

Gas Cylinders

The Problem

Gas cylinders power equipment used for camping, cooking, landscaping, heating, and a variety of other applications. Despite being a convenient commodity, they are a nightmare for landfills, material recovery facilities (MRFs), and our State/National Parks. Each year, [Yosemite National Park](#) alone collects between over 20,000 non-refillable gas containers, primarily 1 lb. propane cylinders, isobutane, and canisters containing butane. If improperly disposed, these gas cylinders pose as a threat to human and environmental health due to the release of harmful gases which can lead to fires and explosions.

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. Very rarely, as in the case of [Santa Cruz County](#), a cylinder that is completely empty can be placed in the curbside mixed recycling cart so it is important to check with your local waste hauler for direction. It is expensive to remove remaining gas and ensure metals are recycled and costs about \$1.25 to recycle each cylinder when they cost around \$4.50 to buy one.

Of particular concern are 1 lb. pound disposal propane gas cylinders. There are 30 million cylinders sold in the U.S. each year and an estimate over four million in California alone. Once used, consumers must dispose of these cylinders and often improperly and at significant cost to local governments and parks. When consumers purchase a cylinder, **80 percent of the cost is for the cylinder itself and 20 percent is for the gas.**

Refilling disposable one pound cylinders is illegal.

On November 28, 2014, the U.S. Department of Transportation (DOT) issued a safety alert, “Prohibited Refilling of DOT 39 Specification Cylinders” regarding refilling disposable cylinders. The alert strongly recommends that the general public not refill DOT 39 cylinders, and outlines fines. Additional information on California and Federal laws and regulations pertaining to the refill of disposable cylinders can be found [here](#). The DOT also produced a [propane safety video](#) and poster to educate the public about the dangers of refilling single-use propane cylinders.

Disposable Cylinder Facts

- In 2014, Sequoia & Kings Canyon National Park spent \$2,656 and shipped 2,125 cylinders for proper handling and recycling.
- According to the City of Sunnyvale between 2010 – 2013 more than 16,000 cylinders were processed through the SMaRT Station (where the trash for Sunnyvale, Mountain View and Palo Alto is processed before being landfilled), at a **cost of over \$144,000** to the cities for their proper disposal. [SMaRT Station Gas Cylinder Fact Sheet](#).



Supporting Cylinder Stewardship

The ReFuel Your Fun and \$ave! campaign was developed and is administered by CPSC, in conjunction with local government agencies and other partners, through a grant from CalRecycle. [Click here](#) for the ReFuel Your Fun website. Please ask retailers in your community to sell or provide refill or exchange services. [Click here](#) for a sample letter.

Research & Relevant Articles

- [Fire inside gazebo at Don and Ann Davis Park](#), Newport News Times, 12/16/22
- [The Best Refillable Propane Tank Options](#), Outside Online, 7/13/20
- [Propane Tanks Wreak Havoc at MRFs and Disposal Sites](#), Waste360, 5/23/19
- [Beyond the Numbers Radio Show](#), Money 105.5 FM Wall Street Business Network, 7/6/16
- [Campaign Targets Disposable Propane Tanks](#), Steve Milne, Capital Public Radio, 6/3/16

Shown below:

Tailgater with the Little Kamper, Kamps Propane; A little camper seen with the Little Kamper, [Kamps Propane Website](#); and Refillable one pound cylinders powering landscaping equipment.

