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SB-647 Hazardous substances: metal-containing jewelry. (2019-2020)

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Senate Bill No. 647

CHAPTER 379

An act to amend Sections 25214.1, 25214.3.1, 25214.4, and 25214.4.1 of, and to amend, repeal, and add Section 25214.2 of, the Health and Safety Code, relating to hazardous substances.

[Approved by Governor September 27, 2019. Filed with Secretary of State September 27, 2019.]

LEGISLATIVE COUNSEL'S DIGEST

SB 647, Mitchell. Hazardous substances: metal-containing jewelry.

The hazardous waste control laws require the Department of Toxic Substances Control to regulate the handling and management of hazardous waste and hazardous materials. A violation of the hazardous waste control laws is a crime.

Existing law, as part of the hazardous waste control laws, prohibits a person from manufacturing, shipping, selling, or offering for sale or promotional purposes jewelry, as defined, for retail sale in the state, unless the jewelry is made entirely from specified materials that do not exceed specified lead and cadmium content limits. Existing law provides that, for jewelry that is not children's jewelry or body piercing jewelry, the content limits for electroplated metal, unplated metal, plastic or rubber, and dye or surface coating are 6%, 1.5%, 0.02%, and 0.06% of lead by weight, respectively. Existing law imposes separate content requirements for children's jewelry, as provided. Existing law defines "children" for purposes of these provisions to mean children 6 years of age and younger. Existing law requires a manufacturer or supplier of jewelry that is sold, offered for sale, or offered for promotional purposes to prepare a certification that attests that the jewelry does not contain a level of lead or cadmium in excess of the provided limits. Existing law provides test methods and procedures for testing jewelry for purposes of these provisions.

This bill would revise and recast the provisions relating to the materials authorized to be used to make jewelry and children's jewelry, but with certain provisions not to become operative until June 1, 2020. The bill would, on and after June 1, 2020, reduce the lead content limits for electroplated metal, unplated metal, and a dye or surface coating to 0.05% of lead by weight, and would reduce the lead content limit for plastic or rubber to 0.02% of lead by weight. The bill would reduce the lead content limit for children's jewelry to 0.009% of lead by weight for surface coatings and 0.01% of lead by weight for all other components, and would reduce the cadmium limit for surface coatings on children's jewelry to 0.0075% of soluble cadmium by weight, as provided. The bill would revise the definition of "children" to mean persons under 15 years of age. The bill would require the manufacturer or supplier certification to include additional detail about the jewelry covered by the certification, including, among other things, the date or dates on which, and the location or locations where, the jewelry was tested for purposes of certification. Because a violation of these additional certification requirements would be a crime, the bill would impose a state-mandated local program. The bill would also authorize the use of additional specified test methods to determine compliance with the standards for lead in children's jewelry.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. It is the intent of the Legislature that this act protect the public health, safety, and welfare of Californians by preventing lead and cadmium exposure from jewelry that is sold in the state.

SEC. 2. Section 25214.1 of the Health and Safety Code is amended to read:

25214.1. For purposes of this article, the following definitions shall apply:

(a) "Body piercing jewelry" means any part of jewelry that is manufactured or sold for placement in a new piercing or a mucous membrane, but does not include any part of that jewelry that is not placed within a new piercing or a mucous membrane.

(b) "Children" means persons under 15 years of age.

(c) "Children's jewelry" means jewelry that is made for, marketed for use by, or marketed to, children. For purposes of this article, children's jewelry includes, but is not limited to, jewelry that meets any of the following conditions:

(1) Represented in its packaging, display, or advertising, as appropriate for use by children.

(2) Sold in conjunction with, attached to, or packaged together with other products that are packaged, displayed, or advertised as appropriate for use by children.

(3) Sized for children and not intended for use by adults.

(4) Sold in any of the following:

(A) A vending machine.

(B) Retail store, catalog, or online internet website, in which a person exclusively offers for sale products that are packaged, displayed, or advertised as appropriate for use by children.

(C) A discrete portion of a retail store, catalog, or online internet website, in which a person offers for sale products that are packaged, displayed, or advertised as appropriate for use by children.

(d) "Component" means any part of jewelry.

(e) "Inaccessible" means not physically exposed by reason of a sealed covering or casing and does not become physically exposed through reasonably foreseeable use and abuse of the product, including swallowing, mouthing, breaking, or other children's activities, and the aging of the product. For purposes of this article, paint, coatings, or electroplating do not render substrate material inaccessible to a child.

(f) "Jewelry" means any of the following:

(1) Any of the following ornaments worn by a person:

(A) An anklet.

(B) Arm cuff.

(C) Bracelet.

(D) Brooch.

(E) Chain.

(F) Crown.

(G) Cuff link.

(H) Hair accessory.

(I) Earring.

(J) Necklace.

(K) Pin.

(L) Ring.

(M) Tie clip.

(N) Body piercing jewelry.

(O) Jewelry placed in the mouth for display or ornament.

(2) Any bead, chain, link, pendant, or other component of an ornament specified in paragraph (1).

(3) A charm, bead, chain, link, pendant, or other attachment to shoes or clothing that can be removed and may be used as a component of an ornament specified in paragraph (1).

(4) A watch in which a timepiece is a component of an ornament specified in paragraph (1), excluding the timepiece itself if the timepiece can be removed from the ornament.

(g) (1) "Surface coating" means a fluid, semifluid, or other material, with or without a suspension of finely divided coloring matter, that changes to a solid film when a thin layer is applied to a metal, wood, stone, paper, leather, cloth, plastic, or other surface.

(2) "Surface coating" does not include a printing ink or a material that actually becomes a part of the substrate, including, but not limited to, pigment in a plastic article, or a material that is actually bonded to the substrate, such as by electroplating or ceramic glazing.

SEC. 3. Section 25214.2 of the Health and Safety Code is amended to read:

25214.2. (a) For jewelry that is not children's jewelry, a person shall not manufacture, ship, sell, offer for sale, or offer for promotional purposes such jewelry for retail sale or promotional purposes in the state, unless the jewelry is made entirely from one or more than one of the following materials:

(1) Stainless or surgical steel.

(2) Karat gold.

(3) Sterling silver.

(4) Platinum, palladium, iridium, ruthenium, rhodium, or osmium.

(5) Natural or cultured pearls.

(6) Glass, ceramic, or crystal decorative components, including cat's eye, cubic zirconia, including cubic zirconium or CZ, rhinestones, and cloisonné.

(7) A gemstone that is cut and polished for ornamental purposes, excluding aragonite, bayldonite, boleite, cerussite, crocoite, ekanite, linarite, mimetite, phosgenite, samarskite, vanadinite, and wulfenite.

(8) Elastic, fabric, ribbon, rope, or string that does not contain intentionally added lead.

(9) All natural decorative material, including amber, bone, coral, feathers, fur, horn, leather, shell, or wood, that is in its natural state and is not treated in a way that adds lead.

(10) Adhesive.

(11) Electroplated metal containing less than 6 percent (60,000 parts per million) lead by weight.

(12) Unplated metal not otherwise listed containing less than 1.5 percent (15,000 parts per million) lead by weight.

(13) Plastic or rubber, including acrylic, polystyrene, plastic beads and stones, and polyvinyl chloride (PVC) containing less than 0.02 percent (200 parts per million) lead by weight.

(14) A dye or surface coating containing less than 0.06 percent (600 parts per million) lead by weight.

(15) Any other material that contains less than 0.06 percent (600 parts per million) lead by weight.

(b) For body piercing jewelry that is not children's jewelry, a person shall not manufacture, ship, sell, offer for sale, or offer for promotional purposes such jewelry for retail sale or promotional purposes in the state, unless the jewelry is made of one or more of the following materials:

(1) Surgical implant stainless steel.

(2) Surgical implant grade of titanium.

(3) Niobium (Nb).

(4) Solid 14 karat or higher white or yellow nickel-free gold.

(5) Solid platinum.

(6) A dense low-porosity plastic, including, but not limited to, Tygon or polytetrafluoroethylene (PTFE), if the plastic contains no intentionally added lead.

(c) (1) For children's jewelry, a person shall not manufacture, ship, sell, offer for sale, or offer for promotional purposes such jewelry for retail sale or promotional purposes in the state, unless the jewelry meets all of the following requirements:

(A) Every component of the jewelry contains no more than 0.01 percent (100 parts per million) lead by weight, excluding inaccessible component parts.

(B) The jewelry has a surface coating that contains no more than 0.009 percent (90 parts per million) lead by weight.

(2) The department may establish guidance on what component parts in children's jewelry shall be considered to be inaccessible for purposes of paragraph (1). In the absence of that guidance from the department, a determination of whether a component part of children's jewelry is inaccessible shall be made in accordance with Section 1500.87 of Title 16 of the Code of Federal Regulations, as it may be amended from time to time.

(d) (1) For children's jewelry, a person shall not manufacture, ship, sell, offer for sale, or offer for promotional purposes such jewelry that meets either of the following descriptions:

(A) The jewelry contains a component or is made of a material that is more than 0.03 percent (300 parts per million) cadmium by weight.

(B) The jewelry has a surface coating that contains more than 0.0075 percent (75 parts per million) soluble cadmium by weight.

(2) This subdivision shall not apply to any toy regulated for cadmium exposure under the federal Consumer Product Safety Improvement Act of 2008 (Public Law 110-314).

(e) The department may establish a standard for children's jewelry or for a component of children's jewelry that is more protective of public health, of sensitive subpopulations, or of the environment than the standards established pursuant to subdivisions (c) and (d).

(f) This section shall become inoperative on June 1, 2020, and, as of January 1, 2021, is repealed.

SEC. 4. Section 25214.2 is added to the Health and Safety Code, to read:

25214.2. (a) For jewelry that is not children's jewelry, a person shall not manufacture, ship, sell, offer for sale, or offer for promotional purposes such jewelry for retail sale or promotional purposes in the state, unless the jewelry is made entirely from one or more than one of the following materials:

(1) Stainless or surgical steel.

(2) Karat gold.

(3) Sterling silver.

(4) Platinum, palladium, iridium, ruthenium, rhodium, or osmium.

(5) Natural or cultured pearls.

(6) Glass, ceramic, or crystal decorative components, including cat's eye, cubic zirconia, including cubic zirconium or CZ, rhinestones, and cloisonné.

(7) A gemstone that is cut and polished for ornamental purposes, excluding aragonite, bayldonite, boleite, cerussite, crocoite, ekanite, linarite, mimetite, phosgenite, samarskite, vanadinite, and wulfenite.

(8) Elastic, fabric, ribbon, rope, or string that does not contain intentionally added lead.

(9) All natural decorative material, including amber, bone, coral, feathers, fur, horn, leather, shell, or wood, that is in its natural state and is not treated in a way that adds lead.

(10) Adhesive.

(11) Electroplated metal containing less than 0.05 percent (500 parts per million) lead by weight.

(12) Unplated metal not otherwise listed containing less than 0.05 percent (500 parts per million) lead by weight.

(13) Plastic or rubber, including acrylic, polystyrene, plastic beads and stones, and polyvinyl chloride (PVC) containing less than 0.02 percent (200 parts per million) lead by weight.

(14) A dye or surface coating containing less than 0.05 percent (500 parts per million) lead by weight.

(15) Any other material that contains less than 0.05 percent (500 parts per million) lead by weight.

(b) For body piercing jewelry that is not children's jewelry, a person shall not manufacture, ship, sell, offer for sale, or offer for promotional purposes such jewelry for retail sale or promotional purposes in the state, unless the jewelry is made of one or more of the following materials:

(1) Surgical implant stainless steel.

(2) Surgical implant grade of titanium.

(3) Niobium (Nb).

(4) Solid 14 karat or higher white or yellow nickel-free gold.

(5) Solid platinum.

(6) A dense low-porosity plastic, including, but not limited to, Tygon or polytetrafluoroethylene (PTFE), if the plastic contains no intentionally added lead.

(c) (1) For children's jewelry, a person shall not manufacture, ship, sell, offer for sale, or offer for promotional purposes such jewelry for retail sale or promotional purposes in the state, unless the jewelry meets all of the following requirements:

(A) Every component of the jewelry contains no more than 0.01 percent (100 parts per million) lead by weight, excluding inaccessible component parts.

(B) The jewelry has a surface coating that contains no more than 0.009 percent (90 parts per million) lead by weight.

(2) The department may establish guidance on what component parts in children's jewelry shall be considered to be inaccessible for purposes of paragraph (1). In the absence of that guidance from the department, a determination of whether a component part of children's jewelry is inaccessible shall be made in accordance with Section 1500.87 of Title 16 of the Code of Federal Regulations, as it may be amended from time to time.

(d) (1) For children's jewelry, a person shall not manufacture, ship, sell, offer for sale, or offer for promotional purposes such jewelry that meets either of the following descriptions:

(A) The jewelry contains a component or is made of a material that is more than 0.03 percent (300 parts per million) cadmium by weight.

(B) The jewelry has a surface coating that contains more than 0.0075 percent (75 parts per million) soluble cadmium by weight.

(2) This subdivision shall not apply to any toy regulated for cadmium exposure under the federal Consumer Product Safety Improvement Act of 2008 (Public Law 110-314).

(e) The department may establish a standard for children's jewelry or for a component of children's jewelry that is more protective of public health, of sensitive subpopulations, or of the environment than the standards established pursuant to subdivisions (c) and (d).

(f) This section shall become operative on June 1, 2020.

SEC. 5. Section 25214.3.1 of the Health and Safety Code is amended to read:

25214.3.1. (a) A manufacturer or supplier of jewelry that is sold, offered for sale, or offered for promotional purposes shall prepare and, at the request of the department, submit to the department no more than 28 days after the date of the request, technical

documentation or other information showing that the jewelry is in compliance with the requirements of this article.

(b) A manufacturer or supplier of jewelry that is sold, offered for sale, or offered for promotional purposes shall prepare a certification. This certification shall attest that the jewelry does not contain a level of lead or cadmium that prohibits the jewelry from being sold or offered for sale pursuant to this article and shall do all of the following:

- (1) Identify the jewelry covered by the certificate, including a description of the jewelry that is sufficiently detailed to match the certificate to each product covered by the certificate and that could not be used to describe any jewelry that is not covered by the certificate.
- (2) Cite to each separate rule or standard for which the jewelry is being certified.
- (3) Identify the manufacturer or supplier certifying compliance of the jewelry, including the name, full mailing address, and telephone number of the manufacturer or supplier.
- (4) Include the contact information for the person maintaining records of the test results of jewelry tested for purposes of this article, including the name, full mailing address, email address, and telephone number of that person.
- (5) Include the date on which the jewelry was manufactured, including at least the month and year.
- (6) Include the location where the jewelry was manufactured, including at least the city or administrative region, state, if applicable, and country where the product was manufactured or finally assembled. If the same manufacturer operates more than one location in the same city, the street address of the factory shall be included.
- (7) Include the date or dates on which, and the location or locations where, the jewelry was tested for purposes of certification.
- (8) Identify any third-party laboratory that performed the testing for purposes of certification, including the name, full mailing address, and telephone number of the laboratory.

(c) A manufacturer or supplier of jewelry sold or offered for promotional purposes in this state shall do either of the following:

- (1) Provide the certification required by subdivision (b) to a person who sells or offers for sale that manufacturer's or supplier's jewelry.
- (2) Display the certification required by subdivision (b) prominently on the shipping container or on the packaging of jewelry.

SEC. 6. Section 25214.4 of the Health and Safety Code is amended to read:

25214.4. (a) The test methods for determining compliance with this article shall be conducted using the EPA reference methods 3050B, 3051A, or 3052, as specified in EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846 (Third Edition, or subsequent update, as applicable) for lead and cadmium in the material being tested, except as otherwise provided in subdivision (b) and Sections 24214.4.1 and 25214.4.2, and shall be conducted in accordance with all of the following procedures:

- (1) When preparing a sample, the laboratory shall make every effort to ensure that the sample removed from a jewelry piece is representative of the component to be tested, and is free of contamination from extraneous dirt and material not related to the jewelry component to be tested.
- (2) All jewelry component samples shall be washed prior to testing using standard laboratory detergent, rinsed with laboratory reagent grade deionized water, and dried in a clean ambient environment.
- (3) If a component is required to be cut or scraped to obtain a sample, the metal snips, scissors, or other cutting tools used for the cutting or scraping shall be made of stainless steel and washed and rinsed before each use and between samples.
- (4) A sample shall be digested in a container that is known to be free of lead and cadmium and with the use of an acid that is not contaminated by lead or cadmium, including analytical reagent grade digestion acids and reagent grade deionized water.
- (5) Method blanks, consisting of all reagents used in sample preparation handled, digested, and made to volume in the same exact manner and in the same container type as samples, shall be tested with each group of 20 or fewer samples tested.
- (6) The results for the method blanks shall be reported with each group of sample results, and shall be below the stated reporting limit for sample results to be considered valid.
- (7) Test methods selected shall be those that best demonstrate they can achieve total digestion of the sample material being analyzed. Test methods shall not be used if they are inconsistent with the specified application of the test method or do not demonstrate the best performance or proficiency for achieving total digestion of the sample material.

(b) Notwithstanding subdivision (a) and Section 25214.4.1, test methods for determining compliance with the limits for lead in children's jewelry in subdivision (c) of Section 25214.2 include those permissible to demonstrate compliance with the federal Consumer Product Safety Improvement Act of 2008 (Public Law 110-314). The test method for determining compliance with subparagraph (B) of paragraph (1) of subdivision (d) of Section 25214.2 shall be the same test method used to demonstrate compliance with Section 2056b of Title 15 of the United States Code.

(c) Digested samples shall be analyzed according to the specification of an approved and validated methodology using inductively coupled plasma optical emission spectroscopy. Other analytical methods, such as inductively coupled plasma mass spectrometry, flame atomic absorption spectroscopy, graphite furnace atomic absorption spectroscopy, or other technology, may be used under appropriate conditions, using applicable, recognized analytical techniques for the alternative method to achieve a reported quantitation limit no greater than 0.001 percent (10 parts per million) for samples.

(d) All testing for determining compliance with this article shall be performed by a laboratory that conforms to the requirements in Article 8.5 (commencing with Section 25198).

SEC. 7. Section 25214.4.1 of the Health and Safety Code is amended to read:

25214.4.1. In addition to the requirements of Section 25214.4, the following procedures shall be used for testing the following materials:

(a) For testing a metal plated with suitable undercoats and finish coats, the following protocols shall be observed:

- (1) Digestion shall be conducted using hot concentrated nitric acid with the option of using hydrochloric acid or hydrogen peroxide.
- (2) The sample size shall be 0.050 gram to one gram.
- (3) The digested sample may require dilution prior to analysis.
- (4) All necessary dilutions shall be made to ensure that measurements are made within the calibrated range of the analytical instrument.

(b) For testing unplated metal and metal substrates that are not a material listed in paragraphs (1) to (10), inclusive, of subdivision (a) of Section 25214.2, the following protocols shall be observed:

- (1) Digestion shall be conducted using hot concentrated nitric acid with the option of using hydrochloric acid or hydrogen peroxide.
- (2) The sample size shall be 0.050 gram to one gram.
- (3) The digested sample may require dilution prior to analysis.
- (4) All necessary dilutions shall be made to ensure that measurements are made within the calibrated range of the analytical instrument.

(c) For testing polyvinyl chloride (PVC), the following protocols shall be observed:

- (1) The digestion shall be conducted using hot concentrated nitric acid with the option of using hydrochloric acid or hydrogen peroxide.
- (2) The sample size shall be a minimum of 0.05 gram if using microwave digestion or 0.5 gram if using hotplate digestion, and shall be chopped or comminuted prior to digestion.
- (3) Digested samples may require dilution prior to analysis.
- (4) All necessary dilutions shall be made to ensure that measurements are made within the calibrated range of the analytical instrument.

(d) For testing plastic or rubber that is not polyvinyl chloride (PVC), including acrylic, polystyrene, plastic beads, or plastic stones, the following protocols shall be observed:

- (1) The digestion shall be conducted using hot concentrated nitric acid with the option of using hydrochloric acid or hydrogen peroxide.
- (2) The sample size shall be a minimum of 0.05 gram if using microwave digestion or 0.5 gram if using hotplate digestion, and shall be chopped or comminuted prior to digestion.

(3) Plastic beads or stones shall be crushed prior to digestion.

(4) Digested samples may require dilution prior to analysis.

(5) All necessary dilutions shall be made to ensure that measurements are made within the calibrated range of the analytical instrument.

(e) For testing coatings on glass and plastic pearls, the following protocols shall be observed:

(1) The coating of glass or plastic beads shall be scraped onto a surface free of dust, including a clean weighing paper or pan, using a clean stainless steel razor blade or other clean sharp instrument that will not contaminate the sample with lead or cadmium. The substrate pearl material shall not be included in the scrapings.

(2) The razor blade or sharp instrument shall be rinsed with deionized water, wiped to remove particulate matter, rinsed again, and dried between samples.

(3) The scrapings shall be weighed and not less than 50 micrograms of scraped coating shall be used for analysis. If less than 50 micrograms of scraped coating is obtained from an individual pearl, multiple pearls from that sample shall be scraped and composited to obtain a sufficient sample amount.

(4) The number of pearls used to make the composite shall be noted.

(5) The scrapings shall be digested according to EPA reference method 3050B or 3051 or an equivalent procedure for hot acid digestion in preparation for trace lead or cadmium analysis.

(6) The digestate shall be diluted in the minimum volume practical for analysis.

(7) The sample result shall be reported within the calibrated range of the instrument. If the initial test of the sample is above the highest calibration standard, the sample shall be diluted and reanalyzed within the calibrated range of the instrument.

(f) For testing dyes, paints, coatings, varnish, printing inks, or ceramic glazes, the following testing protocols shall be observed:

(1) The digestion shall use hot concentrated nitric acid with the option of using hydrochloric acid or hydrogen peroxide.

(2) The sample size shall be not less than 0.050 gram, and shall be chopped or comminuted prior to digestion.

(3) The digested sample may require dilution prior to analysis.

(4) All necessary dilutions shall be made to ensure that measurements are made within the calibrated range of the analytical instrument.

(g) For testing glass and crystal, the following protocols shall be used:

(1) For determining weight:

(A) A component shall be free of any extraneous material, including adhesive, before it is weighed.

(B) The scale used to weigh a component shall be calibrated annually by a qualified vendor using reference mass standards that are traceable to the National Institute of Standards and Technology (NIST) of the Department of Commerce or the International System of Units (SI) and shall be verified daily before weighing the component.

(C) The calibration of the scale shall be accurate to within 0.0001 gram.

(2) Both of the following testing protocols shall be observed:

(A) The glass and crystal component shall be crushed or grounded to powder form before digestion and shall be digested according to the United States Environmental Protection Agency Test Method 3052 using hydrofluoric acid in a microwave or an equivalent method to yield complete digestion.

(B) The digestate shall be diluted in the minimum volume practical for analysis.

SEC. 8. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.