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TEXT OF PROPOSED REGULATIONS
Photovoltaic modules (PV modules) – Universal Waste Management
Department Reference Number: R-2017-04
Office of Administrative Law Notice File Number: Z-xxxx-xxxx-xx

DIVISION 4.5, TITLE 22, CALIFORNIA CODE OF REGULATIONS

Legend: Amendments are shown from the existing text of the California Code of Regulations, title 22, as:

- | | | |
|-----------|----------------------|---|
| Underline | <u>underline</u> | Additions to existing text |
| Strikeout | strikeout | Deletions to existing text |
| *** | | Existing text (not shown) continues unchanged |

1 **Amend** Title 22, division 4.5, chapter 10, article 2, section 66260.10 to read:

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3 **§ 66260.10. Definitions.**

4

5 When used in this division, the following terms have the meanings given below:

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9 “Personnel” or “facility personnel” means all persons who work, at, or oversee the
10 operations of, a hazardous waste facility, and whose actions or failure to act may result
11 in noncompliance with the requirements of this division.

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13 “Photovoltaic cell” means a specialized semiconductor diode designed to convert solar
14 radiation into electrical energy. Photovoltaic cells are an integral part of photovoltaic
15 modules. Photovoltaic cell is also commonly referred to as solar cell.

16

17 “Photovoltaic module” means a device consisting of one or more electrically connected
18 photovoltaic cells that are protected, such as in glass, and designed to convert solar
19 radiation into electrical energy. Photovoltaic module includes any ancillary components
20 such as metal frames used to support the module, junction boxes, batteries, inverters,
21 wires, and cables that are connected to and are part of the photovoltaic module. Types
22 of photovoltaic modules include, but are not limited to, monocrystalline silicon
23 photovoltaic modules, polycrystalline silicon photovoltaic modules, amorphous silicon
24 photovoltaic modules, cadmium telluride photovoltaic modules, copper indium gallium
25 selenide photovoltaic modules, and gallium indium phosphide/gallium arsenide/gallium
26 photovoltaic modules. Photovoltaic modules are also commonly referred to as
27 photovoltaic panels or solar panels.

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29 “Photovoltaic panel” see “photovoltaic module.”

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34 “Physical parameter” means any measurable physical characteristic of a substance
35 including, but not limited to, temperature, electrical conductivity, pH and specific gravity.

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39 “Publicly owned treatment works” or “POTW” means any device or system used in the
40 treatment (including recycling and reclamation) of municipal sewage or industrial wastes
41 of a liquid nature which is owned by a “State” or “municipality” (as defined by 33 U.S.C.
42 section 1362). This definition includes sewers, pipes or other conveyances only if they
43 convey wastewater to a POTW providing treatment.

44

45 “PV cell” see “photovoltaic cell.”

46

1 “PV module” see “photovoltaic module.”

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3 “R chart” (Range chart) means a control chart for evaluating the variability within a
4 process in terms of the subgroup range R.

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6 “RCRA Characteristic” means the characteristic of ignitability, corrosivity, reactivity, or
7 toxicity identified in sections 66261.21, 66261.22(a)(1), 66261.22(a)(2), 66261.23, and
8 66261.24(a)(1) of this division.

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13 “Soil-pore liquid” means the liquid contained in openings between particles of soil in the
14 unsaturated zone.

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16 “Solar cell” see “photovoltaic cell.”

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18 “Solar panel” see “photovoltaic module.”

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20 “Solid Waste Management Unit” means any unit at a hazardous waste facility from
21 which hazardous constituents might migrate, irrespective of whether the units were
22 intended for the management of wastes, including but not limited to: containers, tanks,
23 surface impoundments, waste piles, land treatment units, landfills, incinerators and
24 underground injection wells.

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27 Note: Authority cited: Sections 25141, 25150, 25158.1, 25158.4, 25159, 25159.5,
28 25187.7, 25200.10, 25204, 25214.9, 25218.3(d), 25200.21, 25245, 25259, 25316,
29 25355.5, 25356.9, 25358.9, 58004 and 58012, Health and Safety Code; Governor's
30 Reorganizational Plan #1 of 1991; and Section 42475.1, Public Resources Code.
31 Reference: Sections 25110.02, 25110.1, 25110.5, 25111, 25112, 25112.5, 25113,
32 25114, 25115, 25117, 25117.1, 25117.3, 25117.8, 25117.9, 25117.11, 25118, 25119,
33 25120, 25121, 25121.5, 25122.7, 25123, 25123.3, 25123.5, 25123.6, 25141, 25150,
34 25158.2, 25159, 25159.5, 25187.7, 25200.10, 25201.6, 25204, 25214.9, 25218.1(f),
35 25218.3, 25200.1, 25229, 25245, 25259, 25316, 25354(b), 25355.5, 25355.6, 25356.9,
36 25358.1, 25358.9, 25359.8, 25361, 25501, 25529 and 58012, Health and Safety Code;
37 and 40 CFR Sections 260.10, 261.1, 262.21, 264.551, 264.1031, 268.2, 270.2 and
38 273.6.

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1 **Amend** Title 22, division 4.5, chapter 11, article 1, section 66261.9 to read:

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3 **§66261.9. Requirements for Universal Waste.**

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5 (a) The hazardous wastes listed in this section are exempt from the management
6 requirements of chapter 6.5 of division 20 of the Health and Safety Code and its
7 implementing regulations except as specified in chapter 23 and, therefore, are not fully
8 regulated as hazardous wastes. The wastes listed in this section are subject to
9 regulation pursuant to chapter 23 and shall be known as “universal wastes.”

10 (1) Batteries, as described in section 66273.2, subsection (a);

11 (2) Electronic devices, as described in section 66273.3, subsection (a);

12 (3) Mercury-containing equipment, as described in section 66273.4, subsection (a);

13 (4) Lamps, as described in section 66273.5, subsection (a) (including, but not limited
14 to, M003 wastes);

15 (5) Cathode ray tubes, as described in section 66273.6, subsection (a);

16 (6) Cathode ray tube glass, as described in section 66273.7, subsection (a); ~~and~~

17 (7) Aerosol cans, as specified in Health and Safety Code section 25201.16; and

18 (8) Photovoltaic modules, as described in section 66273.7.1, subsection (a).

19 (b) Unless specified otherwise in section 66273.60, universal wastes shall be managed
20 as hazardous wastes pursuant to chapters 10 through 16, 18, and 20 through 22 of this
21 division upon arrival at a destination facility.

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23

24 Note: Authority cited: Sections 25141, 25150, 25150.6, 25201, 25214.9, 25214.10.1,

25 25219.1, 25259 and 58012, Health and Safety Code; and Section 42475.2, Public

26 Resources Code. Reference: Sections 25117.2, 25141, 25150, 25159.5, 25180-25196,

27 25214.5, 25214.9, 25219, 25219.1, ~~and~~ 25219.2, and 25259, Health and Safety Code;

28 40 CFR Section 261.9.

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1 **Amend** Title 22, division 4.5, chapter 23, article 1, section 66273.1 to read:

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3 **§66273.1. Scope.**

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5 (a) This chapter establishes requirements for managing universal wastes, as defined in
6 section 66273.9. The following universal wastes are subject to regulation pursuant to
7 this chapter:

8 (1) Batteries, as described in section 66273.2, subsection (a);

9 (2) Electronic devices, as described in section 66273.3, subsection (a);

10 (3) Mercury-containing equipment, as described in section 66273.4,
11 subsection (a);

12 (4) Lamps, as described in section 66273.5, subsection (a) (including, but not
13 limited to, M003 wastes);

14 (5) Cathode ray tubes, as described in section 66273.6, subsection (a);

15 (6) Cathode ray tube glass, as described in section 66273.7, subsection (a); ~~and~~

16 (7) Aerosol cans, as specified in Health and Safety Code section 25201.16; and

17 (8) Photovoltaic modules, as described in section 66273.7.1, subsection (a).

18 (b) This chapter provides an alternative set of management standards in lieu of
19 regulation as hazardous wastes pursuant to chapters 10 through 16, 18, and 20 through
20 22 of this division. The alternative management standards of articles 1 through 3 of this
21 chapter do not apply to destination facilities, as defined in section 66273.9, except as
22 otherwise specified in section 66273.60, subsections (b) or (c).

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25 NOTE: Authority cited: Sections 25141, 25150, 25150.6, 25201, 25214.9, 25219.1,
26 ~~and 25259~~ and 58012, Health and Safety Code; and Section 42475, Public Resources
27 Code. Reference: Sections 25141, 25150, 25159.5, 25201, 25212, 25214.6, 25214.9,
28 25219, 25219.1, ~~and 25219.2,~~ and 25259, Health and Safety Code; 40 CFR Section
29 273.1.

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1 **Add** Title 22, division 4.5, chapter 23, article 1, section 66273.7.1 to read:

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3 **§66273.7.1. Applicability — PV modules.**

4

5 (a) PV modules covered pursuant to chapter 23.

6 The requirements of this chapter apply to PV modules, as defined in section
7 66273.9, except PV modules listed in subsection (b) of this section.

8 (b) PV modules not covered pursuant to chapter 23. The requirements of this chapter
9 do not apply to the following PV modules:

10 (1) PV modules that are not yet wastes pursuant to chapter 11 of this division.

11 Subsection (c) of this section describes when PV modules become wastes;

12 (2) PV modules that do not exhibit a characteristic of a hazardous waste as set forth
13 in article 3 of chapter 11 and that are not otherwise identified as hazardous waste
14 pursuant to chapter 11 of this division;

15 (3) PV modules that exhibit any characteristic of a hazardous waste other than the
16 characteristic of toxicity. Such PV modules shall be managed as hazardous wastes
17 pursuant to chapters 10 through 16, 18, and 20 through 22 of this division;

18 (4) PV modules that are destined for recycling (or are recycled) by being “used in a
19 manner constituting disposal,” as described in section 66266.20. Such PV modules
20 shall be managed as hazardous waste pursuant to chapters 10 through 16, 18, and
21 20 through 22 of this division;

22 (5) Except as otherwise provided in section 66273.72 of this chapter, PV modules
23 that are destined for disposal at a permitted hazardous waste disposal facility. Such
24 PV modules shall be managed as hazardous wastes pursuant to chapters 10
25 through 16, 18, and 20 through 22 of this division;

26 (6) PV modules that are managed as hazardous wastes pursuant to chapters 10
27 through 16, 18, and 20 through 22 of this division;

28 (7) PV modules that were previously identified as waste pursuant to chapter 11, but
29 are no longer identified as a waste (e.g., discarded PV modules that are refurbished
30 and are returned to service); and

31 (8) PV modules that are integrated into the structure of electronic devices (e.g.,
32 calculators).

33 (c) Generation of waste PV modules.

34 (1) A used PV module becomes a waste on the date it is discarded.

35 (2) Unused PV modules.

36 (A) An unused PV module that is not a retrograde material becomes a waste on
37 the date it is discarded (e.g., when stored while destined for reclamation); or

38 (B) An unused PV module that is a retrograde material becomes a waste on the
39 date that it becomes a recyclable material pursuant to subsection (e) of the
40 definition of “recyclable materials” in section 66260.10.

41 (d) A respondent in an action to enforce regulations in this division who claims that a PV
42 module is not a waste bears the burden of demonstrating that there is a known
43 market or disposition for its use as a PV module.

44

45 NOTE: Authority cited: Sections 25141, 25150, 25214.6, 25159, and 58012, Health and
46 Safety Code. Reference: Sections 25141, 25150, and 25259, Health and Safety Code.

47

1 **Amend** Title 22, division 4.5, chapter 23, article 1, section 66273.9 to read:

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3 **§ 66273.9. Definitions.**

4

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

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15 “Onsite” means the same or geographically contiguous property which may be divided
16 by public or private right-of-way, provided that the entrance and exit between the
17 properties is at a cross-roads intersection, and access is by crossing as opposed to
18 going along the right-of-way. Non-contiguous properties owned by the same person but
19 connected by a right-of-way which the person controls and to which the public does not
20 have access, are also considered onsite property.

21

22 “Photovoltaic cell” means a specialized semiconductor diode designed to convert solar
23 radiation into electrical energy. Photovoltaic cells are an integral part of PV modules.
24 Photovoltaic cell is also commonly referred to as solar cell.

25

26 “Photovoltaic module” means a device consisting of one or more electrically connected
27 photovoltaic cells that are protected, such as in glass, and designed to convert solar
28 radiation into electrical energy. Photovoltaic module includes any ancillary components
29 such as metal frames used to support the module, junction boxes, batteries, inverters,
30 wires, and cables that are connected to and are part of the photovoltaic module. Types
31 of photovoltaic modules include, but are not limited to, monocrystalline silicon
32 photovoltaic modules, polycrystalline silicon photovoltaic modules, amorphous silicon
33 photovoltaic modules, cadmium telluride photovoltaic modules, copper indium gallium
34 selenide photovoltaic modules, and gallium indium phosphide/gallium arsenide/gallium
35 photovoltaic modules. Photovoltaic modules are also commonly referred to as
36 photovoltaic panels or solar panels.

37

38 “Photovoltaic panel” see “photovoltaic module.”

39

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41 “Pressure or vacuum gauge” means any device in which pressure or vacuum is
42 measured using the height of a column of liquid mercury. “Pressure or vacuum gauge”
43 includes, but is not limited to, barometers, manometers, and sphygmomanometers.

44

45 “Producer” see “Generator.”

46

1 “PV cell” see “photovoltaic cell.”

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3 “PV module” see “photovoltaic module.”

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7 “Scrap metal” means (a) any one or more of the following, except as provided in
8 subsection (b) of this section:

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10 “Solar cell” see “photovoltaic cell.”

11

12 “Solar panel” see “photovoltaic module.”

13

14 “Thermometer” means any thermometer that uses the expansion and contraction of a
15 column of mercury to measure temperature.

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19 Note: Authority cited: Sections 25141, 25141.5, 25150, 25214.6, 25150.6, 25201,
20 25214.9, 25219.1, 25259, and 58012, Health and Safety Code; and Section 42475,
21 Public Resources Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201,
22 25212, 25214.6, 25214.9, 25219, 25219.1, ~~and 25219.2,~~ and 25259, Health and Safety
23 Code; 40 CFR Sections 261.4, 261.5 and 273.9.

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1 **Amend** Title 22, division 4.5, chapter 23, article 3, section 66273.31 to read:

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3 **§66273.31. Prohibitions.**

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5 A universal waste handler is:

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7 (a) Prohibited from disposing of universal waste [however, a universal waste handler
8 may send or take batteries, thermostats, mercury-added novelties containing no liquid
9 mercury, ~~and mercury-containing rubber flooring,~~ and PV modules that are universal
10 wastes to a destination facility for disposal]; and

11

12 (b) Prohibited from diluting or treating universal waste, except by responding to releases
13 as provided in section 66273.37, or by managing specific wastes as provided in
14 sections 66273.33, ~~and 66273.33.5,~~ and 66273.33.6.

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16 Note: Authority cited: Sections 25141, 25150, 25219.1, 25259, and 58012, Health and
17 Safety Code. Reference: Sections 25141, 25150, 25159.5, 25219, 25219.1,
18 ~~and 25219.2,~~ and 25259, Health and Safety Code; 40 CFR Section 273.31.

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1 **Amend** Title 22, division 4.5, chapter 23, article 3, section 66273.32 to read:

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3 **§ 66273.32. USEPA Notification, Department Notification, and Reporting**
4 **Requirements for Universal Waste Handlers.**

5

6 (a) USEPA notification requirements.

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9

10 (c) Department notification requirements for universal waste handlers of electronic
11 devices, CRTs, and CRT glass.

12 (1) Any universal waste handler who might accept and accumulate, but not treat, any
13 electronic device, CRT, and/or CRT glass from an offsite source shall submit to the
14 Department at the address given in subsection ~~(e) or (f)~~ (g) or (h) of this section, an
15 electronic or written notification containing the information specified in subsection
16 (c)(2) of this section no later than 30 calendar days prior to accepting any electronic
17 device, CRT and/or CRT glass.

18

19 ***

20 (d) Annual reporting requirements for universal waste handlers of electronic devices,
21 CRTs, and CRT glass.

22 (1) A universal waste handler that accepts more than 100 kilograms (or 220 pounds)
23 of electronic devices, CRTs, and CRT glass calculated collectively, from any offsite
24 sources in a calendar year shall, by February 1 of the following year, submit to the
25 Department at the address given in subsection ~~(e) or (f)~~ (g) or (h) of this section, an
26 electronic or written annual report containing the information specified in subsection
27 (d)(3) of this section. The information submitted pursuant to this subsection (d)(1)
28 shall cover the electronic-device-handling, CRT-handling, and CRT-glass-handling
29 activities conducted during the previous calendar year.

30 (2) A universal waste handler that generates 5,000 kilograms (or 11,000 pounds;
31 e.g., about 200 CRTs) or more of electronic devices, CRTs, and CRT glass
32 calculated collectively, in a calendar year shall, by February 1 of the following year,
33 submit to the Department at the address given in subsection ~~(e) or (f)~~ (g) or (h) of
34 this section, an electronic or written annual report containing the information
35 specified in subsection (d)(3) of this section. The information submitted pursuant to
36 this subsection (d)(2) shall:

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40 (e) Department notification requirements for universal waste handlers of PV modules.

41 (1) Any universal waste handler who might accept and accumulate, but not treat, any
42 PV modules from an offsite source shall submit to the Department, at the address
43 given in subsection (h) of this section, a written notification containing the
44 information specified in subsection (e)(2) of this section no later than 30 calendar
45 days prior to accepting any PV modules.

- 1 (2) This notification shall include:
2 (A) Name of the universal waste handler (If the facility owner is different than the
3 facility operator, also include the owner's name);
4 (B) ID Number of the universal waste handler, if applicable;
5 (C) Telephone number of the universal waste handler;
6 (D) Mailing address of the universal waste handler, and physical address,
7 including county, if different from the mailing address;
8 (E) Name of the contact person at the universal waste handler's site who should
9 be contacted regarding universal waste management activities;
10 (F) Telephone number of the contact person;
11 (G) An email address for the contact person or organization, if available;
12 (H) The types of PV modules expected to be handled;
13 (I) The sources of the PV modules (i.e., residential collections, business asset
14 recovery, other collectors, etc.); and
15 (J) A statement indicating whether the universal waste handler might accumulate
16 5,000 kilograms or more of universal waste at one time.
17 (3) Notifications made pursuant to this subsection shall be made for each location at
18 which the universal waste handler accepts or accumulates PV modules from an
19 offsite source.
20 (f) Annual reporting requirements for universal waste handlers of PV modules.
21 (1) A universal waste handler that accepts more than 100 kilograms (or 220 pounds)
22 of PV modules from any offsite sources in a calendar year shall, by February 1 of the
23 following year, submit to the Department, at the address given in subsection (h) of
24 this section, a written annual report containing the information specified in
25 subsection (f)(3) of this section. The information submitted pursuant to this
26 subsection shall cover the PV module-handling activities conducted during the
27 previous calendar year.
28 (2) A universal waste handler that generates 5,000 kilograms (or 11,000 pounds) or
29 more of PV modules in a calendar year shall, by February 1 of the following year,
30 submit to the Department, at the address given in subsection (h) of this section, a
31 written annual report containing the information specified in subsection (f)(3) of this
32 section. The information submitted pursuant to this subsection shall identify the PV
33 module-handling activities conducted during the previous calendar year; and
34 (3) This annual report shall include:
35 (A) Name of the universal waste handler (if the facility owner is different than the
36 facility operator, also include the owner's name);
37 (B) ID Number of the universal waste handler, if applicable;
38 (C) Telephone number of the universal waste handler;
39 (D) Mailing address of the universal waste handler, and physical address
40 (including county) if different from the mailing address;
41 (E) Name of the contact person at the universal waste handler's site who should
42 be contacted regarding universal waste management activities;
43 (F) Telephone number of the contact person;
44 (G) An email address for the contact person or organization, if available;
45 (H) The types of PV modules handled;

1 (I) The quantities of PV modules handled, which include any quantities handled
2 but not shipped during the previous calendar year;

3 (J) A list consisting of:

4 1. The name, address, and telephone number for each of the locations to which
5 the universal waste handler shipped PV modules during the previous calendar
6 year;

7 2. The quantity of PV modules shipped to each of those locations during the
8 previous calendar year; and

9 3. A description of how each of those locations intended to manage the PV
10 modules, including whether the PV modules were to be recycled or disposed of.

11 ~~(e)-(g)~~(1) Electronic submissions. If submitted electronically through the Department's
12 universal waste web-based reporting system, Department notifications and annual
13 reports required pursuant to subsections (c) and (d) of this section shall be addressed to
14 the Department at <http://www.dtsc.ca.gov>.

15 (2) A person that has provided written submissions of any of the Department
16 notifications and annual reports required pursuant to subsections (c) or (d) of this
17 section is not required to submit the same information electronically.

18 (3) If the Department's universal waste web-based reporting system is not available
19 or cannot accommodate electronic submissions for any of the Department
20 notifications and annual reports required pursuant to subsections (c) or (d) of this
21 section, the handler shall provide written submissions in accordance with subsection
22 (h).

23 ~~(f)-(h)~~(1) Written submissions. If submitted in writing, Department notifications and
24 annual reports required pursuant to subsections (c) and (d) or (e) and (f) of this section
25 shall be sent to the Department by certified mail, return receipt requested, at the
26 following address: Department of Toxic Substances Control, Universal Waste
27 Notification and Reporting Staff, P.O. Box 806, Sacramento, CA 95812-0806, with the
28 words "Attention: Universal Waste Handling Activities" prominently displayed on the
29 front of the envelope.

30 (2) A person that has provided electronic submissions of any of the Department
31 notifications and annual reports required pursuant to subsections (c), (d), (e), or (f) of
32 this section through the Department's universal waste web-based reporting system
33 in accordance with subsection (g) of this section is not required to submit the same
34 information in writing.

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37 Note: Authority cited: Sections 25141, 25150, 25201, 25214.9, 25219.1, 25259, and
38 58012, Health and Safety Code; and Section 42475, Public Resources Code.

39 Reference: Sections 25141, 25150, 25159.5, 25201, 25214.9, 25219, 25219.1, and
40 25219.2, and 25259, Health and Safety Code; and 40 CFR Section 273.32.

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1 **Add** Title 22, division 4.5, chapter 23, article 3, section 66273.33.6 to read:

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3 **§ 66273.33.6 Universal Waste Management Requirements for PV Modules.**

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5 The requirements of this section apply only to universal waste handlers of PV modules.

6 (a) A universal waste handler of PV modules shall:

7 (1) Comply with the applicable requirements of sections 66273.30 through 66273.32
8 and sections 66273.34 through 66273.39 of this article with respect to the
9 management of PV modules; and

10 (2) Manage PV modules in a way that prevents releases of any constituent of a PV
11 module to the environment under reasonably foreseeable conditions, as follows:

12 (A) A universal waste handler shall contain any PV module in a manner that
13 prevents breakage and release of any constituent of a PV module to the
14 environment. If a container or package is used, such a container or package shall
15 prevent breakage, leakage, spillage, or damage that could cause leakage under
16 reasonably foreseeable conditions.

17 (B) Intact PV modules that are managed in a manner that prevents breakage of
18 the PV modules and release of constituents of the PV modules to the
19 environment under reasonably foreseeable conditions shall be deemed to comply
20 with subsection (a)(2)(A) of this section.

21 (3) A universal waste handler shall immediately clean up and place in a container
22 any PV module or constituent of the PV module if that PV module is accidentally or
23 unintentionally broken. The container shall be structurally sound, compatible with the
24 PV modules and their constituents, and shall prevent releases of constituents of the
25 PV modules to the environment under reasonably foreseeable conditions.

26 (b) Except as otherwise provided in subsection (c) of this section, a universal waste
27 handler of PV modules shall comply with the applicable requirements of article 7 of this
28 chapter in addition to the requirements of subsection (a) of this section with respect to
29 the PV modules.

30 (c) A universal waste handler of PV modules shall be exempt from the requirements of
31 article 7 of this chapter with respect to the PV modules if the universal waste handler:

32 (1) Manages only PV modules that are intact (except for the occasional PV module
33 that is accidentally or unintentionally broken and that is managed according to the
34 applicable provisions of this chapter);

35 (2) Ensures that the intact PV modules remain intact (except for the occasional PV
36 module that is accidentally or unintentionally broken and that is managed according
37 to the applicable provisions of this chapter) throughout the entire time they are in the
38 universal waste handler's custody; and

39 (3) Complies with the requirements of section (a)(1) of this section.

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41 Note: Authority cited: Sections 25141, 25150, 25201, 25259, and 58012, Health and
42 Safety Code. Reference: Sections 25141, 25150, 25201, and 25259, Health and Safety
43 Code.

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46

1 **Amend** Title 22, division 4.5, chapter 23, article 3, section 66273.34 to read:

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3 **§ 66273.34. Labeling/Marking.**

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5 Except as otherwise provided in subsection ~~(g)~~(h) of this section, a universal waste
6 handler shall label or mark universal waste to identify the type of universal waste as
7 specified in subsections (a) through ~~(f)~~(g) of this section.

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11 (f) A container of CRT glass shall be labeled or marked clearly with the following
12 phrase: "Universal Waste-CRT glass".

13 (g) Each PV module, or each container holding PV modules, shall be labeled or marked
14 clearly with the following phrase: "Universal Waste-PV module(s)".

15 ~~(g)-(h)~~ In lieu of labeling individual electronic devices, CRTs, PV modules, and/or
16 containers of CRT glass pursuant to subsections (d) through ~~(f)~~(g) of this section, a
17 universal waste handler may combine, package, and accumulate those universal
18 wastes in appropriate containers or within a designated area demarcated by boundaries
19 that are clearly labeled with the applicable portion(s) of the following phrase: "Universal
20 Waste-Electronic Device(s)/Universal Waste-CRT(s)/Universal Waste-CRT
21 Glass/Universal Waste-PV module(s)".

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25 Note: Authority cited: Sections 25141, 25150, 25201, 25214.6, 25214.9, 25219.1,
26 25259, and 58012, Health and Safety Code; and Section 42475, Public Resources
27 Code. Reference: Sections 25141, 25150, 25159.5, 25201, 25212, 25214.6, 25214.9,
28 25219.1, ~~and 25219.2~~ and 25259, Health and Safety Code; 40 CFR Section 273.34.

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1 **Amend** Title 22, division 4.5, chapter 23, article 3, section 66273.39 to read:

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3 **§ 66273.39. Tracking Universal Waste Shipments.**

4

5 (a) Receipt of shipments. A universal waste handler shall keep a record of each
6 shipment of universal waste received at the universal waste handler's facility. The
7 record may take the form of a log, invoice, manifest, bill of lading, or other shipping
8 document. The record for each shipment of universal waste received shall include the
9 following information:

10 (1) The name and address of the originating universal waste handler from which the
11 universal waste was sent;

12 (2) The quantity [count or weight, consistent with, for example, section 66273.32,
13 subsection (d)] of each type of universal waste received (e.g., batteries, thermostats,
14 lamps, electronic devices, CRTs, CRT glass, PV modules); and

15 (3) The date of receipt of the shipment of universal waste.

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19 (c) Shipments offsite. A universal waste handler shall keep a record of each shipment of
20 universal waste sent from the universal waste handler's facility to another facility. The
21 record may take the form of a log, invoice, manifest, bill of lading or other shipping
22 document. The record for each shipment of universal waste sent shall include the
23 following information:

24 (1) The name and address of the universal waste handler or destination facility to
25 which the universal waste was sent;

26 (2) The quantity [count or weight, consistent with, for example, section 66273.32,
27 subsection (d)] of each type of universal waste sent (e.g., batteries, thermostats,
28 lamps, electronic devices, CRTs, CRT glass, PV modules); and

29 (3) The date of departure of the shipment of universal waste.

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33 Note: Authority cited: Sections 25141, 25150, 25150.6, 25219.1, 25219.2, 25259, and
34 58012, Health and Safety Code. Reference: Sections 25141, 25150, 25159.5, 25219,
35 25219.1, ~~and~~ 25219.2, and 25259, Health and Safety Code; 40 CFR Section 273.39.

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1 **Amend** Title 22, division 4.5, chapter 23, article 5, section 66273.51 to read:

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3 **Article 5. Standards for Universal Waste Transporters**

4

5 **§ 66273.51. Prohibitions.**

6

7 A universal waste transporter is:

8 (a) Prohibited from disposing of universal waste;

9 (b) Prohibited from diluting or treating universal waste, except as a consequence of
10 responding to a release as provided in section 66273.54;

11 (c) Prohibited from transporting more than five CRTs at any one time unless the CRTs
12 are contained as described in section 66273.33.5, subsection (b)(1)(B); ~~and~~

13 (d) Prohibited from transporting more than 100 kilograms or 220 pounds of electronic
14 devices at any one time unless the electronic devices are contained as described in
15 section 66273.33.5, subsection (a)(1)(B); and

16 (e) Prohibited from transporting more than 100 kilograms (220 pounds) of PV modules
17 at any one time unless the PV modules are contained as described in section
18 66273.33.6, subsection (a)(2).

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21 Note: Authority cited: Sections 25141, 25150, 25150.6, 25201, 25214.9, 25219.1,
22 25259, and 58012, Health and Safety Code; and Section 42475, Public Resources
23 Code. Reference: Sections 25141, 25150, 25159.5, 25201, 25214.9, 25219, 25219.1,
24 25219.2, and 25259, Health and Safety Code; and 40 CFR Section 273.51.

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1 **Amend** Title 22, division 4.5, chapter 23, article 7, section 66273.70 to read:

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

5

6 **§ 66273.70. Applicability.**

7

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

12 (b) Except as otherwise provided in subsection (d) of this section, a universal waste
13 handler who manages a universal waste and its integral components, or the
14 components specified below that the handler has removed from the universal waste, for
15 purposes of recycling it or its component(s) or for the purpose of disposing CRTs, ~~or~~
16 CRT glass, or PV modules by performing one or more activities listed in one or more of
17 the three categories given in subsection (c) of this section, shall be deemed authorized
18 by the Department to conduct those activities, provided the universal waste handler
19 complies with the applicable requirements of this article in addition to the applicable
20 requirements of subsection (c) of section 66273.33, and to the applicable requirements
21 of subsections (a)(1), (b)(1), and (c)(1) of section 66273.33.5, the applicable
22 requirements of subsection (a)(1) of section 66273.33.6, and to the applicable
23 requirements of article 8 of this chapter. The authorization created by this subsection
24 shall not be deemed to be any of the following:

25 (1) A permit-by-rule;

26 (2) A conditional authorization; or

27 (3) A conditional exemption.

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

30 (1) Removal activities. Removing user-replaceable components from electronic
31 devices or PV modules as specified in section 66273.71.

32 (2) Disassembling/draining activities.

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

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

37 (C) Removing mercury ampules and/or mercury switches from mercury-

38 containing equipment, as specified in section 66273.72, subsection (d); ~~and/or~~

39 (D) Draining liquid mercury from pressure or vacuum gauges, as specified in
40 section 66273.72, subsection (e); and/or

41 (E) Dismantling PV modules, as specified in section 66273.72, subsection (f).

42 (3) Treatment activities.

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

1 (B) Treating CRTs and/or CRT glass, as specified in section 66273.73,
2 subsection (b)-; and/or
3 (C) Treating PV modules as specified in 66273.73, subsection (d).
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5 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.6, 25214.9,
6 26219.1, 25259, and 58012, Health and Safety Code; and Section 42475, Public
7 Resources Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25201, 25212,
8 25214.6, 25214.9, 25219, 25219.1, ~~and~~ 25219.2, and 25259, Health and Safety Code.
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1 **Amend** Title 22, division 4.5, chapter 23, article 7, section 66273.71 to read:

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3 **§ 66273.71. Authorization for Removal Activities.**

4

5 (a) Removing user-replaceable components.

6 A universal waste handler, who conducts the activities identified in subsections (b) and
7 (c) of this section on electronic devices or PV modules, shall be deemed authorized by
8 the Department to perform these activities, and is exempt from the requirements of
9 sections 66273.74 through 66273.77, provided the universal waste handler complies
10 with the requirements specified in subsections (b) through (g) of this section.

11 (b) A universal waste handler shall remove only those discrete assemblies, such as
12 batteries or ink cartridges from electronic devices, or batteries or inverters from PV
13 modules, which are typically removed for replacement during the normal operation of an
14 electronic device or PV module.

15 (c) A universal waste handler shall conduct the removal of the discrete assemblies in
16 the manner that is prescribed in the operating manual for the electronic device or PV
17 module, or in a manner that would otherwise reasonably be employed during the normal
18 operation of the electronic device or PV module.

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22 Note: Authority cited: Sections 25141, 25150, 25201, 25214.9, 25219.1, 25259, and
23 58012, Health and Safety Code; and Section 42475, Public Resources Code.

24 Reference: Sections 25141, 25150, 25159.5, 25201, 25212, 25214.9, 25219, 25219.1,
25 ~~and 25219.2~~, and 25259, Health and Safety Code.

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1 **Amend** Title 22, division 4.5, chapter 23, article 7, section 66273.72 to read:

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

4

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

7 (A) Chemicals, including water; and/or

8 (B) External heat.

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

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

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

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21 (f) Dismantling PV modules. A universal waste handler who conducts any of the
22 activities identified in subsection (f)(1) of this section shall be deemed authorized by the
23 Department to do so, provided the universal waste handler complies with the
24 requirements in this subsection.

25 (1) The universal waste handler who dismantles, removes, or otherwise manually
26 segregates, components (e.g., glass panels, metal frames used to support the
27 module, junction boxes, inverters, wires and cables) of a PV module, but does not
28 break the PV module glass.

29 (2) The universal waste handler shall:

30 (A) Comply with the notification, annual reporting, and recordkeeping requirements
31 specified in section 66273.74, subsections (a)(4) and/or (a)(5), (b)(3), and (c)(3);

32 (B) Ensure that all segregated or removed components resulting from the activities
33 authorized by subsection (f)(1) of this section that meet the definition of scrap
34 metal in section 66273.9 are recycled; and

35 (C) Except as provided in subsection (f)(3) of this section, treat the PV modules
36 pursuant to section 66273.73 or send or take PV modules to another universal
37 waste handler for treatment pursuant to section 66273.73; and

38 (D) Conduct the activities in a manner that protects persons managing the PV
39 modules, and that prevents releases of any universal wastes and/or any
40 constituents of the PV modules to the environment under reasonably foreseeable
41 conditions, as follows:

42 1. Dismantle PV modules over or in a designated area (e.g., a concrete surface)
43 sufficient in size and construction to contain any materials from being released to
44 the environment under reasonably foreseeable conditions, and provided the

- 1 universal waste handler conducts such activities in a manner that prevents
- 2 breakage of the PV modules.
- 3 2. Contain any hazardous residuals produced from dismantling PV modules in a
- 4 manner that prevents releases of the residuals to the environment under
- 5 reasonably foreseeable conditions.
- 6 3. Immediately clean up and place in a container any PV module that is
- 7 accidentally or unintentionally broken and that may reasonably be expected to
- 8 cause a release to the environment under reasonably foreseeable conditions.
- 9 Such a container shall be structurally sound, be compatible with the contents of
- 10 the PV module, and prevent releases to the environment under reasonably
- 11 foreseeable conditions.
- 12 4. Ensure that persons performing the activities are thoroughly familiar with the
- 13 hazards associated with such treatment, have access to the proper procedures
- 14 and protective equipment necessary to conduct the treatment safely, use such
- 15 protective equipment if required by any applicable health and safety
- 16 requirements, and comply with the requirements of this section.
- 17 5. Ensure that the facility is operated in compliance with all applicable health and
- 18 safety laws and regulations [e.g., Cal. Code Regs., tit. 8, ch. 4 (Division of
- 19 Industrial Safety) subch. 7 (General Industry Safety Orders), group 16 (Control of
- 20 Hazardous Substances), art. 107 (Dusts, Fumes, Mists, Vapors, and Gases), and
- 21 art. 109 (Hazardous Substances and Processes), and sec. 5198 (Lead)].
- 22 6. Ensure that the facility maintains aisle spacing in compliance with applicable
- 23 fire safety code standards in California.
- 24 (3) A universal waste handler who does not conduct further treatment on PV modules
- 25 pursuant to section 66273.73 or send or take PV modules to another universal waste
- 26 handler for treatment pursuant to section 66273.73 shall:
- 27 (A) Ensure that the PV modules are recycled or disposed of as required by this
- 28 section.
- 29 (B) For disposal at a permitted hazardous waste disposal facility:
- 30 1. Be deemed the generator of hazardous waste PV modules;
- 31 2. Manage the PV modules as hazardous waste in accordance with all applicable
- 32 requirements of chapters 12 through 16, 18, 20, and 22 of this division; and
- 33 3. Notify the Department in accordance with 66273.74 (a)(5).

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37 Note: Authority cited: Sections 25141, 25141.5, 25143.2, 25150, 25173, 25201,
38 25214.6, 25214.9, 25219.1, ~~25259~~ and 58012, Health and Safety Code; and Section
39 42475, Public Resources Code. Reference: Sections 25141, 25141.5, 25150, 25159.5,
40 25173, 25201, 25212, 25214.6, 25214.9, 25219, 25219.1, ~~and 25219.2, and 25259,~~
41 Health and Safety Code.

1 **Amend** Title 22, division 4.5, chapter 23, article 7, section 66273.73 to read:

2

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

4

5 (a) Treatment of electronic devices.

6

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8

9 (d) Treatment of PV Modules.

10 A universal waste handler described in subsection (d)(1) of this section shall be deemed
11 authorized by the Department to conduct the activities identified in subsection (d)(2) of
12 this section, provided the universal waste handler complies with the requirements
13 specified in subsections (d)(2) and (d)(3) of this section.

14 (1) The universal waste handler treats PV modules by intentionally breaking the PV
15 modules (e.g., glass).

16 (2) The universal waste handler treats PV modules by: conducting activities other
17 than, or in addition to, the removal activities authorized in section 66273.71 and the
18 dismantling activities authorized by section 66273.72, subsection (f); and using only
19 one or more of the methods allowed pursuant to subsection (e) of this section.

20 (3) The universal waste handler complies with all of the following requirements in
21 addition to the requirements of section 66273.33.6, subsection(a):

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

24 (B) The standards specified in section 66273.75;

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

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

28 (e) PV module treatment methods allowed.

29 (1) Except as otherwise provided in subsection (e)(2) of this section, one or more of
30 the following treatment methods is eligible for authorization pursuant to this section,
31 if performed by a universal waste handler described in subsection (d) of this section:

32 (A) Physical treatment that changes only the physical properties of PV modules,
33 such as cutting, sawing, breaking, shredding, crushing, grinding, screening,
34 sieving, or compacting;

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

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

42 (A) The use or application of chemicals, including water.

43 (B) The use or application of external heat.

1 (3) For disposal of PV modules at a permitted hazardous waste disposal facility, the
2 universal waste handler shall be deemed the generator of hazardous waste PV
3 modules, and shall:

4 (A) Manage the PV modules as hazardous waste in accordance with all
5 applicable requirements of chapters 12 through 16, 18, 20, and 22 of this
6 division; and

7 (B) Notify the Department in accordance with section 66273.74(a)(5).
8

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

12 (2) As used in this subsection, “printed circuit boards produced by an authorized
13 handler” means residual printed circuit boards that a handler has:

14 (A) derived from electronic devices by completing treatment authorized under this
15 article,

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

17 (C) subsequent to the authorized treatment, determined to be exempt scrap
18 metal pursuant to section 66273.71, subsection (e), section 66273.72, subsection
19 (a)(3), or section 66273.75, subsection (c)(1)(C).
20
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22 Note: Authority cited: Sections 25141, 25141.5, 25143.2.5, 25150, 25201, 25214.9,
23 25219.1, 25259, and 58012, Health and Safety Code; and Section 42475, Public
24 Resources Code. Reference: Sections 25141, 25141.5, 25143.2, 25150, 25159.5,
25 25201, 25212, 25214.9, , 25219, 25219.1, ~~and 25219.2,~~ and 25259, Health and Safety
26 Code.
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1 **Amend** Title 22, division 4.5, chapter 23, article 7, section 66273.74 to read:

2

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

4

5 (a) Notification.

6

7 ***

8 (4) Universal waste handlers of PV modules.

9 A universal waste handler who intends to treat PV modules pursuant to this article
10 shall submit to the Department at the address provided in subsection (f) of this
11 section, a written notification containing the following information no later than 30
12 calendar days prior to treating any PV modules:

13 (A) Name of the universal waste handler (If the facility owner is different than the
14 facility operator, also include the owner's name.);

15 (B) ID Number of the universal waste handler, if applicable;

16 (C) Telephone number of the universal waste handler;

17 (D) Mailing address of universal waste handler, and physical address, including
18 county, if different from the mailing address;

19 (E) Name of the contact person at the universal waste handler's site who
20 should be contacted regarding universal waste management activities;

21 (F) Telephone number of the contact person;

22 (G) An e-mail address for the contact person or organization, if available;

23 (H) A description of the authorized treatment method(s) used to treat PV
24 modules; and

25 (I) A description of how treated PV modules will be recycled and/or disposed of.

26 (5) A universal waste handler who makes a determination to dispose of PV modules
27 pursuant to subsection (f)(3)(B) of section 66273.72 or subsection (e)(3) of section
28 66273.73 of this chapter, shall submit to the Department, at the address provided in
29 subsection (f) of this section, a written notification containing the following
30 information no later than 15 calendar days after determining that the PV modules
31 are destined for disposal:

32 (A) The ID number for the universal waste handler's facility where the PV module
33 was generated;

34 (B) A description of the authorized treatment method(s) used to generate the PV
35 modules to be disposed of; and

36 (C) The name, address, and ID number of the hazardous waste disposal facility
37 where the PV modules will be disposed of.

38 (b) Annual reporting.

39

40 ***

41 (3) Universal waste handlers of PV modules

42 Except as otherwise provided in section 66273.71, a universal waste handler who
43 treated any PV module pursuant to this article in a calendar year shall, by February
44 1 of the following year, submit to the Department at the address provided in
45 subsection (f) of this section, a written annual report containing the following:

- 1 (A) Name of the universal waste handler (if the facility owner is different than the
2 facility operator, also include the owner's name);
3 (B) Telephone number of the universal waste handler;
4 (C) Mailing address of the universal waste handler, and physical address,
5 including county, if different from the mailing address;
6 (D) Name of the contact person at the universal waste handler's site who should
7 be contacted regarding universal waste management activities;
8 (E) Telephone number of the contact person;
9 (F) An e-mail address for the contact person or organization, if available;
10 (G) Facility ID Number, if issued;
11 (H) Number of days the facility operated;
12 (I) A description of the authorized treatment method(s) used to treat PV modules;
13 and
14 (J) The total quantity (count or weight) of PV modules treated during the previous
15 calendar year.
16 (K) A list consisting of:
17 1. The name, address, and telephone number for each of the locations to which
18 the universal waste handler shipped PV modules.
19 2. The total number (count or weight) of PV modules shipped to that location
20 during the previous calendar year, including in this case a declaration of
21 whether that location is a glass manufacturer, a reclamation facility, or a
22 destination facility.
23 (L) A universal waste handler who utilizes a mass-based inventory system to
24 quantify PV modules and PV module residuals must provide an appropriate
25 conversion factor to convert mass data to count data.

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27 ***

28
29 (c) Recordkeeping.

30 (1)(A) Universal waste handlers of electronic devices and/or CRTs.
31 Except as otherwise provided in sections 66273.71 and 66273.72, a universal waste
32 handler who treats any electronic device and/or CRT pursuant to this article shall
33 maintain on file at the universal waste handler's facility, the following documents as
34 specified:

35 ***

36 (3) Universal waste handlers of PV modules.

37 (A) The universal waste handler who treats any PV modules pursuant to this article
38 shall maintain on file at the universal waste handler's facility the following documents
39 as specified:

- 40 1. A copy of the notification submitted to the Department as required by
41 subsection (a)(5) of this section;
42 2. A copy of the most recent annual report submitted to the Department as
43 required by subsection (b) of this section, beginning no later than February 1 of
44 the year following the most recent calendar year during which the universal

1 waste handler treated any PV modules at the universal waste handler's facility
2 pursuant to this article; and
3 3. A current copy of any local air district permit and/or other relevant permit(s)
4 required for the facility, beginning no later than the date on which the local air
5 district and/or other relevant permitting authority required the universal waste
6 handler to possess such a permit.

7 (B) The universal waste handler shall make available the relevant documents
8 identified in subsection (c)(3)(A)1 through (c)(3)(A)3 of this section at the universal
9 waste handler's facility upon request, to any representative of the Department, U.S.
10 EPA, or a local governmental agency having jurisdiction over the facility.

11 (C) The universal waste handler shall either deliver in person or send to the
12 Department by certified mail, return receipt requested, a copy of any relevant
13 document identified in subsection (c)(3)(A)3 of this section upon receipt of a written
14 request from the Department. The Department shall specify in its written request all
15 of the following: the identities of the documents for which copies are required; the
16 place where those copies shall be delivered or sent; and the date by which those
17 copies shall be submitted.

18
19 ***

20 (e)(1) If submitted electronically, notifications and annual reports required pursuant to
21 subsections (a) and (b) of this section shall be addressed to the Department at
22 <http://www.dtsc.ca.gov>. For electronic notifications and annual reports made pursuant to
23 this section, the universal waste handler signature required by subsection (d) of this
24 section shall be submitted to the address provided in subsection (f) of this section.

25 (2) A person that has provided written submissions of any of the Department
26 notifications and annual reports required pursuant to subsections (a) and (b) of this
27 section is not required to submit the same information electronically.

28 (3) If the Department's universal waste web-based reporting system is not available
29 or cannot accommodate electronic submissions for any of the Department
30 notifications and annual reports required pursuant to subsections (a) and (b) of this
31 section the handler shall provide written submissions in accordance with subsection
32 (f).

33 (f)(1) If submitted in writing, notifications and annual reports required pursuant to
34 subsections (a) and (b) of this section shall be sent to the Department by certified mail,
35 return receipt requested, at the following address: Department of Toxic Substances
36 Control, Universal Waste Notification and Reporting Staff, P.O. Box 806, Sacramento,
37 CA 95812-0806, with the words "Attention: Universal Waste Handling Activities"
38 prominently displayed on the front of the envelope.

39 (2) A person that has provided electronic submissions of any of the Department
40 notifications and annual reports required pursuant to subsections (a) and (b) of this
41 section through the Department's universal waste web-based reporting system in
42 accordance with subsection (e) of this section is not required to submit the same
43 information in writing.

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1 Note: Authority cited: Sections 25141, 25141.5, 25150, 25201, 25214.6, 25214.9,
2 26219.1, 25259, and 58012, Health and Safety Code; and Section 42475, Public
3 Resources Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25179.6,
4 25201, 25212, 25214.6, 25214.9, 25219, 25219.1, ~~and 25219.2,~~ and 25259, Health
5 and Safety Code.
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1 **Amend** Title 22, division 4.5, chapter 23, article 7, section 66273.74 to read:

2

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

4

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

8

9 (a) Treatment.

10 The universal waste handler shall:

11 (1) Utilize only treatment methods identified in section 66273.73, subsection (c) for
12 electronic devices, residual printed circuit boards, and/or CRTs, or treatment
13 methods identified in section 66273.73, subsection (e) for PV modules;

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

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

28 (b) Containment of residuals.

29 (1) The universal waste handler shall manage all residuals produced from treating
30 electronic devices, residual printed circuit boards, PV modules, and/or CRTs, in a
31 manner that prevents a release to the environment of any universal waste or any
32 component or constituent thereof, as follows:

33 (2) Contain any residuals that are produced from treating electronic devices, residual
34 printed circuit boards, PV modules, and/or CRTs, in a manner that prevents releases
35 of hazardous residuals to the environment under reasonably foreseeable conditions.

36 (3) Clean up and immediately place in a container any electronic device, residual
37 printed circuit board, PV module, and/or CRT that is accidentally or unintentionally
38 broken and that might reasonably be expected to cause a release to the
39 environment under reasonably foreseeable conditions. Such containers shall be
40 structurally sound, be compatible with the contents of the electronic devices, residual
41 printed circuit boards, PV modules, and/or CRTs, and prevent releases under
42 reasonably foreseeable conditions.

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1 (d) Worker safety.

2 (1) A universal waste handler, who treats electronic devices, residual printed circuit
3 boards, PV modules, and/or CRTs, shall be thoroughly familiar with the hazards
4 associated with such treatment, have access to the proper procedures and
5 protective equipment necessary to conduct the treatment safely, use such protective
6 equipment if required by any applicable health and safety requirements, and comply
7 with the requirements of this section;

8 (2) A universal waste handler, who treats electronic devices, residual printed circuit
9 boards, PV modules, and/or CRTs, shall ensure that the universal waste handler's
10 facility is operated in compliance with all applicable health and safety laws and
11 regulations [e.g., Cal. Code Regs., tit. 8, ch. 4 (Division of Industrial Safety), subch.
12 7 (General Industry Safety Orders), group 16 (Control of Hazardous Substances),
13 art. 107 (Dusts, Fumes, Mists, Vapors and ~~Mists~~ Gases), and art. 109 (Hazardous
14 Substances and Processes), and sec. 5198 (Lead)].

15 (e) Zoning.

16 (1) A universal waste handler, who treats electronic devices, residual printed circuit
17 boards, PV modules, and/or CRTs using any of the methods allowed pursuant to this
18 section, shall ensure that such treatment is consistent with local zoning requirements
19 and land use patterns applicable to the universal waste handler's facility.
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Note: Authority cited: Sections 25141, 25141.5, , 25150, 25201, 25214.9, 25219.1, 25259, and 58012, Health and Safety Code; and Section 42475, Public Resources Code. Reference: Sections 25141, 25141.5, 25150, 25159.5, 25173, 25201, 25212, 25214.9, 25219, 25219.1, ~~and 25219.2,~~ and 25259, Health and Safety Code; Sections 42479, Public Resources Code.

1 **Amend** Title 22, division 4.5, chapter 23, article 7, section 66273.76 to read:

2

3 **§ 66273.76. Closure Plan and Financial Requirements.**

4

5 (a) Except as otherwise provided in subsections (a)(4) and (b)(5) of this section, and in
6 addition to the universal waste handler notification required pursuant to section
7 66273.74, subsection (a), a universal waste handler who intends to conduct one or
8 more of the treatment activities described in section 66273.73, subsections (a)(2), ~~and~~
9 (b), and (d), shall submit the information specified in subsections (a)(1) through (d) of
10 this section to the Department in the manner and at the address given in subsections
11 (e) and (f) of this section, no later than 30 calendar days prior to initially conducting
12 those treatment activities:

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14 ***

15 (1) Closure plan

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19 (4) Universal waste handlers who notify the Department pursuant to section
20 66273.74, subsection (a), of their intent to conduct one or more of the treatment
21 activities described in section 66273.73, subsections (a)(2), ~~and (b), and (d)~~ ~~on or~~
22 ~~before [OAL to insert effective date of these regulations]~~ shall submit the closure
23 plan required by subsection (a)(1) of this section when they submit the notification ~~on~~
24 ~~or before December 31, 2008.~~

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28 (b)(1) Cost estimate for closure.

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32 (5) Notwithstanding subsection (b)(2) of this section, universal waste handlers who
33 notify the Department pursuant to section 66273.74, subsection (a), of their intent to
34 conduct one or more of the treatment activities described in section 66273.73,
35 subsections (a)(2), ~~and (b), and (d)~~, ~~on or before [OAL to insert the effective date of~~
36 ~~these regulations]~~, shall submit a ~~revised~~ cost estimate for closure as required by
37 this subsection when they submit the notification ~~on or before December 31, 2008.~~

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40 Note: Authority cited: Sections 25141, 25150, 25201, 25214.9, 25219.1, 25259, and
41 58012, Health and Safety Code; and Section 42475, Public Resources Code.

42 Reference: Sections 25141, 25150, 25159.5, 25201, 25212, 25214.9, 25219, 25219.1,
43 ~~and 25219.2,~~ and 25259, Health and Safety Code.

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1 **Amend** Title 22, division 4.5, chapter 23, article 7, section 66273.77 to read:

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3 **§ 66273.77. Closure of Universal Waste Treatment Facilities.**

4

5 (a) Closure notification.

6 A universal waste handler who intends to close a universal waste treatment facility or
7 any universal waste treatment unit, including universal waste units that also treat
8 residual printed circuit boards that have been determined to be exempt scrap metal
9 pursuant to section 66273.71, subsection (e), section 66273.72, subsection (a)(3), or
10 section 66273.75, subsection (c)(1)(C), and who conducts any of the treatment activities
11 described in section 66273.73, subsection (a)(2), ~~or (b), or (d)~~, shall:

12 (1) Submit to the Department in the manner and at the address given in subsections
13 (c) and (d) of this section, a notification containing the following information:

14 (A) The date of the last day on which the universal waste handler intends to
15 conduct the treatment activities specified in section 66273.73, subsection (a)(2),
16 ~~or (b), or (d)~~;

17 (B) The date of the last day on which the universal waste handler intends to
18 conduct handling activities other than the treatment activities specified in section
19 66273.73, subsection (a)(2), ~~or (b), or (d)~~ at the facility, if applicable; and

20 (C) The date the universal waste handler intends to complete the closure
21 activities described in the handler's closure plan and/or, if applicable, vacate the
22 facility.

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26 Note: Authority cited: Sections 25141, 25150, 25201, 25214.9, 25219.1, 25259, and
27 58012, Health and Safety Code; and Section 42475, Public Resources Code.

28 Reference: Sections 25141, 25150, 25159.5, 25201, 25212, 25214.9, 25219, 25219.1,
29 ~~and 25219.2,~~ and 25259, Health and Safety Code.

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