

## California's Restriction on the Use of Certain Hazardous Substances in Covered Electronic Devices (RoHS)

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### ***What does "RoHS" mean?***

RoHS is an acronym for "Restriction on the use of Certain Hazardous Substances." RoHS generally refers to Directive 2002/95/EC, as adopted by the European Parliament and Commission, which bans certain hazardous substances from electrical and electronic equipment (EEE) sold in the European Union (EU). California's RoHS law, and its implementing regulations, which is modeled after the European Union RoHS law, restricts the use of certain heavy metals in *covered electronic devices* sold, or offered for sale, in California.

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### ***What does California's RoHS law require?***

The Electronic Waste Recycling Act of 2003 created California's RoHS law, which is codified in section [25214.10 of the Health and Safety Code](#). The California RoHS law required DTSC to adopt regulations by January 1, 2007 prohibiting "...an electronic device from being sold or offered for sale in this state if [it] is prohibited from being sold or offered for sale in the EU [under] Directive 2002/95/EC ... due to the presence of certain heavy metals." On January 1, 2007, DTSC's regulations, also known as the California RoHS regulations, became effective. The California RoHS regulations prohibit the sale, or offering for sale, of *covered electronic devices* manufactured on or after January 1, 2007 that contain specific heavy metals above a maximum allowable concentration limit. The California RoHS regulations only apply to specific products.

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## ***What products does the CA RoHS regulation apply to?***

California's RoHS regulation applies only to "covered electronic devices," as defined in *Public Resources Code section 42463*. A "covered electronic device" is "a video display device containing a screen greater than four inches, measured diagonally... identified in the regulations adopted by [DTSC] pursuant to subdivision (b) of Section 25214.10.1 of the Health and Safety Code." DTSC has identified and listed nine categories of *covered electronic devices* in its regulations. That list of devices, which is found in California Code of Regulations, title 22, chapter 11, appendix X, subdivision (c), includes:

1. Cathode ray tube containing devices (CRT devices)
2. Cathode ray tubes (CRTs)
3. Computer monitors containing cathode ray tubes
4. Laptop computers with liquid crystal display (LCD)
5. LCD containing desktop monitors
6. Televisions containing cathode ray tubes
7. Televisions containing liquid crystal display (LCD) screens
8. Plasma televisions
9. Portable DVD players with LCD screens

(Portable DVD players with LCD screens were not added to this list until December 31, 2006. Therefore, the sales prohibition described in California Code of Regulations, title 22, section 66260.202, (i.e., the California RoHS regulation) only applies to portable DVD players with LCD screens greater than four inches in size that are manufactured on or after July 1, 2007. For additional information, see: [http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/DVD\\_Emergency.cfm](http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/DVD_Emergency.cfm) and [http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/Heavy\\_Metals\\_Emergency.cfm](http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/Heavy_Metals_Emergency.cfm))

California law expressly limits the components of a video display device (VDD) to those devices that cannot be easily removed from the VDD by the consumer (Public Resources Code section 42463 (u)). Therefore, ancillary components that are sold along with the video display device, such as remote controls or optional external antennas (e.g., "rabbit ears"), are not considered components of VDDs, and are not subject to the CA RoHS regulations.

*Electronic devices that do not fall into any of the above listed categories (or that do not fall into any new categories added to the regulations in the future) are not subject to the CA RoHS regulations; their sale will not be prohibited, even if they contain lead or other heavy metals.*

For the text of the California RoHS regulations, click [here](#).

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## ***What Hazardous Substances will be restricted from use in covered electronic devices sold in California?***

The California RoHS Regulations restrict the use of:

- Lead,
- Mercury,

- Cadmium, and
- Hexavalent chromium.

in covered electronic devices that are sold in the state.

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### **Are there maximum allowable concentrations of restricted substances?**

Yes. DTSC has adopted the same maximum allowable concentration values (MCVs) for lead, mercury, cadmium, and hexavalent chromium as the EU. The MCVs are:.

<b>:Substance</b>	<b>MCV (percent, by weight)</b>
Lead	0.1%
Mercury	0.1%
Cadmium	0.01%
Hexavalent chromium	0.1%

The MCVs apply to each “homogeneous material” used in the manufacture of covered electronic devices, rather than to the entire device or specific components of the device. (For an informative discussion of “homogeneous materials,” please refer to page 14 of [Frequently Asked Questions on Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment \(RoHS\)](#)..., published by the European Commission.)

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### **Will there be exemptions from California’s RoHS regulations?**

Yes. The European Commission included a number of exemptions from the EU RoHS in the annex to Directive 2002/95/EC. In addition, that directive has been amended by the European Parliament and Commission 7 times, and additional exemptions have been added. Subdivision (e) of section 25214.10 of the Health and Safety Code precludes DTSC from prohibiting the sale electronic devices that are not prohibited from sale in the EU under Directive 2002/95/EC. In essence, this means that DTSC must recognize all of the EU RoHS exemptions. Therefore, all covered electronic devices, as well as specific applications of lead, mercury, cadmium and hexavalent chrome in the manufacture of covered electronic devices, that are exempt from the EU RoHS Directive, are also exempt from California’s RoHS regulations.

In addition, Public Resources Code, section 42463, subsection (f)(2) excludes the following from the definition of “covered electronic device”:

(A) A video display device that is a part of a motor vehicle, as defined in Section 415 of the Vehicle Code, or any component part of a motor vehicle assembled by, or for, a vehicle manufacturer or franchised dealer, including replacement parts for use in a motor vehicle.

(B) A video display device that is contained within, or a part of a piece of industrial, commercial, or medical equipment, including monitoring or control equipment.

(C) A video display device that is contained within a clothes washer, clothes dryer, refrigerator, refrigerator and freezer, microwave oven, conventional oven or range, dishwasher, room air-conditioner, dehumidifier, or air purifier.

(D) An electronic device, on and after the date that it ceases to be a covered electronic device under subdivision (e) of Section 25214.10.1 of the Health and Safety Code.

Any electronic device that does not meet, or is excluded or exempt from, the definition of “covered electronic device”, is not subject to the California RoHS regulations.

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### ***When did California’s RoHS regulations become effective?***

California’s RoHS regulations became effective on January 1, 2007. All covered electronic devices manufactured on or after January 1, 2007 are subject to California’s RoHS regulations, except for specific devices, or specific applications of restricted substances in covered electronic devices, that are exempt or excluded by California law (see Public Resources Code, section 42463(f)), and/or that are exempt from EU Directive 2002/95/EC.

### ***What if devices are added to DTSC’s list after after January 1, 2007, when do they become subject to the California RoHS regulations and the sales prohibition?***

Devices that are added to DTSC’s list of covered electronic devices (California Code of Regulations, title 22, chapter 11, appendix X, subdivision (c)) after January 1, 2007 are not retroactively subject to the California RoHS regulations. All devices added to DTSC’s list after January 1, 2007 will become subject to the California RoHS regulations beginning on and after July 1 of the year subsequent to the year the devices are added to the list, pursuant to California Code of Regulations, title 22, chapter 11, appendix X, subdivision (c), and, the sales prohibition for covered electronic devices will only apply to those covered electronic devices that are *manufactured on and after the date the devices first become subject to the California RoHS regulations.*

So, for example, portable DVD players with LCD screens were added to DTSC’s list on December 31, 2006. Pursuant to California Code of Regulations, title 22, chapter 11, appendix X, subdivision (c), DVD players with LCD screens are not subject to the California RoHS regulations until July 1, 2007. Only portable DVD players with LCD screens manufactured on and after July 1, 2007 will be subject to the California RoHS regulations and the sales prohibition.

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### ***Do manufacturers have to register with DTSC?***

California Law does not require manufacturers of covered electronic devices to register with DTSC. However, Public Resources Code section 42465.2, and section 18660.41 of title 14 of the California Code of Regulations, require manufacturers to submit an annual report to the California

Integrated Waste Management Board (CIWMB) that includes information regarding the use of restricted substances in covered electronic devices.

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### ***What information are manufacturers required to report regarding their use of restricted substances in covered electronic devices?***

Section 18660.41 of title 14 of the California Code of Regulations requires manufacturers of covered electronic devices to submit an annual report to CIWMB that includes specific information regarding the use of certain substances in covered electronic devices. The reports are due by July 1 each year, and cover products sold during the previous calendar year. Manufacturers are required to provide the “estimated average amount in milligrams for mercury, cadmium, lead, hexavalent chromium, including their alloys and compounds, and polybrominated biphenyls (PBBs) used in covered electronic devices, and all their component parts by product category.” You may refer to [CIWMB’s Electronic Product Management Web page](#) for more information regarding manufacturer reporting requirements.

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### ***How does California’s RoHS Law and its implementing regulations differ from the EU RoHS directive?***

California’s RoHS regulations differ from the EU RoHS directive in the scope of products covered by the sale restriction, and in the number of restricted substances:

#### ***Scope of Products***

The EU directive applies to “electrical and electronic equipment,” which is defined, in part, as “equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields ...”. California’s RoHS applies only to “*covered electronic devices*,” which are video display devices that have been listed in DTSC’s regulations ([see discussion above](#)).

#### ***Scope of Substances***

The EU restriction covers six substances: lead, mercury, cadmium, hexavalent chromium, and PBBs and polybrominated diphenyl ethers (PBDEs). California’s RoHS regulation applies only to lead, mercury, cadmium, and hexavalent chromium. The use of PBBs and PBDEs is not currently restricted in California.

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### ***In Summary***

- California’s RoHS regulations are consistent with EU Directive 2002/95/EC, but are narrower in scope.
- In the EU, devices may be subject to RoHS if they were put on the market on or after the date the EU RoHS took effect, regardless of when the devices were manufactured.

California's RoHS regulations, on the other hand, apply only to those covered electronic devices manufactured on and after the date that the devices first become subject to the California RoHS regulations.

- An electronic product that can be legally sold in the EU (i.e., one that complies with the requirements of EU directive 2002/95/EC) will not be prohibited from sale in California under the state's RoHS regulations.
- Electronic devices that are restricted from sale in the EU under directive 2002/95/EC but that are not "covered electronic devices" as defined in Public Resources Code, section 42463, will not be banned from sale in California, even if they exceed one or more of the MCVs.
- Sales of electronic devices that contain PBBs or PBDEs are not currently restricted in California under the California RoHS regulations.

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## ***Applicable statutory and Regulatory Citations***

### **Text of Health and Safety Code Section 25214.10**

**25214.10.** (a) For purposes of this section, "electronic device" has the same meaning as a "covered electronic device," as defined in Section 42463 of the Public Resources Code.

(b) The department shall adopt regulations, in accordance with this section, that prohibit an electronic device from being sold or offered for sale in this state if the electronic device is prohibited from being sold or offered for sale in the European Union on and after its date of manufacture, to the extent that Directive 2002/95/EC, adopted by the European Parliament and the Council of the European Union on January 27, 2003, and as amended thereafter by the Commission of European Communities, prohibits that sale due to the presence of certain heavy metals.

(c) The regulations adopted pursuant to subdivision (b) shall take effect January 1, 2007, or on or after the date Directive 2002/95/EC, adopted by the European Parliament and the Council of the European Union on January 27, 2003, takes effect, whichever date is later.

(d) The department shall exclude, from the regulations adopted pursuant to this section, the sale of an electronic device that contains a substance that is used to comply with the consumer, health, or safety requirements that are required by the Underwriters Laboratories, the federal government, or the state.

(e) In adopting regulations pursuant to this section, the department may not require the manufacture or sale of an electronic device that is different than, or otherwise not prohibited by, the European Union under Directive 2002/95/EC, adopted by the European Parliament and the Council of the European Union on January 27, 2003.

(f) (1) The department may not adopt any regulations pursuant to this section that impose any requirements or conditions that are in addition to, or more stringent than, the requirements and conditions expressly authorized by this section.

(2) In complying with this subdivision, the department shall use, in addition to any other information deemed relevant by the department, the published decisions of the Technical Adaptation Committee and European Union member states that interpret the requirements of Directive 2002/95/EC.

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## **Text of California Code of Regulation, title 22, section 66260.202**

### **§66260.202 Restrictions on the Use of Heavy Metals in Covered Electronic Devices.**

(a) On or after January 1, 2007, no person shall sell or offer for sale in California, a covered electronic device if the device is prohibited from being sold or offered for sale in the European Union on or after its date of manufacture due to the concentration of one or more heavy metals in the device exceeding its maximum concentration value, as specified in the Commission Decision of August 18, 2005, amending Directive 2002/95/EC (European Union document 2005/618/EC), or as specified in a subsequent amendment to the Directive.

(b) The prohibition in subsection (a) applies only to a covered electronic device that is manufactured on or after January 1, 2007.

(c) The prohibition in subsection (a) does not apply to a covered electronic device that is sold or offered for sale in California only for purposes of resale or offering for resale to persons outside of California.

(d) In determining the concentrations of metals for compliance with subsection (a), the Department shall not consider any cadmium, chromium, lead, or mercury, or any component containing any of those metals, which has been exempted by Directive 2002/95/EC, or by an amendment to the Directive.

(e) The prohibition established by subsection (a) of this section does not apply to a covered electronic device that would be prohibited from sale or being offered for sale in California based solely on metals used to meet consumer, health or safety requirements.

NOTE: Authority cited: Sections 25214.10, 25214.10.2, and 58012, Health and Safety Code; Section 42475.2, Public Resources Code. Reference: Section 25214.10, Health and Safety Code; Section 42465.2, Public Resources Code.

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