

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

Beginning in 2007, a California law will ban the sale of some electronic devices that contain certain hazardous substances. The Electronic Waste Recycling Act (EWRA), which was signed into law in September of 2003, requires the Department of Toxic Substances Control (DTSC) to adopt regulations to prohibit *covered electronic devices*, as defined, " from being "sold or offered for sale" in California if they are prohibited from sale in the European Union (EU) because they contain certain heavy metals.

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What does "RoHS" mean?

RoHS is an acronym for "Restriction of the use of Certain Hazardous Substances," which refers to the ban on the use of hazardous substances in electronic equipment under EU directive 2002/95/EC and also, informally, to the upcoming prohibition on some of the same substances in some electronic devices sold or offered for sale in California.

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What does California's RoHS law require?

California's RoHS law, which is found in section [25214.10 of the Health and Safety Code](#), requires DTSC to adopt regulations that "prohibit an electronic device from being sold or offered for sale in this state [it] is prohibited from being sold or offered for sale in the European Union [under] Directive 2002/95/EC ... due to the presence of certain heavy metals." For the proposed text of DTSC's RoHS regulations, click [here](#).

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What products does this law apply to?

California's RoHS law applies only to a "covered electronic device," which Public Resources Code section 42463 defines as "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." As of December, 2005, DTSC had identified eight categories of covered electronic devices in its regulations. The list of covered devices, which is found in subdivision (c) of Appendix X of chapter 11 of the California Code of Regulations, title 22, is as follows:

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
6. Televisions containing cathode ray tubes
7. Televisions containing liquid crystal display (LCD) screens
8. Plasma televisions

These listings apply only to devices with a video display screen four inches or larger, measured diagonally.

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

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

The EWRA will restrict the use of:

- Lead,
- Mercury,
- Cadmium, and
- Hexavalent chromium.

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Are there maximum allowable concentrations?

Directive 2002/95/EC was amended on August 18, 2005 to add maximum concentration values (MCVs) for the six restricted substances. DTSC will incorporate the EU's MCVs for lead, mercury, cadmium, and hexavalent chromium in its regulations implementing the EWRA.

Substance	MCV (percent, by weight)
Lead	0.1%
Mercury	0.1%
Cadmium	0.01%
Hexavalent chromium	0.1%

The MCVs apply to each "homogeneous material" used in a device rather than to the entire device or component of a 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 Directorate General Environment of the European Union.) Applying the MCVs to homogeneous materials rather than to entire devices makes them significantly more stringent.

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Will there be exemptions from the ban on these metals?

The EU included a number of exemptions from the MCVs in the annex to the original January 27, 2003, directive (2002/95/EC). The directive has been amended since then to add additional exemptions and the EU may adopt more exemptions in the future. On October 21, 2005, another EU decision added [new exemptions for several applications of lead and revised two of the original exemptions for lead and cadmium](#).

Subdivision (e) of section 25214.10 of the Health and Safety Code precludes DTSC from prohibiting the sale of electronic devices that are not prohibited from sale under the EU directive. Therefore, DTSC's RoHS regulations will recognize any exemptions adopted by the EU for the use of lead, mercury, cadmium, or hexavalent chromium that apply to covered electronic devices.

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When will California's RoHS regulations become effective?

California's regulations will take effect on January 1, 2007.

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Do manufacturers have to register with DTSC?

The EWRA 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 CIWMB that includes information on the use of restricted substances in covered electronic devices. This aspect of the reporting requirement is discussed below. (The EWRA and implementing regulations impose other requirements on manufacturers, including notification and reporting requirements; discussion of these requirements is beyond the scope of this Web page.)

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What information are manufacturers required to report on 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 information on the use of substances restricted by the RoHS law. Reports are due by July 1 and cover products sold during 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 PBBs used in covered electronic devices, and all their component parts by product category." Please refer to [CIWMB's Electronic Product Management Web page](#) for more information on manufacturer reporting requirements, including the text of the regulations.

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How is California's RoHS law different from the EU RoHS directive?

California's RoHS law differs from the EU RoHS directive in the scope of products covered by the restriction and 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 certain categories of video display devices listed in DTSC's regulations (see discussion above).

Scope of Substances

The EU restriction covers six substances: four metals (lead, mercury, cadmium, and hexavalent chromium) as well as PBBs and polybrominated diphenyl ethers (PBDEs). California’s RoHS law applies only to the four metals. The use of PBBs and PBDEs is not restricted under California’s RoHS law.

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In Summary

- California’s RoHS will be consistent with EU Directive 2002/95/EC, but narrower in scope.
- An electronic product that is can be legally sold in the EU (i.e., one that complies with the requirements of EU directive 2002/95/EC) will not be banned from sale in California under the state’s RoHS law.
- Electronic devices that are restricted from sale in the EU under directive 2002/95/EC but that are not “covered electronic devices” will not be banned from sale in California, even if they exceed one or more of the MCVs.
- Sales of electronic devices – including “covered electronic devices” – that exceed the MCVs for PBBs or PBDEs will not be banned in California under the state’s RoHS law.

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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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