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Health and Safety / Chapter 526: Out with the Old, in with the New - California Addresses the Growing Problem of E-Waste

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Chapter 526: Out with the Old, In with the New— California Addresses the Growing Problem of E-Waste

Jennifer L. Fordyce

Code Sections Affected

Health and Safety Code §§ 25214.9, 25214.10 (new); Public Resources Code §§ 41516, 42460, 42461, 42463, 42464, 42464.2, 42465, 42465.1, 42465.2, 42465.3, 42472, 42473, 42474, 42474.5, 42475, 42475.1, 42475.2, 42475.3, 42475.4, 42476, 42476.5, 42476.6, 42477, 42478, 42479, 42480, 42485 (new).
SB 20 (Sher & Romero); 2003 STAT. Ch. 526.

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*"The machine does not isolate man from the great problems of nature but plunges him more deeply into them."*¹

I. INTRODUCTION

Today's technology is amazing. Everyday it seems that a better television, a faster computer, or a smaller cellular phone arrives on the market. However, these electronic devices do not last forever because they either break or become outdated. In fact, the California Integrated Waste Management Board ("CIWMB") estimates that over thirty-one million of these devices become obsolete each year in California.² But what should California consumers do when they need to rid themselves of an obsolete electronic device? Should they donate it, store it in their home hoping that they find a use for it later, throw it in the garbage, or recycle it? These obsolete electronic devices are known as electronic waste, or "e-waste," and are a growing concern in California.³

E-waste is a concern because many of these devices contain hazardous materials that, if disposed of improperly, can pose a serious risk to both human health and the environment.⁴ The California Department of Toxic Substances Control ("DTSC") has found that cathode ray tubes ("CRTs"),⁵ the glass "picture tubes" found in many video display devices such as televisions, computer monitors, and some camcorders, contain lead.⁶ Lead is highly toxic and can cause lead poisoning.⁷ Devices containing CRTs can also contain toxic levels of mercury, cadmium, and other hazardous materials.⁸ Although not normally considered dangerous when in use, a device's hazardous components can become toxic when the device is incinerated or sits for years in a landfill.⁹ For example,

1. Catherine K. Lin et al., *Globalization, Extended Producer Responsibility and the Problem of Discarded Computers in China: An Exploratory Proposal for Environmental Protection*, 14 GEO. INT'L ENVTL. L. REV. 525, 525 (2002) (quoting A. de Saint-Exupery).

2. ASSEMBLY COMMITTEE ON APPROPRIATIONS, COMMITTEE ANALYSIS OF SB 20, at 4 (July 16, 2003).

3. See ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS, COMMITTEE ANALYSIS OF SB 20, at 4 (July 8, 2003) (stating that e-waste "has become a significant environmental hazard and concern to environmental groups, the press, and the general public").

4. See *id.* at 5 (noting that lead is present in many electronic devices).

5. The purpose of a CRT is to convert electronic signals into visual images. Department of Toxic Substances Control, *Managing Waste Cathode Ray Tubes: Fact Sheet* (Aug. 2001), available at http://www.dtsc.ca.gov/HazardousWaste/CRTs/HWM_FS_CRT-EmergencyRegs.pdf [hereinafter *Managing Waste Cathode Ray Tubes*] (copy on file with the *McGeorge Law Review*).

6. See *id.* (noting that "[a] typical CRT contains between two and five pounds of lead").

7. See *id.* (stating that young children are far more susceptible to lead poisoning compared to adults).

8. California League of Conservation Voters, *What to Do with Yesterday's Electronics?*, at <http://www.ecovote.org/involved/15min-SB20.html> (last visited Mar. 20, 2004) [hereinafter *Yesterday's Electronics*] (copy on file with the *McGeorge Law Review*).

9. Lisa M. Bowman, *Calif. Senate Advances "E-Waste" Bill*, CNET NEWS.COM, at http://news.com/2102-1003_3-1013721.html?tag=ni_print (last visited Mar. 20, 2004) (copy on file with the *McGeorge Law Review*).

by sitting in a landfill, there is a significant risk that the toxins will contaminate the soil and leak into adjacent groundwater.¹⁰

Current California law prohibits CRT devices from being disposed of in landfills.¹¹ As a result, the CIWMB estimates that there are roughly six million obsolete television sets and computer monitors stored in California homes¹² because people do not know what to do with them. Despite the CRT disposal ban, it is estimated that only twenty percent of these obsolete computer monitors and television sets are recycled.¹³ And those that are recycled are often shipped to developing countries where under-paid workers pick apart the devices with little or no protective gear.¹⁴ Despite the ban, many of the devices that are not recycled eventually end up in a landfill.¹⁵

Chapter 526 addresses the growing public health and environmental threat created by e-waste by establishing a statewide electronics recycling program.¹⁶ The new law requires manufacturers and retailers to play a more important role in the disposal and recycling of hazardous electronic devices, while consumers help fund the program.

II. EXISTING LAW

A. Existing International Law

Chapter 526 is modeled on a directive enacted by the European Union addressing the problem of e-waste. The Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (“RoHS Directive”) became European law on February 13, 2003 and member states have until August 13, 2004 to implement the new law.¹⁷ The RoHS Directive establishes restrictions for the eventual phasing out of certain hazardous substances in the manufacture of electronic equipment.¹⁸ By July 1, 2006, newly

10. *Managing Waste Cathode Ray Tubes*, *supra* note 5.

11. *See infra* Part II.D (describing California’s existing law regarding e-waste).

12. SENATE COMMITTEE ON ENVIRONMENTAL QUALITY, COMMITTEE ANALYSIS OF SB 20, at 7-8 (May 12, 2003).

13. Bowman, *supra* note 9.

14. *See* SENATE COMMITTEE ON ENVIRONMENTAL QUALITY, COMMITTEE ANALYSIS OF SB 20, at 7 (May 12, 2003) (stating that this is due to “cheaper labor, lack of environmental standards in Asia, and because such export is still legal in the United States”).

15. *Yesterday’s Electronics*, *supra* note 8.

16. Bowman, *supra* note 9. Prior to the enactment of Chapter 526, there was no statewide e-waste recycling program. Although a few computer manufacturers had already established their own voluntary recycling programs, these programs often required the consumer to take the first step to recycle, usually at a cost to the consumer. *Id.*

17. Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, art. 9-10, 2003 O.J. (L 37) 19 [hereinafter RoHS Directive].

18. *Id.* art. 1.

manufactured electronic equipment is prohibited from containing lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (“PBB”), and/or polybrominated diphenyl ethers (“PBDE”).¹⁹

B. Existing Federal Law

Subtitle C of the Resource Conservation and Recovery Act of 1976 (RCRA)²⁰ mandates that the United States Environmental Protection Agency (“EPA”) establish regulations for the management of hazardous waste.²¹ Under Subtitle C of RCRA, “a solid waste is a hazardous waste if it exhibits one or more of the characteristics of ignitability, corrosivity, reactivity, or toxicity”²² CRTs exhibit the element of toxicity since high concentrations of lead are found in the glass used to make CRTs.²³

The EPA’s current CRT policy is set forth in a proposed rule to revise existing regulations regarding CRTs and mercury containing equipment.²⁴ The purpose of the proposed rule is to encourage greater CRT reuse and recycling.²⁵ Under the proposed rule, used CRTs that are destined for reuse, repair, or recycling would not fall under the definition of solid waste, rather they would be considered products.²⁶ Conversely, used or unused CRTs that are discarded in a landfill or incinerator are considered hazardous waste and are subject to RCRA disposal regulations.²⁷ However, households and conditionally exempt small quantity generators that dispose of used CRTs are excluded from any RCRA disposal requirements.²⁸

C. Prior California Legislation

In 2002, Governor Gray Davis vetoed two bills sponsored by Senator Byron Sher, SB 1523 and SB 1619, which attempted to combat California’s e-waste problem. SB 1523 would have established a state program requiring every

19. *Id.* art. 4(1).

20. 42 U.S.C.A. §§ 6901-6992 (West 2003).

21. *Id.* § 6921(b)(1).

22. Cathode Ray Tubes and Mercury Containing Equipment (proposed June 12, 2002), 67 Fed. Reg. 40508, 40509 (to be codified at 40 C.F.R. pts. 260, 261, 264, 268, 270, and 273).

23. *Id.* at 40511.

24. *Id.* at 40508. At the time this legislative review was written, the proposed rule had yet to be formally adopted.

25. *Id.* at 40509.

26. *Id.* at 40511. Essentially, the EPA does not believe that the reuse or repair of used CRTs is waste generation. *Id.* Unused CRTs sent for recycling are not considered solid waste, therefore, they are not considered hazardous wastes. *Id.* at 40509.

27. *Id.* at 40511-40512. The disposal requirements include packaging, labeling, recordkeeping, and reporting. *Id.* at 40512.

28. *Id.* at 40511. A conditionally exempt small quantity generator is a business that produces less than 100 kilograms (about 220 pounds) of hazardous waste per month. *Id.*

retailer or manufacturer that sold CRT devices to impose a CRT recycling fee of ten dollars on consumers for each device sold in the state, to be used for grants, incentive programs, and a public information program.²⁹ Instead of imposing fees, SB 1619 would have required the California Integrated Waste Management Board (“CIWMB”) to use appropriated funds for essentially the same purpose as SB 1523.³⁰

In his veto message to the Senate on SB 1523, Governor Davis expressed his concern as to whether requiring the government and consumers to be responsible for the disposal of electronic devices was the best solution to the e-waste problem.³¹ Although the Governor vetoed both bills, he commended the authors for addressing the issue and stated that he was willing to sign legislation that challenged the electronic industry to take on greater responsibility for the problems the industry’s products generate.³² The Governor argued that “California needs a comprehensive and innovative state law that partners with product manufacturers, establishes recycling targets, and provides for the safe recycling and disposal of electronic waste.”³³

D. Existing California Law

The DTSC has the authority to regulate hazardous materials and waste in California.³⁴ Due to their lead content, the DTSC has classified discarded CRTs as hazardous.³⁵ In August 2001, DTSC adopted emergency regulations designating CRTs as “universal wastes”³⁶ and officially banned CRT devices from being disposed of in California landfills.³⁷ In February 2003, these

29. SB 1523 (2002) (as amended on Aug. 29, 2002, but not enacted).

30. SB 1619 (2002) (as amended on Aug. 23, 2002, but not enacted).

31. Letter from Gray Davis, Governor of California, to the Members of the California State Senate (Sept. 30, 2002) (copy on file with the *McGeorge Law Review*).

32. *Id.*

33. *Id.*

34. See CAL. HEALTH & SAFETY CODE § 58012 (West 1996) (giving the DTSC general authority to adopt rules and regulations); *id.* § 25141 (directing the DTSC to develop and adopt regulations for the identification of hazardous wastes).

35. See Department of Toxic Substances Control, *Emergency Regulations for Cathode Ray Tubes: Finding of Emergency*, Aug. 2001, at http://www.dtsc.ca.gov/LawsRegulationsPolicies/CRTs/FOE_CRTs_80-01.pdf (copy on file with the *McGeorge Law Review*) (stating that “lead exposure can result in toxic effects upon the kidneys, circulatory and skeletal systems”).

36. Universal wastes are hazardous wastes “that are more common and pose a lower risk to people and the environment than other hazardous wastes.” Department of Toxic Substances Control, *Managing Universal Waste in California* (June 2003), available at http://www.dtsc.ca.gov/PublicationsForms/HWM_FS_UWR.pdf (copy on file with the *McGeorge Law Review*). Some items that are considered universal wastes are batteries, mercury thermometers, and fluorescent tubes. *Id.* Although considered hazardous, universal wastes are not subject to traditional hazardous waste requirements, but instead are subject to less stringent requirements that are based on the risk they pose. *Id.*

37. Emergency Regulations for Cathode Ray Tubes, CAL. CODE REGS., tit. 22, §§ 66261.9(d), 66273.81 (2001). According to the DTSC, emergency regulations are only adopted when there is “an immediate need for a regulation to protect the public health and safety, or the general welfare.” Department of Toxic Substances

regulations became final and replaced the emergency regulations.³⁸ Also in February 2003, the DTSC announced that the universal waste regulations would also apply to consumer electronic devices, which include cell phones, computer hard drives, stereo equipment, VCRs, DVD players, computer printers, and cordless telephones.³⁹ However, the landfill ban does not officially take effect until February 2006.⁴⁰

III. CHAPTER 526

Chapter 526 responded to the Governor's concerns by shifting much of the responsibility of handling the e-waste problem from the government and consumers to manufacturers and retailers of hazardous electronic devices. Chapter 526 essentially contains two main components: first, it phases out the sale of certain electronic devices in California; and second, it establishes the Electronic Waste Recycling Act of 2003 that provides funding for the free and convenient collection and recycling of e-waste.

A. *Phasing Out the Sale of Certain Electronic Devices in California*

Chapter 526 calls for the phasing out of certain electronic devices, prohibiting their sale in the state of California.⁴¹ The new law requires the DTSC to implement regulations prohibiting an electronic device from being sold or offered for sale in California if, due to the presence of hazardous materials, the electronic device is prohibited from being sold or offered for sale in the European Union in accordance with the RoHS Directive.⁴² These regulations will "take effect January 1, 2007, or on or after the date the [RoHS Directive] takes effect, whichever date is later."⁴³ DTSC is also required to exclude certain electronic devices from the regulation.⁴⁴ Furthermore, the DTSC is prohibited from

Control, *Laws, Regulations and Policies*, at <http://www.dtsc.ca.gov/LawsRegulationsPolicies/index.html> (last visited Apr. 3, 2004) (copy on file with the *McGeorge Law Review*).

38. Final Regulations for Electronic Hazardous Waste, CAL. CODE REGS., tit. 22, §§ 66260.22-66273.9 (2003).

39. Press Release, California Environmental Protection Agency, Department of Toxic Substances Control, New Cathode Ray Tube Regulations Will Also Apply to Cell-Phones, VCRs and Other Consumer Electronic Devices (Feb. 11, 2003), at http://www.dtsc.ca.gov/HazardousWaste/CRTs/NEWS_2003_EwasteRegs.pdf (copy on file with the *McGeorge Law Review*).

40. *Id.*

41. See generally CAL. HEALTH & SAFETY CODE § 25214.10 (enacted by Chapter 526) (explaining that California law is meant to mirror Directive 2002/95/EC, adopted by the European Union, which calls for the phasing out of particular devices).

42. *Id.* § 25214.10(b).

43. *Id.* § 25214.10(c).

44. *Id.* § 25214.10(d). Such devices include 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." *Id.*

requiring the “manufacture or sale of any electronic device that is different than, or not otherwise prohibited by, the European Union under [the RoHS Directive].”⁴⁵

B. *The Electronic Waste Recycling Act of 2003*

Chapter 526 enacts the Electronic Waste Recycling Act of 2003 (“the Act”).⁴⁶ Electronic devices that are covered under the Act include CRTs, CRT devices, flat panel screens, and any other video display device with a screen larger than four inches when measured diagonally that, when discarded, the DTSC determines would be a hazardous waste.⁴⁷

1. *Manufacturer Responsibility*

Starting July 1, 2004, the Act makes it a crime to sell a covered electronic device to a consumer in California, unless the CIWMB or DTSC finds that the manufacturer of the device is in compliance with specific requirements established in the Act.⁴⁸ One requirement is that, starting January 1, 2005, all covered electronic devices sold or offered for sale in California must contain a clearly visible label containing “the name of the manufacturer or the manufacturer’s brand label.”⁴⁹ In addition, by July 1, 2005, and every year after that, each manufacturer must submit a report to the CIWMB.⁵⁰ Also, by July 1, 2005, and at least once a year thereafter, each manufacturer is required to “[m]ake information available to consumers, that describes where and how to return, recycle, and dispose of the covered electronic device and opportunities

45. *Id.* § 25214.10(e).

46. CAL. PUB. RES. CODE § 42460 (enacted by Chapter 526).

47. *Id.* § 42463(f)(1). Electronic devices that are not covered include automobiles and large pieces of “commercial or industrial equipment, including but not limited to, commercial medical equipment, that contains a [CRT, CRT device], or other similar video display device that is contained within, and is not separate from, the larger piece of industrial or commercial equipment.” *Id.* § 42463(f)(2).

48. *Id.* § 42465.

49. *Id.* § 42465.1.

50. *Id.* § 42465.2(a)(1)(A)-(D). The report is required to contain:

(A) the estimated number of devices the manufacturer sold in California during the previous year;

(B) a baseline showing “the total estimated amounts of mercury, cadmium, lead, hexavalent chromium, PBDE’s, and PBB’s used in [devices manufactured] that year and the reduction in the use of those hazardous materials from the previous year;”

(C) a baseline showing “the total estimated amount of recycled materials contained in . . . devices sold by the manufacturer in that year and the increase in the use of those recyclable materials from the previous year;” and

(D) a baseline describing “any efforts to design covered electronic devices for recycling and attribute goals and plans for further increasing design for recycling.”

Id.

and locations for the collection or return of the device.”⁵¹ Furthermore, by April 1, 2004, manufacturers must inform retailers whether a “covered electronic device sold by that manufacturer is subject to the electronic waste recycling fee.”⁵²

2. *Imposition of Fees and Fines*

Starting July 1, 2004, the Act provides that all California retailers selling covered electronic devices are required to collect from the consumer an electronic waste recycling fee at the time the device is purchased.⁵³ The amount of the recycling fee will vary depending on the screen size of the device.⁵⁴ Starting July 1, 2005, the Act requires the CIWMB to review and adjust the recycling fee every two years in order to accommodate any increased costs associated with recycling the devices.⁵⁵ The recycling fee is to be given to the CIWMB; however, the retailer is entitled to keep three percent of the recycling fee as reimbursement for any costs associated with the fee collection.⁵⁶

Chapter 526 also authorizes the CIWMB to administratively impose civil liability of up to \$2,500 per violation, and to seek civil penalties of up to \$5,000 per violation, for each sale of an electronic device for which a recycling fee has not been paid.⁵⁷ In addition, CIWMB may impose civil liability of up to \$25,000 against manufacturers for failure to comply with the Act.⁵⁸

The CIWMB and DTSC are required to deposit all recycling fees and imposed fines into the Electronic Waste Recovery and Recycling Account.⁵⁹ The funds are to be used to cover the costs of local governments and other recyclers who provide free collection and recycling services to the public.⁶⁰ However, the CIWMB may not provide funds for e-waste recyclers unless the materials are “handled in compliance with all statutes and regulations regarding the export[ation] of hazardous waste[.]”⁶¹ In addition, no more than one percent of

51. *Id.* § 42465.2(a)(2). Manufacturers may do this through the “use of a toll-free telephone number, Internet Web site, information labeled on the device, information included in the packaging, or information accompanying the sale of the covered electronic device.” *Id.*

52. *Id.* § 42465.3.

53. *Id.* § 42464(a)-(b).

54. *See id.* § 42464(b)(1)-(3) (listing the fees which range from six to ten dollars depending on the size of the screen measured diagonally). The fees are as followed: six dollars for screens measuring less than fifteen inches, eight dollars for screens measuring from fifteen to less than thirty-five inches, and ten dollars for screens measuring thirty-five inches or more. *Id.*

55. *Id.* § 42464(e).

56. *Id.* § 42464(c)-(d).

57. *Id.* § 42474(a)-(b).

58. *Id.* § 42474(c).

59. *Id.* § 42476(a).

60. *Id.* § 42476(a)(1)-(4).

61. *Id.* § 42476(d).

the funds annually deposited in the account may be spent establishing public information programs to educate the public about the hazards of e-waste.⁶²

On July 1, 2004, and the first of July every two years after that, the CIWMB and DTSC must establish an electronic waste recovery payment schedule for electronic wastes generated to cover: (1) “the net cost for an authorized collector to operate a free and convenient system for collecting, consolidating, and transporting . . . electronic waste[],”⁶³ and (2) “an electronic waste recycler’s net cost to receive, process, and recycle [an] electronic device from an authorized collector.”⁶⁴ Prior to receiving payment, an electronic waste recycler must certify to the CIWMB that he or she is in compliance with specific requirements.⁶⁵

3. *Exportation of E-Waste*

Chapter 526 restricts the exportation of e-waste to foreign countries. It requires all exporters to comply with five requirements at least sixty days prior to the exportation.⁶⁶ First, exporters must notify the DTSC of the destination, contents, and amount of e-waste that is to be exported.⁶⁷ Second, exporters must prove that the country of destination does not prohibit the importation of e-waste.⁶⁸ Third, the exportation must be conducted in accordance with international law.⁶⁹ Fourth, the exporter must prove “that the management of the exported [e-waste] will be handled within the country of destination in accordance . . . with standards . . . adopted by the Organization for Economic Cooperation and Development [“OECD”] for the environmentally sound management of electronic waste.”⁷⁰ Finally, the exporter must provide proof that the e-waste is being exported for reuse or recycling.⁷¹ However, these requirements do not apply to component parts of covered electronic devices that are exported to an authorized collector or recycler to be reused or recycled into a new electronic component.⁷²

62. *Id.* § 42476(c).

63. *Id.* § 42477.

64. *Id.* § 42478.

65. *Id.* § 42479(b). Some of the requirements include proving that the facility used for handling, processing, refurbishing, or recycling has been inspected by DTSC within the last twelve months and is accessible during normal business hours for unannounced inspections. *Id.* § 42479(b)(2)(A)-(B).

66. *Id.* § 42476.5.

67. *Id.* § 42476.5(a).

68. *Id.* § 42476.5(b).

69. *Id.* § 42476.5(c).

70. *Id.* § 42476.5(d).

71. *Id.* § 42476.5(e).

72. *Id.* § 42476.6.

4. Enforcement and Administration of the Act

Chapter 526 provides that the Act, and all regulations adopted pursuant to the Act, may be enforced by the DTSC.⁷³ Also, the CIWMB shall administer the Act in consultation with the DTSC.⁷⁴ Both CIWMB and DTSC are given the authority to adopt regulations, including emergency regulations, which are found to be necessary to implement and enforce the Act.⁷⁵ In terms of administration, CIWMB is also required to establish annual “statewide recycling goals for covered electronic waste.”⁷⁶

5. Preemption, Inapplicability, and Severability

Chapter 526’s imposition of the recycling fee preempts any city, county, or public agency from enacting similar regulations.⁷⁷ However, cities, counties, and public agencies may enact regulations governing curbside or drop off recycling programs.⁷⁸

CIWMB or DTSC will not implement Chapter 526 if applicable federal law is enacted⁷⁹ or a California court rules that out-of-state manufacturers and/or retailers may not be required to assess and collect recycling fees.⁸⁰

73. *Id.* § 42474.5.

74. *Id.* § 42475(a).

75. *Id.* §§ 42475.1, 42475.2(a).

76. *Id.* § 42475.4(a). In doing so, the CIWMB is required to annually post on its web site the amount of covered electronic devices sold and recycled in California in the previous year. *Id.* § 42475.4(a)(1)-(2).

77. *Id.* § 42472(a).

78. *Id.* § 42472(b).

79. *Id.* § 42485(a). In order for Chapter 526 to be preempted by federal law(s), the law(s) must do all of the following:

- (1) Establish[] a program for the collection, recycling, and proper disposal of covered electronic waste that is applicable to all cathode ray tube devices sold in the United States.
- (2) Provide[] revenues to the state to support the collection, recycling, and proper disposal of covered electronic waste, in an amount that is equal to, or greater than, the revenues that would be generated by the fee imposed under Section 42464.
- (3) Require[] covered electronic device manufacturers, retailers, handlers, processors, and recyclers to dispose of those devices in a manner that is in compliance with all applicable federal, state, and local laws, regulations, and ordinances, and prohibits the devices from being exported for disposal in a manner that poses a significant risk to the public health or the environment.

Id. § 42485(a)(1)-(3).

80. *Id.* § 42485(b).

IV. ANALYSIS OF CHAPTER 526

A. *Legislative Purpose*

The California Legislature declared that the purpose of Chapter 526 is not only to establish a comprehensive system for the recycling and proper disposal of hazardous electronic devices, but also to “provide incentives to design electronic devices that are less toxic, more recyclable, and that use recycled materials.”⁸¹ In addition, Chapter 526’s purpose was to establish a recycling program that is both free and convenient for the public.⁸² The Legislature clearly intended that the cost of managing hazardous electronic devices should not be borne by state and local governments alone. Instead, the cost should be borne by the manufacturers and consumers of these devices.⁸³

B. *How Will Chapter 526 Affect California Consumers?*

Starting July 1, 2004, California consumers can expect to pay six to ten dollars more when they buy new televisions and computer monitors.⁸⁴ While consumers may groan about paying this additional fee, consumers benefit from paying this fairly nominal fee by being able to freely and conveniently rid their homes of stored electronic waste.⁸⁵ Since manufacturers are required to provide information to consumers describing where consumers can conveniently recycle their electronic waste, if a consumer has electronic waste in his or her home or office, the consumer can simply drop off the device at an authorized collection center.⁸⁶ Thus, while consumers will essentially fund the recycling program established by Chapter 526, consumers will no longer have to worry about what to do with their old electronic devices.

C. *How Will Chapter 526 Affect Manufacturers and Retailers of Covered Electronic Devices?*

Starting no sooner than January 1, 2007, manufacturers will be strictly prohibited from selling certain electronic devices in the state of California if, due to the presence of certain heavy metals, that electronic device is also prohibited

81. *Id.* § 42461(a).

82. *Id.* § 42461(b) (stating that it “is the further purpose of this chapter to enact a law that establishes a program that is cost free and convenient for consumers and the public to return, recycle, and ensure the safe and environmentally-sound disposal of hazardous electronic devices”).

83. *Id.* § 42461(c).

84. *Id.* § 42464(b)(1)-(3).

85. *See id.* § 42461(b) (discussing the legislative goal of providing free and convenient disposal for consumers).

86. *Id.* § 42465.2(a)(2).

from being sold in the European Union.⁸⁷ Furthermore, starting July 1, 2004, manufacturers will be required to comply with several requirements regarding their electronic devices.⁸⁸ Some of these requirements include providing a visible label on the device, submitting an annual report to the CIWMB, and making information known to consumers describing where the consumers can recycle their obsolete devices.⁸⁹

While there is considerable opposition to Chapter 526 from electronics manufacturers and their trade associations, Chapter 526 is actually an incentive for companies who do business on an international scale. Specifically, manufacturers that do business in the European Union know that unless they rid their electronic products of certain heavy metals by July 1, 2006, they will not be able to sell their products in the European Union.⁹⁰ Thus, Chapter 526 could provide manufacturers with an incentive to clean up their electronic products, which may be advantageous once the deadline approaches.

One major issue that manufacturers have argued for is a national solution, as opposed to a state-by-state solution.⁹¹ For example, although Sony supports recycling programs and said it will support federal efforts regarding e-waste, the company has expressed concern that a string of conflicting state laws could potentially put some electronics manufacturers at a disadvantage.⁹²

Manufacturers have also argued against Chapter 526 for fear that it will be costly and ultimately affect jobs. The California Manufacturers and Technology Association (“CMTA”) strongly opposes Chapter 526, even going so far as to call it a “job killer bill.”⁹³ In May 2003, the CMTA testified in opposition to Chapter 526 in front of the Senate Committee on Environmental Quality stating that its membership was strongly concerned about imposing additional cost burdens on manufacturers.⁹⁴ In addition, although the Silicon Valley Manufacturing Group conceded that companies based in California have an important role to play in recycling hazardous electronic devices,⁹⁵ the

87. CAL. HEALTH & SAFETY CODE § 25214.10(b)-(c) (enacted by Chapter 526).

88. CAL. PUB. RES. CODE § 42465 (enacted by Chapter 526).

89. See *supra* Part III.B.1 (describing requirements for manufacturers).

90. See generally RoHS Directive, *supra* note 17.

91. See Bowman, *supra* note 9 (stating that many computer manufacturers are wary of state efforts).

92. *Id.*

93. California Manufacturers & Technology Association, *Electronic Waste Recycling*, at <http://www.cmta.net/billsample.php?bill=8> (last visited Mar. 21, 2004) (copy on file with the *McGeorge Law Review*); California Manufacturers & Technology Association, *Capitol Updates*, at http://www.cmta.net/legupdate.php?topic_id=env&phpSID=459367b4c89abc96695507bea0703533 (last visited Mar. 21, 2004) [hereinafter *Capitol Updates*] (copy on file with the *McGeorge Law Review*).

94. *Capitol Updates*, *supra* note 93.

95. Ann E. Marimow, *Plan Offered for Recycling Obsolete Computers*, SILICONVALLEY.COM, May 7, 2003, at <http://www.siliconvalley.com/mld/siliconvalley/5804894.htm?template=contentModules/printstory.jsp> (last visited Mar. 21, 2004) (copy on file with the *McGeorge Law Review*).

organization has given the bill a “thumbs down” on its environmental legislation web page.⁹⁶

D. Is Chapter 526 Necessary for California?

California has an e-waste problem. In today’s age, the useful lifespan of a computer is only three to five years.⁹⁷ In addition, the Federal Communications Commission (“FCC”) has established that by 2007 all new televisions are required to be equipped with technology for receiving digital signals.⁹⁸ As a result of this phase-out, it is estimated that 500 million CRT devices will have to be recycled.⁹⁹ Under the existing regime, these electronic devices are finding themselves in landfills, stored in people’s homes, or exported to foreign destinations. Something clearly needed to be done.

Chapter 526 has received an overwhelming amount of support among local governments, environmental groups, recyclers, waste haulers, and non-profit thrift shops.¹⁰⁰ It is their belief that e-waste should be “properly collected, recycled, refurbished, or disposed.”¹⁰¹ In addition, local governments find that disposal of electronic waste is costly to them.¹⁰² Non-profit organizations such as Goodwill and the Salvation Army are also finding that many donated computer monitors and televisions are costly to them as well.¹⁰³ In fact, it is estimated that such organizations can lose between twenty-five and thirty dollars for each computer or television that they accept as a donation.¹⁰⁴ Historically, these stores were able to offer consumers free collection of their obsolete electronic devices, as long as they were still usable.¹⁰⁵ However, due to increased costs, they have

96. Silicon Valley Manufacturing Group, “Environment” Legislation, at http://www.svmg.org/Legislation/Legislation_Details.cfm?committeeid=4 (last visited Sept. 29, 2003) (copy on file with the *McGeorge Law Review*).

97. United States Environmental Protection Agency, *Electronics Reuse and Recycling*, WASTEWISE UPDATE, Oct. 2000, at <http://www.epa.gov/wastewise/pubs/wwupda14.pdf> (copy on file with the *McGeorge Law Review*).

98. Press Release, Federal Communications Commission, FCC Introduces Phase-In Plan for DTV Tuners: Plan Minimizes Costs and Allows Consumers to Access DTV Signals, at 1 (Aug. 8, 2002), at http://hraunfoss.fcc.gov/edocs_public/attachmatch/Doc-225221A1.pdf (copy on file with the *McGeorge Law Review*).

99. Yesterday’s Electronics, *supra* note 8.

100. See ASSEMBLY COMMITTEE ON NATURAL RESOURCES, COMMITTEE ANALYSIS OF SB 20, at 9-12 (July 7, 2003) (listing all those who have registered their support).

101. SENATE RULES COMMITTEE, BILL ANALYSIS OF SB 20, at 8 (June 2, 2003).

102. 2003 Cal. Legis. Serv. ch. 526, sec. 1(h), at 3253 (enacting the Electronic Waste and Recycling Act of 2003).

103. *Id.*

104. Nancy Vogel, *The State; Davis Signs Law to Boost TV, Computer Monitor Recycling*, L.A. TIMES, Sept. 26, 2003, at B8.

105. Californians Against Waste, *Poison PCs and Toxic TVs: 2003 Update*, at [http://www.cawrecycles.org/Ewaste/SB%2020%20\(Sher\)/Talking%20Points%20\(3%20pager\).htm](http://www.cawrecycles.org/Ewaste/SB%2020%20(Sher)/Talking%20Points%20(3%20pager).htm) (last visited Mar. 21, 2004) (copy on file with the *McGeorge Law Review*).

been forced to reject such devices leaving Californians wondering what to do with them next.¹⁰⁶ On average, only ten percent of computers that are dropped off at thrift stores can actually be refurbished or reused.¹⁰⁷ The rest have to be handled as hazardous materials, which imposes a considerable cost to the organization.¹⁰⁸ Based on these burdens it would appear that e-waste regulation is necessary for California.

E. Will Chapter 526 Affect California Trade?

In order to sell certain electronic devices in California, Chapter 526 requires a retailer to impose a recycling fee on all consumers.¹⁰⁹ Furthermore, the manufacturers of these devices are required to conform to the specific requirements detailed in the Act.¹¹⁰ The natural question then is whether manufacturers and retailers will stop selling their devices in California to avoid these requirements.

The California Chamber of Commerce, whose motto is “Helping California Business do Business,” strongly opposes Chapter 526.¹¹¹ The reason behind the opposition is two-fold: first, the new law puts electronic “manufacturers at a competitive disadvantage with neighboring states and other nations;” and second, the new law increases prices for consumers.¹¹² The Chamber of Commerce argues that California already has a stigma of being a “regulatory island” and that Chapter 526 will “further enforce that stigma,” and may cause California businesses to move out of the state.¹¹³ If California makes it too expensive for a business to operate in the state, it seems likely that some manufacturers will simply stop selling their products in California in order to avoid having to comply with Chapter 526’s requirements.

Furthermore, the Chamber of Commerce argues that California consumers could go out of California to buy their electronic devices in order to avoid having to pay the electronic waste recycling fee mandated by Chapter 526.¹¹⁴ Prior to the enactment of Chapter 526, SB 20 had included sales made over the Internet, telephone, or “by any other means that result[ed] in a hazardous electronic device being transported or shipped into the state.”¹¹⁵ Upon amendment, this provision

106. *Id.*

107. *Id.*

108. *Id.*

109. CAL. PUB. RES. CODE § 42464(a)-(b) (enacted by Chapter 526).

110. *Id.* § 42465 (enacted by Chapter 526).

111. California Chamber of Commerce, *New E-Waste Recycling Mandates Moving*, July 18, 2003, at <http://www.calchamber.com/headlines/index-print.cfm?navid=374&action=detail&id=79> (copy on file with the *McGeorge Law Review*).

112. *Id.*

113. *Id.*

114. *Id.*

115. SB 20 (as amended July 29, 2003).

was deleted. This begs the question whether consumers will purchase out-of-state electronic devices in order to avoid paying the recycling fee.

F. Is Chapter 526 Necessary for Foreign Countries that Handle E-Waste?

Chapter 526 now requires any person in California that intends to export e-waste to a foreign country to abide by specific requirements sixty days prior to exportation.¹¹⁶ Chapter 526 recognizes that e-waste is illegally handled in developing countries which pose a threat to health, safety, and the environment.¹¹⁷ In 2002, the Silicon Valley Toxics Coalition and the Basel Action Network published a report on the exportation of electronic devices to developing countries in Asia.¹¹⁸ The report goes into extensive detail recounting the harm Asian countries face when the United States exports its [e]-waste.¹¹⁹ Furthermore, the report points out that “China has banned the import[ation] of e-waste and yet the United States refuses to honor that ban by preventing exports to them.”¹²⁰ Thus, it appears that Chapter 526 is necessary to protect foreign countries that handle e-waste.

V. CONCLUSION

Chapter 526 is landmark legislation. It establishes the nation’s first statewide electronics recycling program. The new law is an attempt on the part of the California Legislature to put the responsibility of disposal and recycling on manufacturers, retailers, and consumers. Specifically, Chapter 526 calls for manufacturers to phase out certain electronic devices currently sold in California.¹²¹ In addition, retailers are required to collect a recycling fee on all electronic devices sold in the state of California to be used for recycling

116. CAL. PUB. RES. CODE § 42476.5 (enacted by Chapter 526).

117. See SENATE COMMITTEE ON ENVIRONMENTAL QUALITY, COMMITTEE ANALYSIS OF SB 20, at 7-8 (May 12, 2003) (summarizing the findings of a report issued by the Silicon Valley Toxics Coalition). The report states that:

[T]rade in E-waste is an export of real harm to the poor communities of Asia. The open burning, acid baths and toxic dumping pour pollution into the land, air and water and exposes the men, women and children of Asia’s poorer peoples to poison. The health and economic costs of this trade are vast and, due to export, are not born by the western consumers nor the waste brokers who benefit from the trade.

Id.

118. JIM PUCKET ET AL., EXPORTING HARM: THE HIGH-TECH TRASHING OF ASIA, SILICON VALLEY TOXICS COALITION (Feb. 2002), at <http://www.svtc.org/cleancc/pubs/technotrash.pdf> (copy on file with the *McGeorge Law Review*).

119. *Id.*

120. SENATE COMMITTEE ON ENVIRONMENTAL QUALITY, COMMITTEE ANALYSIS OF SB 20, at 8 (May 12, 2003).

121. See *supra* Part III.A.

programs that are free to the public.¹²² Lastly, manufacturers are required to provide information to consumers describing locations where consumers can recycle their electronic waste.¹²³

Chapter 526 is highly controversial.¹²⁴ In addition to placing a burden on consumers, retailers, and manufacturers, the future effects of the new law are still unknown. Obviously, Chapter 526's future impact on California trade should be a concern.¹²⁵ As home to the infamous Silicon Valley, which is well known for its technological advancements, California must be concerned that California businesses might go out-of-state just to purchase a computer.

As for California consumers, they now have a free and convenient option of what to do with their obsolete electronic devices. Thus, not only does Chapter 526 protect public health and the environment, but it also allows Californians to free up storage space in their homes.

122. *See supra* Part III.B.2.

123. *See supra* Part III.B.1.

124. *See supra* Part IV.E.

125. *See supra* Part IV.E.