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CPSC is a powerful network of local governments, non-government organizations, businesses, and individuals supporting policies and projects where producers share in the responsibility for managing problem products at their end of life. CPSC's mission is to shift California's product waste management system from one focused on government funded and ratepayer financed waste diversion to one that relies on producer responsibility in order to reduce public costs and drive improvements in product design that promote environmental sustainability.



Funding provided by our grant partners:



















#### **Executive Summary**

Single-use 1 lb. propane cylinders power equipment used for a variety of applications, including camping, heating, and landscaping. However, they are often improperly disposed and pose safety, economic, and environmental issues. Refillable, reusable 1 lb. propane cylinders provide a great solution to reducing the waste and fire risks of single-use cylinders. California residents buy and refill these reusable cylinders at retailers across the state, yet policy reform is still needed to support reusables and cylinder producer responsibility programs.

### **Background Information**

Each year, about four million single-use 1 lb. propane cylinders are sold in California alone. These cylinders power equipment and can be used for camping, cooking, landscaping, heating, and a variety of other applications. Once used, consumers must dispose of these cylinders, but unfortunately are often disposed improperly and at significant cost to local governments and parks. For instance, Yosemite National Park collects around 20,000-



Single-use cylinders collected at Yosemite National Park in 2021

25,000 1 lb. propane cylinders every year. Safely disposing these cylinders cost the Park labor and money, which is ultimately funded by taxpayers.<sup>1</sup>

According to CalRecycle, nearly 130,000 lbs. of propane cylinders were collected across California in all collection methods, including: permanent facility, temporary collection events, recycle-only facility, door-to-door residential program, and others.<sup>2</sup> CalRecycle also estimates that over 1,700 tons (or 3.4 million pounds) of 1 lb. propane cylinders ended up in the waste stream in 2018.<sup>3</sup>

Considered hazardous waste in California, 1 lb. propane cylinders often end up in landfills due to a lack of education and a convenient collection system. When improperly disposed, these cylinders can cause fires and explosions.<sup>1</sup> Waste management facilities (MRFs) have been experiencing fires caused by single-use cylinders for years, with many unreported. A Sunnyvale MRF suffered a fire in 2015 when a cylinder exploded and destroyed \$3,000 worth of processed and baled cardboard.<sup>4</sup> Two years later, a materials recycling facility in Michigan suffered an explosion that was caused by three 1 lb. propane cylinders.<sup>5</sup>

Not only are collection systems limited, these 1 lb. propane cylinders are difficult to recycle and once discarded cannot be presumed to be empty. Even a small amount of propane gas under pressure is dangerous and presents a risk to sanitation workers. Typically, empty cylinders are not allowed in mixed recycling bins and are collected separately at parks, household hazardous waste facilities, and transfer stations and are then shipped to a processing facility that handles cylinder evacuation.

# Reusable Alternatives to Single-use 1 lb. propane cylinders

Reusable 1 lb. propane cylinders save the consumer money- after about 4 refills, these reusable 1 lb. propane cylinders pay for themselves very quickly. Flame King and Little Kamper both offer

reusable 1 lb. propane cylinders as an alternative to single-use cylinders, reducing the number of cylinders that our local governments and parks must manage.<sup>6</sup>

The ReFuel Your Fun & \$ave! (RFYF) program, created and administered by the California Product Stewardship Council (CPSC), promotes reusable 1 lb. propane cylinders and cylinder stewardship. Funded through a grant from CalRecycle, RFYF educates the public about the dangers and environmental impact of single-use cylinders and sites collection receptacles at parks across the state.



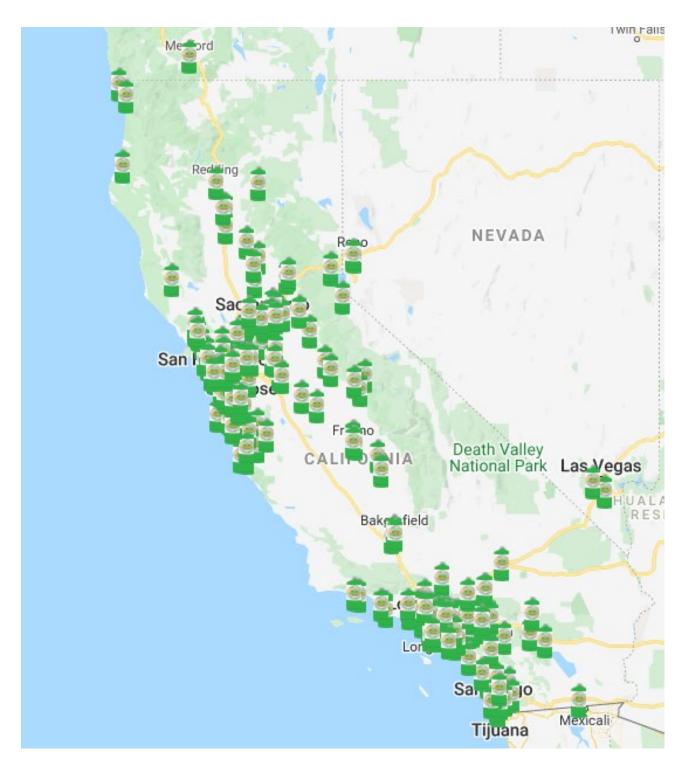
RFYF campaign staff recruits retailers and refill locations of reusable 1 lb. propane cylinders, which can all be found on the <u>RFYF map</u>. RFYF also hosts exchange events, where residents bring empty single-use cylinders and receive a free, reusable one by signing a propane pledge.



RFYF staff hosted Propane Cylinder Exchange Events. Top left going clockwise: Butte County, West Contra Costa County, Yolo County, City of Huntington Beach

# **RFYF Map**

Many sales and/or refill locations already exist in California and more are being added. Click on the map below to find one near you.



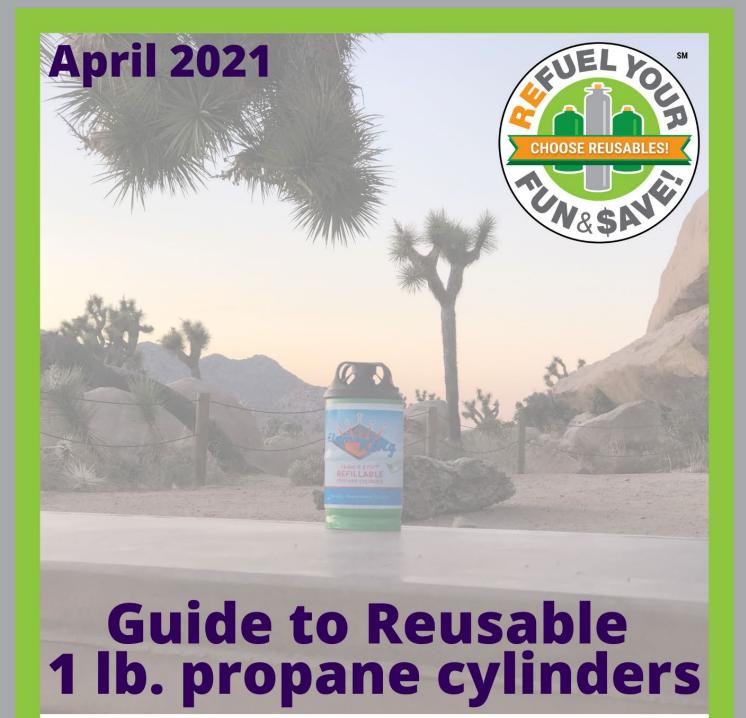
# Next Steps

To reduce waste, save local governments money, reduce the risk of fires, and protect the environment, cylinder product stewardship in California is necessary. Across the county, the Connecticut Product Stewardship Council was instrumental in crafting and introducing the Connecticut Gas Cylinders Bill<sup>7</sup> which would establish a gas cylinder stewardship program including collection, end-of-life management, and recycling and reuse requirements.<sup>8</sup> In the 2020 Preliminary Policy Recommendations Report, the CalRecycle Statewide Commission on Recycling Markets and Curbside Recycling worked with CPSC's recommendations to craft a policy proposal.<sup>5</sup> The policy proposal called for an extended producer responsibility program for cylinders, which would shift the burden of single-use 1 lb. propane cylinders from local governments to the producers. The proposal also included promotion and education of reusable, refillable 1 lb. propane cylinders.

Buy a reusable 1 lb. propane cylinder before your next adventure! Find retailers and refillers at: www.ReFuelYourFun.org.

# Sources

- 1. Propane Tanks Wreak Havok at MRFs and Disposal Site- Waste360, 5/23/19
- 2. Form 303 HHW Aggregate Statewide Data (in pounds)- CalRecycle, 2019-2020
- 3. 2018 Facility-Based Characterization of Solid Waste in California- CalRecycle, 5/15/20
- 4. <u>California Adds Fourth R-Refill- to Keep Propane Tanks Out of the Trash-</u> Waste360, 8/24/15
- 5. <u>Statewide Commission on Recycling Markets and Curbside Recycling: Policy</u> <u>Recommendations</u>- CalRecycle, 12/21/20
- 6. Little Kamper debuts 1-pound propane tank exchange- LP Gas Magazine, 3/12/21
- 7. <u>CT PSC support letter</u>
- 8. <u>Raised Bill No. 6386</u>- State of Connecticut General Assembly, 2021



# www.ReFuelYourFun.org



