazardous  
21 waste residual pursuant to any applicable chapter 11 exclusion or exemption [e.g., the  
22 scrap metal exclusion provided in § 66261.6, subsec. (a)(3)(B)], except for residual  
23 printed circuit boards, which shall be managed pursuant to subsection (a)(4) and (a)(5),  
24 or (a)(6) of this section.

25 (4) Prior to conducting any subsequent treatment activity authorized by section  
26 66273.73 on any residual printed circuit board resulting from removal activities  
27 conducted under this section, a universal waste handler shall manage the residual  
28 printed circuit board in a manner that prevents a release to the environment by:

29 (A) Containing the residual printed circuit board in a container that is structurally  
30 sound and compatible with the residual printed circuit board,

31 (B) Labeling the container with the following phrase: "Residual Printed Circuit  
32 Boards," and

33 (C) If the residual printed circuit board is spilled or might reasonably be expected  
34 to cause a release to the environment under reasonably foreseeable conditions,  
35 cleaning it up and placing it in a container.

36 (5) A universal waste handler who conducts further treatment pursuant to section  
37 66273.73 on any residual printed circuit board, CRT-residual, and/or CRT glass-residual  
38 resulting from any activity authorized by this section shall also comply with the  
39 applicable requirements of that section.

40 (6) A universal waste handler who does not conduct further treatment pursuant to  
41 section 66273.73 on a residual printed circuit board resulting from removal activities  
42 conducted under this section shall manage the printed circuit board as prescribed in  
43 section 66273.75, subsection (c).

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop  
November 16, 2011

1 (7) Except as provided in subsections (a)(3), (a)(5) or (a)(6) of this section, a  
2 universal waste handler who conducts further treatment on any residual that is a  
3 hazardous waste resulting from any activity authorized by this section shall not conduct  
4 such treatment, nor use any treatment method, unless that person obtains a hazardous  
5 waste facility permit or other form of authorization from the department.  
6

7 \*\*\*

8 (b) Removing CRTs from electronic devices that are CRT devices. A universal  
9 waste handler who conducts the activity identified in subsection (b)(1) of this section on  
10 electronic devices that are CRT devices shall be deemed authorized by the Department  
11 to do so, provided the universal waste handler complies with the requirements specified  
12 in this subsection.

13 (1) The universal waste handler shall remove CRTs from electronic devices in a  
14 manner that prevents breakage of the CRTs.

15 (2) The universal waste handler shall:

16 (A) Comply with the notification, annual reporting, and recordkeeping  
17 requirements specified in section 66273.74, subsections (a) through (c)(1);

18 ~~(23) The universal waste handler shall be exempt from the notification, annual~~  
19 ~~reporting, and recordkeeping requirements specified in section 66273.74, but shall:~~

20 (A) Remove CRTs only over, on, or in, a containment device (e.g., a tray, a box,  
21 a workbench, a table, or an enclosed machine) sufficient in size and construction to  
22 contain any CRT glass that may be released to the environment under reasonably  
23 foreseeable conditions in the event of breakage;

24 (B) Ensure that persons removing CRTs are thoroughly familiar with the  
25 techniques and safety precautions required to remove CRTs safely (e.g., releasing the  
26 vacuum from each CRT and discharging the CRT);

27 (C) Place the removed CRTs in a container with packing materials, if such  
28 materials are necessary to prevent breakage of the CRTs during handling, storage and  
29 transportation; and

30 (D) Manage the packaged CRTs in accordance with the requirements of section  
31 66273.33.5, subsection (b); and

32 (E) Ensure that all activity residuals meeting the definition of scrap metal as  
33 defined in section 66260.10 are recycled.

34 (4) A universal waste handler who does not conduct further treatment on  
35 generated CRTs pursuant to subsection (c) of this section or section 66273.73 or who  
36 does not send or take generated CRTs to another universal waste handler for such  
37 treatment shall:

38 (A) Ensure that generated CRTs are sent for reclamation of CRT glass at a CRT  
39 manufacturer or a primary or secondary lead smelter, recycled by other means, or  
40 disposed;

41 (B) No later than one year from the date that the accumulation of the CRTs  
42 begins pursuant to section 66273.34, determine whether the CRTs are to be reclaimed  
43 at a CRT glass manufacturer or at a primary or secondary lead smelter, recycled by  
44 other means, or disposed;

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 9 of 28

1 (C) Manage the CRTs following the applicable treatment standards in this section  
2 until the universal waste handler determines to recycle the CRTs other than through  
3 reclamation at a CRT glass manufacturer or at a primary or secondary lead smelter or  
4 to dispose of the CRTs;

5 (D) Upon determining that the CRTs are destined for recycling as provided in  
6 paragraph (4)(C) of this subsection, manage the CRTs as hazardous waste in  
7 accordance with all applicable requirements in chapters 10 through 16, 18, 20 and 22 of  
8 this division;

9 (E) Upon determining that the CRTs are destined for disposal as provided in  
10 paragraph (4)(C) of this subsection, manage the CRTs as hazardous waste pursuant to  
11 article 8 of this chapter; and

12 (F) For CRTs not destined for recycling, including recycling through reclamation  
13 at a CRT glass manufacturer or at a primary or secondary lead smelter, upon request,  
14 submit to the Department, prior to disposal, the following information:

15 1. The amount of CRTs that is to be disposed.

16 2. The amount of CRTs recycled in the previous year.

17 3. The amount of CRTs generated succeeding the previous year.

18 4. The technological, economic or other reasons for not recycling the CRTs,  
19 taking into account relevant factors, which may include the available amount, any  
20 chemical, physical or other properties that might affect its recyclability, the treatment  
21 required in recycling the CRTs and the availability of and cost of suitable processing  
22 technology, its marketability including current market prices for the lead or the lead free  
23 glass, and any information pertaining to facilities that could have potentially recycled the  
24 CRTs that influenced the generators decision to dispose of the glass.

25 5. Any other information the department finds relevant to ensure the CRTs  
26 cannot be recycled.

27 6. [Reserved]<sup>1</sup>

28 (c) Dismantling electronic devices that are not CRT devices and/or removing  
29 yokes from CRTs. A universal waste handler who conducts any of the activities  
30 identified in subsection (c)(1) of this section shall be deemed authorized by the  
31 Department to do so, provided the universal waste handler complies with the  
32 requirements in this subsection.

33 (1) The universal waste handler:

34 (A) Dismantles, or otherwise manually segregates, components (e.g., circuit  
35 boards, integrated circuits, metals, plastic, wiring, batteries, lamps, etc.) from an  
36 electronic device, or

37 (B) Removes the yokes from CRTs but does not break the CRT glass.

38 (2) The universal waste handler shall:

39 (A) Comply with the notification, annual reporting, and recordkeeping  
40 requirements specified in section 66273.74, subsections (a) through (c)(1);

41 (B) Ensure that all activity residuals meeting either the definition of scrap metal in  
42 section 66260.10 or the definition of CRT glass in section 66273.9 are recycled; and

---

<sup>1</sup> Reserved for the process of identifying trade secrets.

1 (C) Conduct the activities in a manner that protects persons managing the  
2 electronic devices and/or the CRTs, and that prevents releases of any universal wastes  
3 and/or any components of universal wastes, to the environment under reasonably  
4 foreseeable conditions, as follows:

5  
6 \*\*\*

7 (3) A universal waste handler who does not conduct further treatment pursuant to  
8 subsection (c) of this section or section 66273.73 on CRTs or who does not send or  
9 take CRTs to another handler for such treatment shall:

10 (A) Ensure that generated CRTs are sent for reclamation of CRT glass at a CRT  
11 manufacturer or a primary or secondary lead smelter, recycled by other means, or  
12 disposed

13 (B) No later than one year from the date that the accumulation of the CRTs or  
14 CRT glass begins pursuant to section 66273.34, determine whether the CRTs are to be  
15 reclaimed at a CRT glass manufacturer or at a primary or secondary lead smelter,  
16 recycled by other means, or disposed.

17 (C) Manage the CRTs following the applicable treatment standards in this  
18 section until the universal waste handler determines to recycle the CRTs other than  
19 through reclamation at a CRT glass manufacturer or at a primary or secondary lead  
20 smelter or to dispose of the CRTs.

21 (D) Upon determining that the CRTs are destined for recycling as provided in  
22 subparagraph (3)(A) of this subsection, the universal waste handler shall manage the  
23 CRTs or CRT glass as hazardous waste in accordance with all applicable requirements  
24 in chapters 10 through 16, 18, 20 and 22 of this division

25 (E) Upon determining that the CRTs are destined for disposal as provided in  
26 subparagraph (3)(A) of this subsection, the universal waste handler shall manage the  
27 CRT or CRT glass as hazardous waste pursuant to article 8 of this chapter; and

28 (F) For CRTs not destined for recycling, including recycling through reclamation  
29 at a CRT glass manufacturer or at a primary or secondary lead smelter, upon request,  
30 submit to the Department, prior to disposal, the following information:

31 1. The amount of CRTs that is to be disposed.

32 2. The amount of CRTs recycled in the previous year.

33 3. The amount of CRTs generated succeeding the previous year.

34 4. The technological, economic or other reasons for not recycling the CRTs,  
35 taking into account relevant factors, which may include the available amount, any  
36 chemical, physical or other properties that might affect its recyclability, the treatment  
37 required in recycling the CRTs and the availability of and cost of suitable processing  
38 technology, its marketability including current market prices for the lead or the lead free  
39 glass, and any information pertaining to facilities that could have potentially recycled the  
40 CRTs that influenced the generators decision to dispose of the glass.

41 5. Any other information the department finds relevant to ensure the CRTs  
42 cannot be recycled.

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop  
November 16, 2011

1            **6. [Reserved]<sup>2</sup>**

2            (d) Removing mercury ampules and/or mercury switches from mercury-  
3 containing equipment.

4  
5 \*\*\*

6  
7 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.6, 25214.9,  
8 25214.10.2, 25219.1 and 58012, Health and Safety Code; and Section 42475, Public  
9 Resources Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201, 25212,  
10 25214.6, 25214.9, 25219, 25219.1 and 25219.2, Health and Safety Code.

DO NOT CITE OR REFERENCE --- For Discussion Purposes Only

---

<sup>2</sup> Reserved for the process of identifying trade secrets.

1 **Amend** California Code of Regulations, title 22, division 4.5, chapter 23, section  
2 66273.73 to read:

3  
4 **§66273.73. Authorization for Treatment (Processing) Activities.**

5  
6 (a) Treatment of electronic devices.

7 (1) A universal waste handler described in subsection (a)(1)(A) of this section  
8 shall be deemed authorized by the Department to conduct the activities identified in  
9 subsection (a)(1)(B) of this section, provided the universal waste handler complies with  
10 the requirements specified in subsections (a)(1)(B), ~~and~~ (a)(1)(C), and (e) of this  
11 section.

12 (A) The universal waste handler treats electronic devices and/or residual printed  
13 circuit boards for which the handler is deemed to be the generator pursuant to sections  
14 66273.71 and/or 66273.72 and produces only residuals that, if they exhibit any  
15 hazardous waste characteristic described in article 3 of chapter 11 of this division, will  
16 meet either of the following criteria when managed pursuant to section 66273.75,  
17 subsection (c):

- 18 1. They meet the definition of scrap metal in section 66273.9; or
- 19 2. They qualify for management as universal wastes pursuant to this chapter.

20 (B) The universal waste handler treats electronic devices and/or residual printed  
21 circuit boards for which the handler is deemed to be the generator pursuant to sections  
22 66273.71 and/or 66273.72 by conducting activities other than, or in addition to, the  
23 removal activities authorized in section 66273.71 or the disassembling/draining activities  
24 authorized by section 66273.72, and using only one or more of the methods allowed  
25 pursuant to subsection (c) of this section.

26 (C) The universal waste handler complies with all of the following requirements in  
27 addition to the requirements of section 66273.33.5, subsection (a)(1):

- 28 1. The notification, annual reporting, and recordkeeping requirements specified in  
29 section 66273.74; and
- 30 2. The standards specified in section 66273.75.

31 (2) A universal waste handler described in subsection (a)(2)(A) of this section  
32 shall be deemed authorized by the Department to conduct the activities identified in  
33 subsection (a)(2)(B) of this section, provided the universal waste handler complies with  
34 the requirements specified in subsections (a)(2)(B), ~~and~~ (a)(2)(C), and (e) of this  
35 section.

36 (A) The universal waste handler treats electronic devices and/or residual printed  
37 circuit boards for which the handler is deemed to be the generator pursuant to sections  
38 66273.71 and/or 66273.72 and produces any residual that exhibits a hazardous waste  
39 characteristic described in article 3 of chapter 11 of this division when managed  
40 pursuant to section 66273.75, subsection (c) and meets both of the following criteria:

- 41 1. It does not meet the definition of scrap metal in section 66273.9; and
- 42 2. It does not qualify for management as universal wastes pursuant to this  
43 chapter.

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

1 (B) The universal waste handler treats electronic devices and/or residual printed  
2 circuit boards for which the handler is deemed to be the generator pursuant to sections  
3 66273.71 and/or 66273.72 by conducting activities other than, or in addition to, the  
4 removal activities authorized in section 66273.71 and the disassembling/ draining  
5 activities authorized in section 66273.72, and using only one or more of the methods  
6 allowed pursuant to subsection (c) of this section.

7 (C) The universal waste handler complies with all of the following requirements in  
8 addition to the requirements of section 66273.33.5, subsection (a)(1):

9 1. The notification, annual reporting, and recordkeeping requirements specified in  
10 section 66273.74;

11 2. The standards specified in section 66273.75;

12 3. The closure plan and financial requirements specified in section 66273.76; and

13 4. When applicable, the closure requirements specified in section 66273.77.

14 (b) Treating CRTs and/or CRT glass. A universal waste handler described in  
15 subsection (b)(1) of this section shall be deemed authorized by the Department to  
16 conduct the activities identified in subsection (b)(2) of this section, provided the  
17 universal waste handler complies with the requirements specified in subsections (b)(2)  
18 and (b)(3) of this section.

19 (1) The universal waste handler treats CRTs, breaking the CRTs' glass.

20 (2) The universal waste handler treats CRTs by: conducting activities other than,  
21 or in addition to, the disassembling/ draining activities authorized by section 66273.72,  
22 subsections (b) or (c); and using only one or more of the methods allowed pursuant to  
23 subsection (c) of this section.

24 (3) The universal waste handler complies with all of the following requirements in  
25 addition to the requirements of section 66273.33.5, subsection (b)(1) and section  
26 66273.33.5, subsection (c)(1):

27 (A) The notification, annual reporting, and recordkeeping requirements specified  
28 in section 66273.74;

29 (B) The standards specified in section 66273.75;

30 (C) The closure plan and financial requirements specified in section 66273.76;

31 and

32 (D) When applicable, the closure requirements specified in section 66273.77.

33 (c) Electronic device, CRT, and residual printed circuit board treatment methods  
34 allowed.

35 (1) Except as otherwise provided in subsection (c)(2) of this section, one or more  
36 of the following treatment methods is eligible for authorization pursuant to this section, if  
37 performed by a universal waste handler described in subsections (a) and/or (b) of this  
38 section:

39 (A) Physical treatment that changes only the physical properties of electronic  
40 devices, residual printed circuit boards, and/or CRTs, such as cutting, sawing, breaking,  
41 shredding, crushing, grinding, screening, sieving, acceleration, or compacting (e.g.,  
42 screening to separate different particle sizes of the same component);

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 14 of 28

1 (B) Physical separation based on differences in physical properties such as size,  
2 color, density, or ferromagnetism (e.g., screening to separate different components  
3 based on differences in their sizes);

4 (C) Use of a pinpoint torch or hot wire to check (i.e., thermally crack) CRTs for  
5 glass separation; and/or

6 (D) Sampling, burning (ashing) and ball-milling of samples of electronic devices  
7 and/or treatment residues thereof [i.e., shredded circuit boards excluded under 40  
8 C.F.R. sec. 261.4(a)(13)] provided the sample size does not exceed 250 kg, and no  
9 more than 250 kg (one sample) is subject to thermal assay per 24 hour period.

10 (2) Any treatment activity identified in subsection (c)(1) of this section is not  
11 eligible for authorization pursuant to this article, but is instead subject to all applicable  
12 requirements of chapters 14, 15, 16, 18, 20, and 22 of this division, if the treatment  
13 activity involves:

14 (A) The use or application of:

15 1. Chemicals, including water, other than coolant recirculated in CRT cutting  
16 machines; and/or

17 2. External heat.

18 (B) Except as specifically provided in subsection (c)(1)(D), the onsite treatment of  
19 the residuals resulting from the activities authorized by section 66273.73, subsection  
20 (a)(1) or (a)(2).

21 (C) The treatment of any electronic device containing PCBs, a medical waste, a  
22 radioactive material, a reactive material, or an ignitable material.

23 (d)(1) Notwithstanding subsections (a)(1)(B), (a)(2)(B) and (b)(2) of this section,  
24 the authorizations provided in this section shall not be required for a handler who  
25 recycles scrap metal, including printed circuit boards produced by an authorized  
26 handler.

27 (2) As used in this subsection, "printed circuit boards produced by an authorized  
28 handler" means residual printed circuit boards that a handler has:

29 (A) derived from electronic devices by completing treatment authorized under this  
30 article,

31 (B) containerized and labeled pursuant to section 66273.75, subsection (b), and

32 (C) subsequent to the authorized treatment, determined to be exempt scrap  
33 metal pursuant to section 66273.71, subsection (e), section 66273.72, subsection (a)(3),  
34 or section 66273.75, subsection (c)(1)(C).

35 (e) The universal waste handler ensures that any CRT glass generated is  
36 recycled or disposed pursuant to section 66273.75, subsection (a)(7), (f) or (g).

37  
38  
39  
40 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.9, 25214.10.2,  
41 25219.1 and 58012, Health and Safety Code; and Section 42475, Public Resources  
42 Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201, 25212, 25214.9,  
43 25219, 25219.1 and 25219.2, Health and Safety Code.

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop  
November 16, 2011

1 **Amend** California Code of Regulations, title 22, division 4.5, chapter 23, section  
2 66273.74 to read:

3  
4 **§66273.74. Notification, Annual Reporting, and Recordkeeping.**

5  
6 (a) Notification.

7 (1) Universal waste handlers of electronic devices and/or CRTs. Except as otherwise  
8 provided in sections 66273.71 and 66273.72, a universal waste handler who intends to  
9 treat any electronic device and/or CRT pursuant to this article shall submit to the  
10 Department at the address given in subsection (e) or (f) of this section, an electronic or  
11 written notification containing the following information no later than 30 calendar days  
12 prior to treating any electronic device and/or CRT:

13 (A) Name of universal waste handler;

14 (B) Telephone number of universal waste handler;

15 (C) Mailing address of universal waste handler, and physical address, including  
16 county, if different from the mailing address;

17 (D) If different from the notifier pursuant to subsection (a) of this section, the name  
18 and mailing address of the organization (as authorized to transact business in  
19 California) that owns and/or operates the facility;

20 (E) Name, business telephone number, and e-mail address (if available) of the  
21 person at the universal waste handler's site who should be contacted regarding  
22 universal waste management activities;

23 (F) Facility ID Number, if issued;

24 (G) A general description of the source(s) of electronic devices and/or CRTs [e.g.,  
25 residential collection(s), other collector(s), etc.];

26 (H) Type(s) of electronic devices and/or CRTs expected to be treated;

27 (I) A description of the treatment process(es) to be used; and

28 (J) Documentation that the facility operator has notified the facility property owner (if  
29 different from the operator of the facility) that the facility operator is treating electronic  
30 devices and/or CRTs at the facility.

31 (2) Except as otherwise provided in paragraph (3) of this subsection, a universal  
32 waste handler who manages CRTs or CRT glass destined for disposal or for recycling  
33 other than reclamation of CRT glass at a CRT glass manufacturer or a primary or  
34 secondary lead smelter and who conducts such disposal or recycling pursuant to this  
35 article shall submit to the Department at the address given in subsection (e) or (f) of this  
36 section, an electronic or written notification containing the following information no later  
37 than 60 calendar days prior to shipping the CRTs or CRT glass for such disposal or  
38 recycling:

39 (A) The name, address and telephone number of the hazardous waste facility;

40 (B) Facility ID Number, if issued.

41 (C) Contact person at the hazardous waste facility;

42 (D) The land disposal unit designation for the facility to be used for disposal (i.e.,  
43 Class I, II, or III disposal unit).

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop  
November 16, 2011

1 (E) The ID Number for the location where the CRTs or CRT glass was generated  
2 prior to disposal.

3 (3) A universal waste handler who treats CRTs or CRT glass destined for disposal  
4 pursuant to section 66273.81, subsection (b) shall comply with the notification and  
5 certification requirements described in section 66268.9, subsection (d) of chapter 18 of  
6 this division.

7 (24) Universal waste handlers of mercury ampules, mercury switches, and/or  
8 pressure or vacuum gauges: Any universal waste handler who intends to treat any  
9 equipment containing mercury ampules and/or mercury switches, and/or to treat any  
10 pressure or vacuum gauge, pursuant to this article is not required to notify the  
11 Department pursuant to this section

12 (b) Annual reporting.

13 (1) Universal waste handlers of electronic devices and/or CRTs. Except as otherwise  
14 provided in sections 66273.71 and 66273.72, a universal waste handler who treated any  
15 electronic device and/or CRT pursuant to this article in a calendar year shall, by  
16 February 1 of the following year, submit to the Department at the address given in  
17 subsection (e) or (f) of this section, an electronic or written annual report containing the  
18 information specified in subsection (b)(1)(A) through (b)(1)(J) of this section. The  
19 information submitted shall cover the electronic device treatment and CRT treatment  
20 activities conducted during the previous calendar year.

21 (A) Name, mailing address (and physical address, including county, if different from  
22 the mailing address), and telephone number of the universal waste handler;

23 (B) A description of the facility;

24 (C) Name and mailing address of the organization (as authorized to transact  
25 business in California) that owns and/or operates the facility;

26 (D) Name, title, telephone number, and e-mail address (if available) of the contact  
27 person at the universal waste handler's physical address who should be contacted  
28 regarding universal waste management activities at that location;

29 (E) Facility ID Number, if issued;

30 (F) Number of days the facility operated;

31 (G) Types of electronic devices and/or CRTs treated at the facility;

32 (H) Treatment method used for each type of electronic device and/or CRT treated at  
33 the facility;

34 (I) The following quantities treated, which include any quantities treated but not  
35 shipped:

36 1. The total quantity of CRT devices (count) treated during the previous calendar  
37 year;

38 2. The total quantity of CRTs (count) treated during the previous calendar year;  
39 and/or

40 3. The total quantity of electronic devices other than CRT devices (count or weight)  
41 treated during the previous calendar year.

42 (J) A list consisting of:

43 1. The name, address, and telephone number for each of the locations to which the  
44 universal waste handler shipped CRTs, CRT glass, scrap metal, yokes, universal waste

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop  
November 16, 2011

1 (e.g., lamps, batteries, etc.), and/or exempt materials during the previous calendar year;  
2 and

3 2. The following quantities shipped to each of those locations:

4 a. The total quantity of CRTs (count) or CRT glass (weight) shipped to that location  
5 during the previous calendar year, including in this case a declaration of whether that  
6 location is a CRT glass manufacturer, ~~and/or~~ a primary lead smelter, ~~or~~ a secondary  
7 lead smelter, a destination facility or a Class II or III disposal unit;

8 b. The total quantity of residual printed circuit boards and scrap metal (weight) from  
9 all treatment activities reported pursuant to this subsection shipped to that location  
10 during the previous calendar year;

11 c. The total quantity of yokes (weight) shipped to that location during the previous  
12 calendar year; and/or

13 d. The total quantity of universal waste (weight) shipped to that location during the  
14 previous calendar year.

15 \*\*\*

16  
17 (c) Recordkeeping.

18 (1)(A) Universal waste handlers of electronic devices and/or CRTs.

19 Except as otherwise provided in sections 66273.71 and 66273.72, a universal waste  
20 handler who treats any electronic device and/or CRT pursuant to this article shall  
21 maintain on file at the universal waste handler's facility, the following documents as  
22 specified:

23 1. A copy of the notification submitted to the Department as required by  
24 subsection (a)(1) of this section, ~~beginning no later than 30 days prior to treating any~~  
25 ~~electronic device and/or CRT at the universal waste handler's facility~~;

26 2. A copy of the notification submitted to the Department as required by  
27 subsection (a)(2) of this section.

28 3. A copy of the most recent annual report submitted to the Department as  
29 required by subsection (b) of this section, beginning no later than February 1 of the year  
30 following the most recent calendar year during which the universal waste handler  
31 treated any electronic device and/or CRT at the universal waste handler's facility  
32 pursuant to this article; and/or

33 4. A current copy of any local air district permit and/or other relevant permit  
34 required for the facility, beginning no later than the date on which the local air district  
35 and/or other relevant permitting authority required the universal waste handler to  
36 possess such a permit.

37 5. A copy of the document developed upon request by the Department to  
38 demonstrate compliance with section 66273.72, subsections (b)(4)(F) or (c)(3)(F).

39 6. A copy of the documents used to demonstrate compliance with section  
40 66273.75, subsections (a)(7)(A) and (g).

41 7. A copy of the waste analysis plan as required by section 66273.81, subsection  
42 (g).

43 \*\*\*

44  
**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 18 of 28

1  
2 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.6, 25214.9,  
3 25214.10.2, 26219.1 and 58012, Health and Safety Code; and Section 42475, Public  
4 Resources Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201, 25212,  
5 25214.6, 25214.9, 25219, 25219.1 and 25219.2, Health and Safety Code.  
6

DO NOT CITE OR REFERENCE --- For Discussion Purposes Only

1 **Amend** California Code of Regulations, title 22, division 4.5, chapter 23, section  
2 66273.75 to read:

3  
4 **§66273.75. Treatment (Processing) Standards.**

5  
6 A universal waste handler who treats electronic devices, residual printed circuit  
7 boards, and/or CRTs pursuant to section 66273.73 shall comply with the following  
8 standards:

9 (a) Treatment.

10 The universal waste handler shall:

11 (1) Utilize only treatment methods identified in section 66273.73, subsection (c);

12 (2) Ensure that all mercury-containing lamps, PCB capacitors, and other  
13 components containing fluids (i.e., liquids or gases) that would be identified as  
14 hazardous wastes, are removed prior to treatment methods that may release the fluids  
15 such as cutting, sawing, breaking, shredding, crushing, grinding, screening, sieving,  
16 acceleration, or compacting;

17 (3) Conduct treatment activities over, or in, a containment device (e.g., a tray, a  
18 box, a workbench, a table, or an enclosed machine) sufficient in size and construction to  
19 contain any materials that might be released to the environment under reasonably  
20 foreseeable conditions.

21 ~~(4) Ensure that all hazardous wastes generated from treatment activities and~~  
22 ~~sent offsite for disposal are managed (i.e., manifested) in accordance with the~~  
23 ~~applicable requirements of article 2 of chapter 12 of this division.~~

24 ~~(45)~~ Comply with the requirements of sections 66265.18 and 66265.25 of chapter  
25 15 of this division to the extent that those requirements apply to facility location and  
26 design standards.

27 ~~(56)~~ Ensure that all treatment is conducted in compliance with all applicable state  
28 and local air pollution control laws and regulations.

29 ~~(67)~~ Treat electronic devices that are not CRT devices and/or residual printed  
30 circuit boards only for the purpose of recycling one or more of their components. ~~and~~  
31 ~~ensure that all treatment residuals meeting the definition of scrap metal in section~~  
32 ~~66273.9 are recycled and that all treatment residuals meeting the definition of CRT~~  
33 ~~glass in section 66273.9 are recycled as specified below.~~

34 ~~(78)~~ Except as provided in subsections (a)(8) of this section, treat CRT devices  
35 and CRTs only for the purpose of recycling one or more types of CRT glass and ensure  
36 that all the CRT glass is reclaimed at a CRT glass manufacturer or at a primary or  
37 secondary lead smelter, recycling CRT glass by other means, or disposing CRT glass.

38 (A) Ensure that the CRT glass generated from the treatment activities described  
39 in this paragraph are recycled or disposed as required by this paragraph. Respondents  
40 in actions to enforce this requirement must demonstrate the required disposition. In  
41 doing so, they shall provide appropriate documentation, such as the following:

42 1. For reclamation at a CRT glass manufacturer or primary or secondary lead  
43 smelter, a written submittal that includes the following:

44 a. The name, address and telephone number of the transporter

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 20 of 28

1 b. The name and address of the CRT glass manufacturer or primary or  
2 secondary lead smelter and the intermediate facility (i.e., any facility that receives the  
3 CRT glass prior to being sent to a CRT glass manufacturer or primary or secondary  
4 lead smelter), if applicable

5 c. A copy of the contractual arrangements between the intermediate facility or  
6 facilities, if applicable, and the CRT glass manufacturer or primary or secondary smelter  
7 that document the legal obligation of the manufacturer or smelter to accept CRT glass  
8 from the handler

9 d. The amount of CRT glass sent in each shipment

10 e. Confirmation receipts from the CRT glass manufacturer or primary or  
11 secondary lead smelter that the CRT glass was received.

12 2. For disposal at a Class II or Class III disposal unit pursuant to article 8 of this  
13 chapter, the notification and certification document prescribed by section 66273.74,  
14 subsection (a)(3).

15 3. For disposal or recycling by other means, the manifest, as defined in section  
16 66260.10.

17 (89) Not accept for treatment, any electronic devices or CRTs that are managed,  
18 or that are required to be managed, as hazardous wastes pursuant to chapters 10  
19 through 16, 18, 20 and 22 of this division, unless authorized to do so pursuant to a  
20 hazardous waste facility permit or other authorization granted by the Department  
21 pursuant to those chapters.

22 (b) Containment of residuals.

23 \*\*\*

24 (c) Management of residuals other than CRT glass.

25 (1) A universal waste handler shall perform a hazardous waste determination  
26 pursuant to section 66262.11 for all residuals resulting from the activities authorized by  
27 ~~subsection (a) of this section~~ 66273.73, and shall:

28 (A) Be deemed the generator of all residuals that are hazardous waste.

29 (B) For all residuals that are hazardous wastes, comply with all the applicable  
30 requirements of chapters 12, 14, 15, 16, 18, 20, 22 and 23 of this division and the  
31 applicable notification requirements in Health and Safety Code section 25153.6, except  
32 as otherwise provided in subsection (c)(1)(C), (f) and (g) of this section.

33 (C) Notwithstanding section 66261.3, subsection (c) and section 66262.11,  
34 subsection (d), a handler who is deemed the generator of a residual that is a hazardous  
35 waste pursuant to subsection (c)(1) of this section may manage that hazardous waste  
36 residual pursuant to any applicable chapter 11 exclusion or exemption [e.g., the scrap  
37 metal exclusion provided in § 66261.6, subsec. (a)(3)(B)].

38 (D) Except as allowed pursuant to subsection (c)(1)(C) of this section, a universal  
39 waste handler who conducts further treatment on any residual that is a hazardous waste  
40 resulting from any activity authorized by this section shall not conduct such treatment,  
41 nor use any treatment method, unless that person obtains a hazardous waste facility  
42 permit or other form of authorization from the Department.  
43

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 21 of 28

1 (2) A universal waste handler shall ensure that all treatment residuals meeting  
2 the definition of scrap metal in section 66273.9 are recycled

3 ~~(2) A universal waste handler whose treatment of electronic devices and/or CRTs~~  
4 ~~generates CRT glass as defined in section 66273.9 shall ensure that all CRT glass-~~  
5 ~~residuals are sent to a CRT glass manufacturer or to a primary or secondary lead~~  
6 ~~smelter and recycled.~~

7  
8 \*\*\*

9 (e) Zoning.

10  
11 \*\*\*

12 (f) Management of CRT glass destined for other types recycling. The universal  
13 waste handler shall:

14 (1) Manage CRT glass following the treatment standards in subsection (a), (b),  
15 (d) and (e) of this section until the universal waste handler determines to recycle the  
16 CRT glass other than through reclamation at a CRT glass manufacturer or at a primary  
17 or secondary lead smelter;

18 (2) No later than one year from the date that the accumulation of the CRT glass  
19 begins pursuant to section 66273.34, determine if the CRT glass generated is to be  
20 reclaimed at a CRT glass manufacturer or at a primary or secondary lead smelter or  
21 recycled by other means; and

22 (3) Upon determining that the CRT glass is destined for recycling as provided in  
23 paragraph (1) of this subsection, the universal waste handler shall manage the CRT  
24 glass as hazardous waste in accordance with all applicable requirements in chapters 10  
25 through 16, 18, 20 and 22 of this division.

26 (g) Management of CRT glass destined for disposal. The universal waste  
27 handler shall:

28 (1) Manage the CRT glass following the treatment standards in subsection (a),  
29 (b), (d) and (e) of this section until the universal waste handler determines to dispose  
30 the CRT glass;

31 (2) No later than one year from the date that the accumulation of the CRT glass  
32 begins pursuant to section 66273.34, determine if the CRT or CRT glass generated is to  
33 be reclaimed at a CRT glass manufacturer or at a primary or secondary lead smelter or  
34 disposed.

35 (3) For CRT glass not destined for recycling, including recycling through  
36 reclamation at a CRT glass manufacturer or at a primary or secondary lead smelter,  
37 upon request, submit to the Department, prior to disposal, the following information:

38 (A) The amount of CRT glass that is to be disposed.

39 (B) The amount of CRT glass recycled in the previous year.

40 (C) The amount of CRT glass generated succeeding the previous year.

41 (D) The technological, economic or other reasons for not recycling the CRT  
42 glass, taking into account relevant factors, which may include the available amount, any  
43 chemical, physical or other properties that might affect its recyclability, the processing  
44 required in recycling the CRT glass and the availability of and cost of suitable

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 22 of 28

1 processing technology, its marketability including current market prices for the lead or  
2 the lead free glass, and any information pertaining to facilities that could have potentially  
3 recycled the CRT glass that influenced the generators decision to dispose of the glass.

4 (E) Any other information the department finds relevant to ensure the CRT glass  
5 cannot be recycled.

6 (F) [Reserved]<sup>3</sup>

7 (4) Upon determining that the CRT glass is destined for disposal as provided in  
8 paragraph (1) of this subsection, the universal waste handler shall manage the CRT  
9 glass as hazardous waste pursuant to article 8 of this chapter.

10  
11  
12 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.9, 25214.10.2,  
13 25219.1 and 58012, Health and Safety Code; and Sections 42475, Public Resources  
14 Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201, 25212, 25214.9,  
15 25219, 25219.1 and 25219.2, Health and Safety Code; Sections 42479, Public  
16 Resources Code.  
17

---

<sup>3</sup> Reserved for the process of identifying trade secrets.

1 **Add** California Code of Regulations, title 22, division 4.5, chapter 23, article 8, section  
2 66273.80 to read:

3  
4 **Article 8. Requirements for the Disposal of CRTs and CRT Glass**

5  
6 **§66273.80. Applicability.**

7  
8 (a) The article applies to a universal waste handler who manages CRTs or CRT  
9 glass authorized pursuant to section 66273.72 or section 66273.73 for disposal at a  
10 Class I disposal unit at a hazardous waste facility, or at a Class II or Class III disposal  
11 unit at a solid waste landfill within a composite-lined portion of a solid waste landfill unit  
12 that meets all requirements applicable to disposal of municipal solid waste in California  
13 after October 9, 1993, and that is regulated by waste discharge requirements issued  
14 pursuant to division 7 (commencing with § 13000) of the Water Code for discharges of  
15 designated waste, as defined in section 13173 of the Water Code.

16 (b) This article does not apply to CRTs and CRT glass recycled by being “used in a  
17 manner constituting disposal” described in section 66266.20 of chapter 16 of this  
18 division.

19 (c) This article does not apply to CRTs and CRT glass managed as universal waste  
20 for recycling purposes which are sent to a destination facility pursuant to articles 1  
21 through 6 of this chapter.

22  
23  
24 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.9, 25214.10.2,  
25 and 58012, Health and Safety Code; and Sections 42475, Public Resources Code.

26 Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201 and 25214.9, Health and  
27 Safety Code; Section 42479, Public Resources Code; and Section 13173 Water Code.

28  
**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 24 of 28

1 **Add** California Code of Regulations, title 22, division 4.5, chapter 23, article 8, section  
2 66273.81 to read:

3  
4 **§66273.81. Management Standards for Universal Waste Handlers Who Dispose of**  
5 **CRTs or CRT Glass.**  
6

7 (a) Except as otherwise specified in subsection (b) of this section, a universal waste  
8 handler who disposes of CRTs or CRT glass shall be deemed the generator of  
9 hazardous waste CRTs or CRT glass and shall manage these wastes as hazardous  
10 waste in accordance with all applicable requirements in chapters 10 through 16, 18, 20  
11 and 22 of this division.

12 (b) CRT glass that does not exhibit the RCRA hazardous waste characteristic of  
13 toxicity [as described in § 66261.24, subsec. (a)(1) of ch. 11] is not subject to regulation  
14 as a hazardous waste under this division for purposes of disposal at a Class II or Class  
15 III disposal unit described in subsection (a) of section 66273.80, provided that prior to  
16 disposal, the universal waste handler who generates the CRT glass complies with the  
17 requirements of subsections (c) through (m) of this section.

18 (c) The universal waste handler shall determine that the CRT glass is identified as  
19 hazardous waste solely because it exhibits the characteristic of toxicity only by  
20 exceeding the Total Threshold Limit Concentration, as defined in section 66260.10 of  
21 chapter 10 and as described in section 66261.24 of chapter 11 of this division.

22 (d) For purposes of this section, the universal waste handler shall make the Total  
23 Threshold Limit Concentration determination for the CRT glass only by the use of  
24 Method 3052, as described in “Test Methods for Evaluating Solid Waste,  
25 Physical/Chemical Methods,” SW-846, 2nd edition, U.S. Environmental Protection  
26 Agency, 1982 (incorporated by reference per section 66260.11 of chapter 10 of this  
27 division).

28 (e) The universal waste handler shall determine that the CRT glass is not identified  
29 as meeting the toxicity characteristics of a RCRA hazardous waste, as defined in  
30 section 66260.10, and by the use of Method 1311, as described in “Test Methods for  
31 Evaluating Solid Waste, Physical/Chemical Methods,” SW-846, 2nd edition, U.S.  
32 Environmental Protection Agency, 1982 (incorporated by reference per section  
33 66260.11 of chapter 10 of this division).

34 (f) Prior to disposal under this article, the universal waste handler shall treat the CRT  
35 glass to remove all phosphor powders by using only the authorized treatment methods  
36 described in section 66273.73, subsection (c) and shall conduct such treatment  
37 activities pursuant to the treatment standards in section 66273.75.

38 (g) The universal waste handler develops and follows a waste analysis plan that  
39 ensures the conditions of subsections (c), (d) and (e) of this section are met. The plan  
40 shall specify:

41 (1) The treatment process (e.g., physical separation) used to generate the CRT  
42 glass;

43 (2) A detailed physical and chemical analysis of representative samples of the CRT  
44 glass that identifies and quantifies all hazardous constituents, including any underlying

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 25 of 28

1 hazardous constituents used to meet the treatment standards in section 66268.48 of  
2 chapter 18;

3 (3) A sampling and sample management plan following one of the sampling methods  
4 described in Appendix I of chapter 11 of this division or an equivalent sampling method;

5 (4) Published or documented data on the hazardous constituents found in CRT  
6 glass; and

7 (h) The waste analysis plan shall be reviewed either:

8 (1) Annually; or

9 (2) If any deviations or changes occur in the article 7 authorized treatment  
10 process(es) used by the universal waste handler.

11 (i) The universal waste handler shall comply with the applicable requirements for  
12 CRT glass management pursuant to section 66273.33.5, subsection (c)(1).

13 (j) The universal waste handler shall clearly mark or label the accumulation areas  
14 and/or containers used to contain the CRT glass with the words "Excluded Hazardous  
15 Waste – CRT glass".

16 (k) The universal waste handler shall not accumulate the CRT glass for longer than  
17 180 days from the date the universal waste handler determines that the CRT glass will  
18 be disposed pursuant to this section.

19 (l) The universal waste handler shall comply with the personnel training  
20 requirements in section 66273.36.

21 (m) The universal waste handler shall comply with the response to releases  
22 requirements of section 66273.37.

23  
24 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.9, 25214.10.2,  
25 and 58012, Health and Safety Code; and Sections 42475, Public Resources Code.

26 Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201 and 25214.9, Health and  
27 Safety Code; Section 42479, Public Resources Code; and Section 13173 Water Code.

28  
**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop  
November 16, 2011

1 **Add** California Code of Regulations, title 22, division 4.5, chapter 23, article 8, section  
2 66273.82 to read:

3  
4 **§66273.82. Tracking of Off-site Shipments.**

5  
6 (a) The universal waste handler shall keep a record of each shipment of CRT glass  
7 sent from the universal waste handler's facility to the Class II or Class III disposal unit at  
8 the solid waste landfill described in subsection (a) of section 66273.80. The record may  
9 take the form of a log, invoice, manifest, bill of lading or other shipping document. The  
10 record for each shipment of CRT glass managed pursuant to this section shall include  
11 the following information:

12 (1) The name and address of the solid waste landfill to which the CRT glass was  
13 sent;

14 (2) The quantity [weight, consistent with, for example, §66273.32, subsec. (d)] of  
15 CRT glass;

16 (3) The date of departure of the shipment of CRT glass.

17 (4) The signed notification that the CRT glass was received by the landfill containing  
18 the Class II or III disposal units.

19 (b) The universal waste handler shall retain each record described in subsection (a)  
20 of this section for at least three years from the date of departure of the corresponding  
21 shipment of CRT glass shipped to the solid waste landfill described in subsection (a) of  
22 section 66273.80.

23 (c) (1) The universal waste handler shall submit to the Department the notification  
24 and certification required by section 66273.74, subsection (a)(3), and shall provide that  
25 notification and certification pursuant to section 66273.74, subsections (e) or (f).

26 (2) The universal waste handler shall ensure that the universal waste transporter is  
27 provided, at minimum, two copies of the notification described in subparagraph (1) prior  
28 to the CRT glass being transported offsite.

29 (d) The universal waste handler shall maintain the documents described in this  
30 section for three years from the date that the universal waste handler made the  
31 determinations in subsections (c),(d) and (e) of section 66273.81.

32  
33  
34 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.9, 25214.10.2,  
35 and 58012, Health and Safety Code; and Sections 42475, Public Resources Code.  
36 Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201 and 25214.9, Health and  
37 Safety Code; Section 42479, Public Resources Code; and Section 13173 Water Code.  
38

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

1 **Add** California Code of Regulations, title 22, division 4.5, chapter 23, article 8, section  
2 66273.83 to read:

3  
4 **§66273.83. Transporter requirements.**

5  
6 (a) A person who transports CRT glass, meeting the conditions in section 66273.81  
7 of this article, to a Class II or Class III disposal unit shall comply with all of the  
8 requirements applicable to a universal waste transporter, as defined in section 66273.9.

9 (b) The universal waste transporter shall ensure at minimum two copies of the  
10 notification required in section 66273.74 (a)(3) accompany the shipment of CRT glass to  
11 the Class II or Class III disposal unit .

12 (c) Upon relinquishing the CRT glass to a Class II or Class III disposal unit , the  
13 universal waste transporter shall ensure the operator of the Class II or Class III disposal  
14 unit receives one copy of the notification and signs the other copy.

15 (1) The signed copy of the notification shall include a statement that the CRT  
16 glass was received by the Class II or Class III disposal unit , and

17 (2) The signed copy must be returned to the universal waste handler by the  
18 universal waste transporter within 30 days after the Class II or Class III disposal unit  
19 receives the CRT glass.

20  
21 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.9, 25214.10.2,  
22 and 58012, Health and Safety Code; and Sections 42475, Public Resources Code.

23 Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201 and 25214.9, Health and  
24 Safety Code; Section 42479, Public Resources Code; and Section 13173 Water Code.

**DO NOT CITE OR REFERENCE – For Discussion Purposes Only**

Proposed Regulatory Concepts for the Disposition of CRTs and CRT Glass Workshop

November 16, 2011

Page 28 of 28