

Carpet

The Problem

According to CalRecycle's [2018 Waste Characterization Study](#), nearly 630,000 tons of carpet was landfilled in California. It is bulky and difficult to manage and has the fourth largest greenhouse gas footprint of any product waste in California. According to the U.S. Environmental Protection Agency, every year [4 billion pounds of carpet are discarded](#) in the U.S. and only about 1 percent is recycled.

Carpet Stewardship – California is the First in the World

In 2010, CPSC worked with carpet manufacturers, recyclers, the [Carpet America Recovery Effort \(CARE\)](#), and Assembly Speaker John Perez to pass the first product stewardship legislation to support the recycling of waste carpet, [AB 2398](#). This legislation was not entirely successful, so warranted a new bill, [AB 1158](#) sponsored by our national affiliate the [National Stewardship Action Council \(NSAC\)](#), to fix some issues. AB 1158 was signed by Governor Brown on October 14th, 2017. In 2019, NSAC sponsored a third bill amending the California carpet stewardship program, [AB 729 \(Chu\)](#). This legislation that paves the way for the state to reclaim over \$15 million in carpet recycling fees used to support California carpet collection and recycling businesses, protecting its recycling infrastructure from the carpet recycling program administrator, [Carpet America Recovery Effort \(CARE\)](#), which is headquartered in Georgia. The bill added the requirement that differential assessments take into account the financial burden that a particular carpet material has on the stewardship program, and the amount of post-consumer recycled content contained in a particular carpet. This national precedent of "eco-modulated fees" will show the consumers which products are more recyclable and less toxic with a lower fee compared to the carpet types with a higher burden on the stewardship program achieving its legislated goals.

Carpet America Recovery Effort (CARE)

CARE is a joint industry-government effort to increase the amount of recycling and reuse of post-consumer carpet. CARE administers the California Carpet Stewardship Program, which is charged with meeting the requirements for carpet recycling set by AB 2398 and managed by CalRecycle. CARE's 2017-2021 California Carpet Stewardship Program was rejected by CalRecycle many times for not meeting [statutory requirements](#). On January 13, 2020, after approving CARE's Plan on the condition they achieve everything they included in the [Approved Chapter 0](#) to the Plan. Pursuant to CalRecycle's [November 19, 2019, Request for Approval](#), [CARE submitted timelines](#) agreed upon by CalRecycle staff, that it shall meet to fulfill the remaining requirements of Chapter 0 and new statutory requirements established by the enactment of Assembly Bill 729.

However, CARE has not been making significant progress to increase recycling and CalRecycle has submitted an [accusation](#) and a possible fine of over \$3 million for failure to meet the legislated standard of continuous and meaningful improvement. On December 19, 2017, CalRecycle concluded that CARE's Annual Report for 2016 [failed to demonstrate compliance with the carpet law](#), even after the Department found CARE non-compliant in 2014, 2015, and had requested CARE to implement changes. In February, 2018, CalRecycle agreed to [lower civil](#)

[penalties](#) against CARE from \$3.2 million to \$1 million, but found CARE [out of compliance again for the 2016 Annual Report](#) for an additional \$1.8 million in penalties. In June 2018, CalRecycle [decided to delay enforcement](#) of non-compliance for CARE until the decision is made regarding their final submission of the [Carpet Stewardship Plan 2018-2022](#) in order to allow public consideration of the revised Plan. In March 2020, CalRecycle referred CARE to enforcement. The Court officially upheld CalRecycle's decisions regarding CARE's noncompliance in 2021, in which CalRecycle and CARE settled on an agreement where CARE would pay CalRecycle \$1,175,000 in administrative penalties.

CalRecycle once again disapproved of CARE's Annual Report in 2022, citing that their 2021 Annual Report did not meet all the requirements in statute, regulations, and its 2018 to 2022 Plan. That same year, CalRecycle disapproved [CARE's California Carpet Stewardship Plan 2023 to 2027](#), but conditionally approved the revised version in early 2023.

Department of Toxic Substances Control (DTSC) Safer Consumer Products

The Safer Consumer Products (SCP) program uses a four-step process to reduce toxic chemicals in the products that consumers buy and use. DTSC identifies specific products that contain potentially harmful chemicals and reviews safer alternatives. Carpets and rugs treated with PFASs for stain- or soil-resistance are potential long-term sources of widespread human and ecological exposures to this class of chemicals. In February 2018, DTSC released a Product-Chemical Profile for carpets and rugs with PFASs. In May 2020, DTSC proposed to adopt regulations listing Carpets and Rugs Containing PFAS as a Priority Product, which was adopted on July 1, 2021.

- [CPSC Coalition sign-on letter supporting DTSC's proposed regulations 5/15/20](#)
- [DTSC Final Regulations: Carpets and Rugs with PFASs](#)

Recycled Carpet Products and Market Development

There are many products on the market that use recycled carpet materials in their production. Here are some examples of companies leading the market in creating products that improve the market for carpet recycling.

- [Aquafil manufactures nylon from post-consumer recycled materials in their Eco-nyl product, used in many eco-fashion oriented products](#)
- [Aquafil Carpet Recycling Facility: Tour and Interview Hosted by CPSC](#)
- [DSM-Niaga creates fully recyclable carpet using their new glue technology](#)
- [Interface Carpet manufacturers incorporate sustainability into their business and product design for carpet](#)
- [Fiberon Composite decking uses post-consumer wood and plastic in their production process](#)
- [SafePath](#) and [Sierra Rubber Products](#) use recycled carpet and tires in their manufacturing process
- [DGS and CalRecycle Report to the Governor and the Legislature about carpet procurement standards in CA- 2014](#)

Carpet Procurement Standards- San Francisco

San Francisco Department of the Environment adopted new sustainable [carpet purchasing requirements](#) into regulation that are among the strictest in the nation. It limits City purchases to certain, recycled, commercial, hard-backed carpet tiles because they allow for easy replacement and minimize waste.

Highlights of the regulation include a ban on these toxic chemicals in carpet tiles and broadloom (rolled) carpet:

- Antimicrobial chemicals because they can make bacteria resistant to antibiotics and disrupt our hormones. It is not necessary for city department carpet to have antimicrobial chemicals.
- Flame retardant chemicals because they do little, if anything, to slow or prevent fire. They migrate out of products and escape into our air, dust and our bodies. And they're associated with [cancer](#), [lower intelligence quotient \(IQ\)](#), and [reproductive harm](#).
- Per- and poly-fluoroalkyl substances (PFAS) because they are associated with [cancer](#), [high cholesterol and obesity](#). So San Francisco's regulation requires carpets to have cationic nylon yarn. It is soil stain resistant and does not require toxic fluorinated chemicals.
- Polyvinyl chloride (PVC) because it usually has phthalates (some of which disrupt our hormones and probably causes cancer), and sometimes it has lead (which can cause reproductive problems and nerve disorders), and when PVC is made or disposed, it releases cancer-causing dioxins.

To learn more, watch [this webinar](#) on the San Francisco carpet procurement standards.

Carpet Procurement Standards- Woodland Unified School District

In 2017-2018, parents became alarmed when children were sickened after new carpet was installed in four classrooms at Beamer Park elementary. The trustees voted not to remove the carpet at Beamer Elementary on February 8, 2018, but the [Woodland Coalition for Green Schools](#) kept researching and organizing around the issue. On 12/19/19, the Woodland Joint Unified School Trustees unanimously adopted a new sustainable floor policy that bans PFAS, lead, 4-PC, PBDEs, phthalates, and other hazardous chemicals commonly found in school carpets.

Research & Relevant Articles

- [CARE's Five-Year Plan Approved by CalRecycle](#) - Floor Daily, 04/24/23
- [Canary Science in the Mineshaft of the Anthropocene](#) - Grandia, 09/01/21
- [Suspect Screening, Prioritization, and Confirmation of Environmental Chemicals in Maternal-Newborn Pairs from San Francisco](#)- Environmental Science & Technology, 3/22/21
- [Regulating PFAS as a Chemical Class under the California Safer Consumer Products Program](#)- DTSC, 2/2021
- [Scientific Basis for Managing PFAS as a Chemical Class](#)- Environmental Science & Technology Letters, 6/12/20
- [Tackling carpet recycling head on](#)- American Recycler, 5/6/20
- [Consequences of Carpet Waste and the Push for Stewardship Programs](#) - Waste360, 8/1/19

- [Dangerous wildfires show need to detoxify carpets](#) – San Jose Mercury News, 1/26/19
- [US Carpet EPR Toolkit](#)– Eunomia, 1/24/19
- [Testing Carpet for Toxics: Chemicals affecting human health and hindering the circular economy](#)– GAIA, 12/13/18
- [Joint statement for a circular carpet sector](#)– Zero Waste Europe, 12/5/18
- [Testing for Toxics: How chemicals in European carpets are harming health and hindering circular economy](#)– Changing Markets, 10/2018
- [A Carpet Manufacturer’s Sustainability Story](#)– Waste 360, 9/13/18
- [Toxics in Carpets in the European Union](#)– Jessica Onyshko and Dr Rob Hewlett, Anthesis Consulting Group, 3/5/18
- [Product-Chemical-Profile-PFAS-Carpets-and-Rugs](#) – DTSC and CalEPA, 2/24/18
- [Household Dust as a Repository of Chemical Accumulation](#). Christoph Moscet et al., Environmental Science and Technology, 1/31/18

Links

- [CalRecycle Carpet Webpage](#)
- [CARE AB 2398 Webpage](#)
- [U.S, EPA Environmentally Preferable Purchasing: Carpet](#)