

Propane Mowers



Source: www.TurfMagazine.com

The lawn care industry is starting to take notice



These mowers are all powered by propane.
PHOTO COURTESY OF JIM COKER.

I have been called the godfather of propane mowers, which brings me satisfaction that I have been somewhat instrumental in seeing propane mowers get recognition. However, a friend and colleague of mine, Dave Calver, was the first to patent a “low-polluting lawn mower” that was powered by propane and patented in December 10, 1996, patent number 5,581,986, and assigned the name EnviroGard. Onyx Environmental Solutions currently holds this patent and supplies many manufacturers with EPA and CARB-certified kits for numerous small engines, mainly Kawasaki.

In 2004, I joined Dave and others and soon became president of Onyx. I approached all the mower manufacturers about producing propane-powered mowers; their response? “No one is asking for propane mowers,” and “There are no engines certified on propane for this application.” Dave and I came from the janitorial service industry in which we both were involved in propane burnishers (buffers) that were introduced in the early '80s and now used almost every night in every retail chain in this country. The majority of these propane buffers are powered by Kawasaki engines and are safe for indoor use. Now to get the lawn and garden industry to convert is the challenge.

What Is Propane?

Propane is a hydrocarbon (C₃H₈) and is sometimes referred to as liquefied petroleum gas, LP-gas or LPG. Propane is produced from both natural gas processing and crude oil refining, in roughly equal amounts from each source. Nearly 97 percent of propane consumed in the United States is produced in North America. It is nontoxic, colorless and virtually odorless. As with

natural gas, an identifying odor is added so the gas can be readily detected.

Is propane dangerous to the environment?

No. Propane is an approved, clean fuel listed in the 1990 Clean Air Act and the Energy Policy Act of 1992, and is one of the cleanest burning of all fossil fuels. Tests conducted by the U.S. Environmental Protection Agency show that propane-fueled vehicles produce 30 percent to 90 percent less carbon monoxide and about 50 percent fewer toxins and other smog-producing emissions than gasoline engines. Propane also is nontoxic, so it's not harmful to soil or water.

Who uses propane?

Propane is used by millions of Americans each day.

People use propane in and around their homes for furnaces, water heaters, air conditioners, outdoor grills, fireplaces and appliances. On farms, propane-fueled equipment and technologies control pests, dry crops and power irrigation pumps. Industrial uses include propane-driven forklifts and fleet vehicles. And, millions of commercial establishments, including restaurants and hotels, depend on propane for heating, cooking and other uses.

Is propane really convenient to use?

Yes. Up to 56,000 miles of pipeline and more than 6,000 retail dealer locations make propane readily available throughout the United States. And because propane is stored in portable tanks, it can be used in areas beyond gas mains.

To fuel homes, large tanks can be buried underground, because propane is a nontoxic, nonpoisonous fuel that doesn't contaminate aquifers or soil. Refueling a propane vehicle takes about the same time as refueling a gasoline vehicle, and propane is the only alternative fuel with fueling stations located in every state.

Propane is a safe and environmentally friendly fuel that is available now and widely used throughout the United States in homes, on farms, on the road, and in industrial and commercial operations.

Source: www.propanecouncil.org.

My plans are to educate professionals in the industry on propane as an engine fuel, discuss the different options that manufacturers have and to answer questions that you, the reader and consumer, have. No doubt you have heard many conflicting things about propane and propane accessories. I want to direct you to the facts and where you can get accurate information, therefore if you have comments, questions or recommendations, please send them to us. Let's begin with "Why Propane Mowers?"

There are around 1 million commercial mowers that run every day in our

country. It is estimated that 5 to 10 percent of our pollution comes from the lawn and garden industry. John Watson, a landscaper in Knoxville, Tenn., said, "We have been in the green industry before it became the green industry, and we should protect where we work." John converted his fleet over to propane last year. Propane as an engine fuel is much cleaner to burn than gasoline or diesel, which I will discuss in the next article.

There is also another compelling reason to switch to propane: reducing the need for foreign oil. It is estimated that these 1 million commercial mowers use an estimated 1.5 billion gallons of fuel each and every year. According to T. Boone Pickens, we send \$1 billion a day to OPEC, where our military are fighting. In effect, according to Pickens, "We are paying for both sides of the war. It's a national security issue." Yes, our military force is in countries where our money is being sent for oil. Propane is a domestic fuel with no dependency on foreign oil.

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