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EXPORT REQUIREMENTS FOR ELECTRONIC DEVICES

Dear Mr. Kim:

Thank you for your letter to the Department of Toxic Substances Control (DTSC). You have requested guidance on the export requirements contained in Public Resources Code (PRC) section 42476.5, as originally enacted into law in 2003. Please note that section 42476.5 was amended in 2004. The amendments became effective January 1, 2005. Consequently, the questions that you asked and to which DTSC responds in this letter have been reframed as necessary to provide responses that are based upon section 42476.5, as amended.¹

Question 1: PRC 42476.5

Public Resources Code section 42476.5 requires a person who exports a covered electronic waste (CEW) or a covered electronic device (CED), intended for recycling or disposal, to notify DTSC sixty days prior to the exportation. California Code of Regulations, title 22, sections 66273.20, 66273.40, and 66273.90 require that a universal waste (UW) handler who exports universal waste electronic devices (UWEDs) or cathode ray tube (CRT) materials to notify DTSC four weeks prior to the exportation. With which time period should a person comply?

¹ The 2004 amendments broadened the applicability of Public Resources Code section 42476.5 to include "covered electronic devices intended for recycling or disposal." The amendments also changed each of the section 42476.5 notification and demonstration requirements.

DTSC Response:

A universal waste handler or CRT material handler who plans to export UWEDs or CRT materials other than CEDs or CEWs, such as central processing units (CPUs) or CRT glass must comply with the four week advance notification requirements identified in California Code of Regulations, title 22, sections 66273.20, 66273.40, or 66273.90, as appropriate. If you export CEWs, or CEDs (i.e., those devices listed in California Code of Regulations, title 22, chapter 11, Appendix X, subsection (c)) intended for recycling or disposal, you must also comply with the 60-day advance notification requirements of Public Resources Code section 42476.5. Of course, if you are exporting shipments consisting of CEWs, CEDs, and CRT glass or other UWEDs, if you submit all of the required information (both notifications) at least sixty days in advance, both notification time requirements will be satisfied.

**Question 2:
PRC 42476.5(a)**

Public Resources Code section 42476.5, subdivision (a), requires that the export notification include the volume of CEWs, and the volume of CEDs being exported for recycling or disposal. Must the volume be reported in terms of weight or numbers?

DTSC Response:

For purposes of the Public Resources Code section 42476.5, subdivision (a), notification, a person may quantify the volume of CEWs, or CEDs intended for recycling or disposal, using any standard units for volume, e.g., cubic feet, cubic yards, cubic meters, etc. You may find it convenient to use the quantity and volume of the shipping containers used for the shipment.

When notifying DTSC of an export pursuant to California Code of Regulations, title 22, sections 66273.20, 66273.40, or 66273.90, the amount of UWEDs or CRT materials to be exported must be specified by weight or by count. Typically, the weight in pounds or kilograms is provided to DTSC.

Examples:

Example #1: If you export CRT monitors that are CEDs (i.e., are not wastes) you may submit a single export notification sixty days in advance that satisfies the notification requirements of Public Resources Code section 42476.5, subdivision (a).

To satisfy the requirements for quantifying your material, you could provide the number and volume of the shipping containers. For example: "The shipment consists of three (3) 40 foot shipping containers of 60 cubic meters each (total of 180 cu meters)."

Example #2: If you export CRT monitors that are CEWs, you may submit a single export notification sixty days in advance that satisfies the notification requirements of Public Resources Code section 42476.5, subdivision (a), and California Code of Regulations, title 22, sections 66273.20, 66273.40, or 66273.90 (as appropriate). To satisfy the requirements for quantifying your material, you could provide both the number and volume of the shipping containers, as well as the weight or count of the CRT monitors in the containers. For example: "The shipment consist of three (3) 40 foot shipping containers of 60 cubic meters each (total of 180 cu meters); each container holds 20 skids with 45 units per skid (900 monitors) (total of 2700 monitors)."

**Question 3 (Question 7 in your letter):
PRC 42476.5(b)**

Public Resources Code section 42476.5, subdivision (b), requires a person who exports CEWs, or CEDs intended for recycling or disposal, to demonstrate that the CEWs or CEDs will be exported for the purposes of recycling or disposal. How can this demonstration be made?

DTSC Response:

At this time, DTSC is not limiting the types of documents that may be used to make the demonstrations required by Public Resources Code section 42476.5, subdivision (b). DTSC will evaluate the adequacy of the specific documents submitted on a case-by-case basis. In some cases, the authorization documents and other information required by Public Resources Code section 42476.5, subdivisions (c) or (d), may be sufficient. In other cases, a copy of a signed contract with a consignee facility that is known to DTSC to recycle or dispose of CEWs or CEDs may be sufficient. In other cases, a copy of a report of one or more inspections, audits or similar reviews of the consignee facility that confirms that legitimate recycling and disposal methods are in use at the facility²; initiated, for example, as a part of your due diligence as a responsible exporter of CEWs or CEDs, may be sufficient. There may even be cases in which more than just one of

² If you are exporting CEWs or CEDs for recycling, a report that includes mass balances showing recycling efficiencies, i.e., the fraction or percent of the material recovered and the fraction or percent properly disposed may be adequate to make this demonstration.

the above types of documents may be necessary to make the required demonstration. Export brokers, consultants or attorneys may be able to provide you with documents other than those discussed above that would also enable you to make the required demonstration.³ In essence, the documents that DTSC looks for are those that indicate how the CEWs or CEDs covered by your notification will be managed at the consignee facility. It is even foreseeable that documents originated by the consignee facility itself, such as an operations plan approved by the appropriate regulatory authority, may be sufficient in some cases.

The bottom line here is that the choice of documents to submit is yours, provided that they enable DTSC to conclude with confidence that the CEDs or CEWs covered by your notification are destined for the facility named therein for legitimate recycling or disposal purposes.

**Question 4 (Questions 3 and 4 in your letter):
PRC 42476.5(c)**

Public Resources Code section 42476.5, subdivision (c) requires a person who exports to demonstrate that an applicable law in the state or country of destination does not prohibit the importation of the CEWs or CEDs and that any import will be conducted in accordance with all applicable laws. Would a written statement from the importing company be sufficient?

As part of this demonstration, any required import and operating licenses, permits, or other appropriate authorization documents must be submitted to DTSC. What would be appropriate authorization documents?

DTSC Response:

The Public Resources Code section 42476.5, subdivision (c), demonstration would not be made by a simple written statement from the importing company that importation is not prohibited by any applicable law of the country of destination and that the import will be conducted in accordance with all applicable laws.

With regard to your request to elaborate on what would be “required import and operating licenses”, we note that Public Resources Code section 42476.5, subdivision (c), as amended, adds “permits, or other appropriate authorization documents” to the list of documents that must be forwarded to DTSC as part of the section 42476.5, subdivision (c), demonstration.

³ For example, a letter or signed summary from an export broker, consultant, or attorney familiar with the operation of recycling or disposal facilities who has verified recycling activities at the facility may sometimes be sufficient

An EPA Acknowledgment of Consent or a written consent received from an Organization for Economic Cooperation and Development (OECD) destination country, as appropriate, would be a sufficient authorization document.

The appropriate consent document would also suffice to demonstrate that the applicable law in the country of destination does not prohibit the importation of the CEWs or CEDs. And, if the consent document identifies the conditions placed by the destination country on the importation, you can complete the required demonstration by submitting a fact-based, well reasoned explanation of how those conditions will be satisfied.⁴

In the absence of an EPA Acknowledgment of Consent or a written consent received from an OECD destination country, as appropriate, the demonstration should include information that actually identifies the specific laws of the importing country that allow or authorize the importation of the CEDs and CEWs covered by your export notification and the intended recycling or disposal activities.⁵ In some cases, identification of these laws, coupled with a description of the types of CEDs and CEWs covered by your export notification and a copy of any authorization documents required by those laws may be sufficient to make the demonstration. But if any law or authorization places conditions on import or operation, additional documents may be necessary to demonstrate that the importation or operation, as appropriate, will be conducted in accordance with those conditions. At this time, DTSC is not limiting the specific types of additional documents that you may use to make this demonstration. The choice of documents to submit is yours, provided that they enable DTSC to conclude with confidence that the conditions will be met.⁶ DTSC will determine the adequacy of the documentation submitted on a case-by-case basis.

⁴ For additional discussion of these consent documents, see DTSC's response to Question 5 below. With regard to exports to Basel Party countries, please see footnote 7 below.

⁵ The only laws that need be identified here are those that are based on the hazardous characteristics of the CEDs or CEWs. Laws based on other characteristics, such as technical characteristics as they relate to national concerns of the importing country, such as national security, missile technology, nuclear proliferation, chemical and biological weapons, anti-terrorism or crime control, need not be addressed.

⁶ You may utilize the services of any qualified person, such as a broker, consultant or attorney familiar with importation matters in the country of destination, in order to make the required demonstration.

**Question 5:
PRC 42476.5(d)**

Public Resources Code section 42476.5, subdivision (d), requires a person who exports CEWs, or CEDs intended for recycling or disposal, to demonstrate that the exportation is conducted in accordance with applicable United States or applicable international law. What are the applicable international laws and how can compliance be demonstrated?

DTSC Response:

There are three international laws that obligate the United States government to control the export of hazardous wastes from the United States: a treaty between the United States and Canada, a treaty between the United States and Mexico, and an agreement among the member countries of the Organization for Economic Cooperation and Development (OECD), including the United States.⁷ Through the Resource Conservation and Recovery Act (RCRA) (42 U. S. C. sec. 6901 et seq.), Congress has delegated to the U.S. Environmental Protection Agency (EPA) authority to develop and enforce an export control program that fulfills the obligations of the United States under these international agreements.

Under RCRA, individual states can become authorized to implement the hazardous waste programs in their states in lieu of EPA. To become an authorized state, the state must adopt laws and/or regulations that are equivalent to the federal hazardous waste regulations. California is an authorized state and DTSC has adopted federally equivalent regulations regarding exports under the RCRA program. Therefore, an individual who complies with California's laws and regulations pertaining to hazardous wastes is, ordinarily, also in compliance with

⁷ The Basel Convention is a more global international agreement dealing with the transportation of hazardous waste across international boundaries. The Convention obligates countries that have signed and ratified the Convention (Basel Party Countries) to place certain prohibitions on the export of Basel Hazardous Waste to other Basel Party Countries. However, the United States has not yet ratified the Convention or voluntarily imposed the Basel prohibitions on exporters from the United States. Consequently, until it is ratified by the United States, the Convention does not obligate the United States to impose controls on the export of any CEDs or CEWs that would qualify as Basel Hazardous Waste. But lack of United States ratification does not prevent the Basel Party Countries from barring the importation of such CEDs or CEWS. Specifically, until ratified by the United States, the Basel Convention (article 4.5) prohibits Basel Party Countries from allowing the importation of Basel Hazardous Waste from "non-Parties", such as the United States. Additionally, Article 4.4 of the Convention obligates Basel Party Countries to take appropriate legal, administrative and other measures to implement this prohibition. Consequently, even though the Convention's export controls are not yet binding on the export of CEDs or CEWs from the United States, this import prohibition, when incorporated into the law of a Basel Party Country, would bar the entry of any Basel Hazardous Waste CEDs or CEWs exported from the United States into that country.

"the applicable United States or applicable international law" for the exportation of hazardous wastes⁸.

In general, for exports of federally regulated hazardous wastes, EPA currently exercises its RCRA export authority through the regulations specified in 40 Code of Federal Regulations, part 262, subparts E and H. Subpart H applies to federally regulated hazardous wastes to be exported for purposes of reclamation to an OECD member country designated in 40 Code of Federal Regulations part 262.58(a)(1). Subpart E applies to federally regulated hazardous wastes to be exported to a designated country for purposes of disposal, or to Mexico, Canada or any other country⁹ for purposes of reclamation or disposal^{10, 11}. DTSC has adopted regulations equivalent to those federal regulations. (See California Code of Regulations, title 22, chapter 12, article 5, section 66262.50 et seq.)

With regard to CRTs and CRT devices, (for convenience referred to collectively as "CRTs" hereafter) on January 29, 2007, EPA (federal) regulations regarding CRTs (EPA CRT Rule) became effective. (See 71 Fed. Reg. 42928.) These regulations conditionally exclude used CRTs destined for recycling from federal regulation as hazardous wastes. Consequently, when used CRTs are exported for recycling pursuant to the EPA CRT Rule, neither Subpart H nor Subpart E is applicable.¹² The EPA CRT Rule further divides the export notification requirements for CRTs destined for recycling into several categories. Consequently, to comply with Public Resources Code section 42476.5, subdivision (d) for any CRTs (that are CEWs) that you intend to export for recycling or disposal, you should submit (to DTSC) a copy of the documents as indicated in the table below.

⁸ Although states are not delegated authority to implement the export control program through the RCRA authorization process, the states do generally include the export requirements as part of the regulations implementing their authorized programs in an effort to provide completeness and clarity for the regulated entities.

⁹ In addition to requiring compliance with applicable international law, Public Resources Code section 42476.5, subdivision (d), requires a demonstration of compliance with applicable United States law. In applying 40 Code of Federal Regulations part 262, subpart E to these other countries, EPA is implementing export controls required by United States law; specifically, RCRA (42 U. S. Code sec.6938, subd (a)(1)). Consequently, a demonstration of compliance with subpart E notification and consent requirements must also be made for exports to countries that have not entered into a treaty or other agreement with the United States.

¹⁰ See 40 Code of Federal Regulations part 262.58(b).

¹¹ On January 29, 2007, EPA (federal) regulations regarding CRTs destined for reclamation became effective. These regulations exclude CRTs destined for reclamation from federal regulations as hazardous wastes and also include export notification and consent requirements different from those of Subparts E or H

¹² Subpart E is implemented in California through California Code of Regulations, title 22, chapter 12, article 5. Chapter 23 does not authorize CRTs destined for disposal to be managed as universal wastes, Consequently, article 5 continues to be the "applicable United States or applicable international law" for federally regulated hazardous waste CRTs being exported for purposes of disposal.

Table 1
Applicable United States or International Laws for CRT-CEWs

| CRTs are: | And are: | Destined for: | Submit to DTSC a copy of: |
|------------------|------------------|----------------------|---|
| Used | Intact | reuse | Your notification to EPA per 40 CFR 261.41(a) |
| Unused | Intact | recycling | None Required |
| Used | Intact | recycling | Your completed notification submitted to EPA per 40 CFR 261.39(a)(5)(i), and Your Acknowledgement of Consent to Export CRTs from EPA per 40 CFR 261.39(a)(5)(v) |
| Unused | Broken | recycling | None required |
| Used | Broken | recycling | Your completed Notification of Intent to Export CRTs submitted to EPA per 40 CFR 261.39(a)(5)(i), and Your Acknowledgement of Consent to Export CRTs from EPA per 40 CFR 261.39(a)(5)(v) |
| Used or Unused | Intact or Broken | Disposal | Your completed Notification of Intent to Export per 40 CFR 262.53(a), and Your EPA Acknowledgment of Consent from EPA per 40 CFR 262.53(f). |

As can be seen in the table above, the EPA CRT Rule added export notification requirements differing from those in the proposed EPA CRT Rule and in DTSC's universal waste regulations. DTSC has begun modifications to its universal waste regulations regarding the exportation of CRTs¹³. Once adopted, those modifications will align DTSC's regulations regarding exports of CRTs with EPA's final CRT rule. (See 71 Fed. Reg. 42928, 42944.) The purpose of this realignment is not for DTSC to obtain EPA authorization to implement the RCRA export control program in lieu of EPA, but to provide regulated entities with a complete set of applicable federal and state requirements. (See footnote 8 above.)

The EPA CRT Rule also clarified EPA's policy for RCRA hazardous waste, non-CRT electronic devices. (See 71 Fed. Reg. 42930.) EPA's current policy is that non-CRT

¹³ You may review the proposed regulatory language on the internet at:
http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/upload/UWR_Consolidated_regConcept_regText.pdf
 (see amendments to section 66273.40)

electronic devices sent for reuse are not solid wastes (and hence, not hazardous wastes.). Consequently, to comply with Public Resources Code section 42476.5, subdivision (d) for any non-CRT electronic devices (that are CEWs, e.g. flat panel monitors) that you intend to export for recycling or disposal, you should submit (to DTSC) a copy of the documents as indicated in Table 2 below.

Table 2
Applicable United States or International Laws for non-CRT-CEWs

| CEWs are: | Destined for: | Submit to DTSC a copy of: |
|------------------|---------------------------------|---|
| Unused | recycling | None Required |
| Used | reuse | None Required |
| Used | Recycling in a non-OECD country | Your completed Notification of Intent to Export per 40 CFR 262.53(a), and Your EPA Acknowledgment of Consent from EPA per 40 CFR 262.53(f). |
| Used | Recycling in an OECD country | A copy of the applicable Appendix to the OECD Council Final Decision Concerning the Transfrontier Movements of Wastes Destined for Recovery Operations (C(92)39/FINAL) demonstrating whether the non-CRT CEW is a green-, amber- or red-list waste, or an unlisted waste and, as applicable: A copy of the completed written Notification submitted per 40 CFR 262.83(b)(1)(i) for amber- and red- listed wastes and for unlisted wasted (if applicable per 40 CFR 262.83(d)) , and A copy of the written consent(s) received per 40 CFR 262.83(c) for red- list wastes, or per 40 CFR 262.83(d) (if applicable). |
| Used or Unused | Disposal | Your completed Notification of Intent to Export per 40 CFR 262.53(a), and Your EPA Acknowledgment of Consent from EPA per 40 CFR 262.53(f). |

**Question 6:
PRC 42476.5(e)**

Public Resources Code section 42476.5, subdivision (e), requires a person who exports CEWs or CEDs to demonstrate that electronic devices will be managed within the country of destination only at facilities whose operations meet or exceed the binding decisions and implementing guidelines of the OECD for the environmentally sound management of the waste or device being exported. You have asked: "If a written statement by the importing country would be sufficient?"

DTSC Response:

DTSC's review of OECD documents did not reveal any binding decisions of OECD that apply to the management of CEDs or CEWs. Consequently, the demonstration required by section 42476.5, subdivision (e), is not required at this time.

Although OECD has not issued any binding decisions, it has issued non-binding recommendations and implementing guidance that apply to the management of CEDs and CEWs. DTSC strongly encourages you to utilize destination facilities whose operations meet or exceed OECD's recommendations and guidelines. To assist you in this endeavor we are providing the following information:

The controlling OECD legal instrument related to the environmentally sound management of CEWs and CEDs subject to Public Resources Code section 42476.5 is the "Recommendation of the Council on the Environmentally Sound Management of Waste", OECD Document C(2004)100 (June 9, 2004). The basic elements to ensure environmentally sound management of CEWs and CEDs are found in Annex I of the Recommendation.

Specific technical guidance related to desktop and laptop computer monitors is found in "Technical Guidance for the Environmentally Sound Management of Specific Waste Streams: Used and Scrap Personal Computers," OECD Document ENV/EPOC/WGWPR(2001)3/FINAL (February 18, 2003). This document is referenced in Annex II to the Recommendation.

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Thank you for your efforts to comply with the applicable California requirements relative to export notifications. If you have any questions about this letter, please contact Mr. Andre Algazi of my staff at (916) 324-3114.

Sincerely,

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