

TITLE 22 CALIFORNIA CODE OF REGULATIONS

15-DAY NOTICE AND COMMENT PERIOD

**PUBLIC AVAILABILITY OF POST-HEARING CHANGES
AND DOCUMENTS ADDED TO THE RULEMAKING FILE**

September 9, 2019

Photovoltaic Modules (PV Modules) – Universal Waste Management

**Department of Toxic Substances Control reference number: R-2017-04
Office of Administrative Law Notice Reference Number: Z-2019-0409-04**

NOTICE IS HEREBY GIVEN that the Department of Toxic Substances Control (DTSC) has made post-hearing changes to the proposed regulation, adopting the California Code of Regulations, title 22, division 4.5, chapter 23, sections 66260.10, 66273.7.1, 66273.9, 66273.32, 66273.33.6, 66273.34, 66273.37, 66273.51, 66273.70, 66273.71, 66273.72, 66273.73, and 66273.74. The proposed regulation would allow PV modules that are determined by generators to be hazardous waste to be managed according to universal waste management standards in California Code of Regulations, title 22, division 4.5, chapter 23.

DTSC considers these new changes to the rulemaking to be “sufficiently related changes,” as defined in title 1, California Code of Regulations, section 42. DTSC has determined that these changes do not impact the finding of the previously proposed Notice of Exemption prepared pursuant to the California Environmental Quality Act (CEQA).

DTSC mailed the notice of proposed action for this rulemaking and provided links to these documents for public review and comment on April 19, 2019. A public hearing was held on June 10, 2019, during which DTSC accepted written and oral testimony. In addition, written comments were accepted during the 52-day public comment period.

POST-HEARING CHANGES TO PROPOSED REGULATIONS

Modified Regulatory Text

Proposed Regulation

Health and Safety Code section 25259 specifies that DTSC is authorized to add PV modules, that are determined to be hazardous, to its universal waste regulations, which will apply to businesses that generate, transport, handle, and treat or dispose of PV modules in California. The regulation proposed by DTSC establish the management of hazardous waste PV modules as universal waste, an alternative to full hazardous waste management requirements.

Changes to the Proposed Regulation Text

The proposed revisions to the regulation text are necessary to correct errors and omissions to maintain the consistency of language throughout the chapter and to clarify the following:

- Definition of photovoltaic cell, photovoltaic module integrated device, photovoltaic module, photovoltaic system, and scrap metal;
- Applicability of PV modules that are Resource Conservation and Recovery Act (RCRA) hazardous waste;
- Applicability of electronic devices that have integrated PV modules;
- Exclusion of PV module integrated devices to be managed as universal waste PV modules;
- Notification, annual reporting, and recording keeping requirements for the handlers;
- Labeling requirements;
- Addition of requirements for responding to releases;
- Removal, dismantling, and processing treatment requirements;
- Addition of management requirements for residual printed circuit boards found in PV modules; and
- Other changes, such as spelling, restructuring sections, and correcting respective references to align with changes made.

A copy of the revised text is attached. Changes to the regulatory text after the start of the rulemaking process contain the following formatting features:

- New language in the original proposed regulation text is indicated by single-underlining the text.
- Deleted language in the original proposed regulation text is indicated by ~~striking out the text~~.
- Language that has been added since publishing the notice of proposed action is indicated by double-underlining text.
- Language that has been deleted since publishing the notice of proposed action is indicated by ~~double-striking out the text~~.

Document(s) Added to the Rulemaking File

Pursuant to Government Code section 11347.1, subdivision (a), DTSC has added the following documents to the rulemaking file:

- Ostfeld, Aminy E; Arias, Ana Claudia, "Flexible photovoltaic power systems: integration opportunities, challenges and advances," Flex. Print. Electron. 2, 2017.
- Khan, Zulki, "Tapping into PCBs for PV thermal issues," www.CircuitTree.com.
- Solar Energy Industries Association, "Fact Sheet: End-of-Life Considerations for Solar Photovoltaics," May, 2019.
- Solar Energy Industries Association, "Fact Sheet: PV Waste 101," September 2018.

WRITTEN COMMENT PERIOD

A written comment period has been established and is scheduled to commence on September 9, 2019 and conclude at 11:59 PM PST on September 24, 2019.

Any interested persons or their authorized representatives may submit written comments relevant to the proposed regulatory action to DTSC in either electronic or hard-copy formats. Written comments may be submitted electronically through the DTSC regulations email address at regs@dtsc.ca.gov. Written comments can be directed to Ms. Jackie Buttle, Regulations Coordinator, as specified below. Only comments received at the DTSC office by that date and time will be considered.

CONTACT PERSONS

Inquiries regarding technical aspects of the proposed regulation or CEQA documents may be directed to Dr. Chosu Khin of DTSC at (916) 324-2428 or, if unavailable, Ms. Jessica Twining of DTSC at (916) 445-2959. However, such oral inquiries are not part of the rulemaking record.

AVAILABILITY OF MODIFIED TEXT AND ALL OTHER RULEMAKING DOCUMENTS

Copies of the revised text of the proposed regulations and documents added to the rulemaking file are posted to DTSC's Internet website at <https://dtsc.ca.gov/regs/> or may be obtained upon request from the Regulations Coordinator listed below.

Ms. Jackie Buttle
Office of Legislation and Regulatory Review
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806
Fax Number: (916) 324-1808
TTY/TDD/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

Copies of the Notice of Proposed Action, Initial Statement of Reasons, all the information upon which its proposal is based, and the express terms of the proposed regulation (also known as the proposed regulatory text), are posted to DTSC's Internet website at <https://dtsc.ca.gov/regs/> or may be obtained from Ms. Jackie Buttle, Regulations Coordinator, as specified above.

After the close of the comment period, DTSC may adopt the proposed regulation. If substantial changes are made, the modified full text will be made available for comment for at least 15 days prior to adoption. Only persons who request the specific proposed regulation, attend the hearing, or provide written comments on this specific regulation will be sent a copy of the modified text if substantive changes are made.

Once the regulation has been adopted, DTSC will prepare a Final Statement of Reasons that updates the Initial Statement of Reasons, summarizes how DTSC

addressed comments, and includes other materials. A copy of the Final Statement of Reasons will also be posted on DTSC's Internet site at <https://dtsc.ca.gov/regs/>, along with the date the rulemaking is filed with the Secretary of State and the effective date of the regulation.

Please direct all written comments, procedural inquiries, and requests for documents by mail, e-mail, or fax to Ms. Jackie Buttle, Regulations Coordinator, as specified above. To be included in this regulation package's mailing list and to receive updates of this rulemaking, please visit <https://dtsc.ca.gov/dtsc-e-lists/> and subscribe to the applicable EList or e-mail: regs@dtsc.ca.gov.