By Kevin Farrell

Going Green

It's Responsible. Can it Also Be More Effective?

Above: Steam and pressure combined will clean a wheel with very little water.

We have all heard these terms recently: "going green," "eco friendly," and "environmentally safe." Often, they are more than just catch phrases. We know what they mean and why we should heed the call. Some of us may drive more-fuel-efficient automobiles or hybrids, we may use energy-saving light bulbs in our homes, we all hopefully recycle as much as we can, but when we look at "going green" from a car care point of view what does that mean to us?

Unfortunately, many of us may look at this as a nuisance. We are all creatures of habit and are used to doing things a certain way. We have to look at what we have been doing and examine how we can change to satisfy the demands of the green trend. Can we be as effective, or more effective, and still be environmentally friendly? Going green does not need to slow us down, nor prevent us from getting cars as clean as we are used to.

OLD SCHOOL

Before we look at the "new school" or eco-friendly ways to clean and detail cars, let's look at the "old school" ways.

Car Washing

There has never been any one way to clean something, especially an automobile, other than using large amounts of water and soap. We wet the car and rinse it first, then wash the car with a soapy solution to lift the dirt, and then rinse the entire vehicle with large amounts of water. It always seemed to work and it has always been an accepted process. Nobody has ever told us otherwise. However, we are now being told!

There are drought problems all over the country, which could severely limit the amount of water (if any) that can be used to wash a vehicle. There are also major concerns about polluting our streams and rivers — something few really cared about years ago. Some foreign

Right: An example of a pressure steam cleaner that will wash a car in about the same time as the conventional method with 70 percent less water.

countries are not even allowing homeowners to wash their vehicles at home anymore. There was an article not too long ago in the *Wall Street Journal* about the banning of driveway car washing in some towns right here in the United States. Many municipalities are now keeping an eye on car washes and how much water they use. They must reclaim and recycle the water being used and the water needs to be treated before it can enter a sewage system. Mobile detailers need to know the rules about water usage and reclaim in the areas that they service as well. The problem is *real* and it's not going away.

Volatile Organic Compounds

Not only is car washing a major environmental issue in general, but so are the kinds of cleaners that we use on vehicles to get them clean. We know that soap will not clean much more than light dirt. Once the cars get caked with heavy soils and grease and ground in crud, we need other, stronger, more dangerous and less environmentally friendly products and cleaners to get the cars clean. Our use of high pH (alkaline) all-purpose cleaners and degreasers is one example. Wheel acids are another example. Heavy solvents such as lacquer thinner, gasoline, and kerosene (yes, some detailers still use this to remove grease from interiors as well as tar from the outside of the car) are perhaps extreme examples. Even the buffing products we use are not very environmentally friendly.

The operative measurement here is VOCs (Volatile Organic Compounds). This is a measure of the amount of pollutants a product emits into the atmosphere. Car manufacturers and body shops are familiar with this measure — they need to keep strict track of what products they are using and the VOC level of each. They must chart the use and the waste of those products and safely get rid of them, or face heavy fines or closure. The companies that make these products are themselves under strict limitations regarding the level of VOCs in each product. If it's over a specified number, they must go back to the drawing board. This is affecting us already, and you may not even know it.

Reformulation

Many of you might have noticed that a great product you used to use is either no longer available, or has changed — sometimes for the worse? You may also have noticed that the prices of some products are heading northwards. The manufacturing companies have had to reformulate many of their products to meet the new VOC guidelines and become more eco-friendly. Almost every buffing product and cleaner has some degree of solvent in it. This aids in the formulation and mixing of the products and assists in the way it performs and cleans.

Some solvents are very harsh — for both you and the environment — and have been outlawed. There are now new, safer solvents in almost every product. Some detailers feel that the new products do not clean as well as the old ones did. In some

cases this may be true, but the unsafe and dangerous products are a thing of the past. We are "going green" whether we like it or not. So how do we embrace it?

NEW SCHOOL

How do we apply this "going green" idea in our businesses and use it to our benefit? Let's look at some solutions.

Soap

Washing with conventional soap is actually a 100-year-old technology. Soaps require rinsing first and having something, in this case the vehicle, already wet. The soap will only emulsify and lift the dirt because water (and lots of it) is present. Then, water (and lots of it) must be used to flush and rinse the surface to remove all the dirt, oils, and soapy residue. If any soap is left on the vehicle, we will see streaks and hazing, and the surface will be sticky. The other bad thing about soap is that you cannot re-emulsify soap once it dries. You basically need to repeat the process to get the same results. Also, believe it or not, many soaps are actually aggressive and can cause more harm than good. Many will strip wax, leaving the paint surface less glossy and slick than when you began. This is very "old school." There is an alternative.

Polymers

The newer technologies — designer polymers — are being used to clean vehicles with very little water or no water at all. This is the "new school" way. Polymers can be made to do many things. They can be linked and chained together to accomplish anything that is needed — in this case getting a paint surface clean. These polymers have a much better ability to dissolve oils and grease, emulsify dirt, and lift it off a vehicles' surface with less product and much less water. The polymer creates a barrier between the paint surface and the dirt and carries it away. The polymers bond better to the dirt and will also bond to the paint surface leaving it with more gloss, a much slicker feel, and even some protection. Many of these new special designer polymer products can be used with a small amount of water mixed in a bucket. The cleaning operation is simple: immerse a microfiber towel in the bucket, and go about wiping the car down and freeing the dirt. This will even work on an extremely dirty vehicle.

There is also a method of no-water washing where "spray wash" products can be used to spray on a dirty surface and simply wiped away. These products need to totally "wet" and encapsulate the dirt, but once wet, the dirt can be wiped away in the exact same manner. Both are excellent choices.

Time Factor

Time is always a factor in detailing. We prefer to get a car done sooner rather than later. I have always thought

that the best practice was to start by washing a car the conventional way if possible. This consists of pre-wetting the car, using soap to wash the car, rinsing it off, and drying it. This does take time but has always shown to be effective. There is no argument there. However, by using the new polymer technology, we are saving a few steps. We save the pre-rinsing step (if the car has not been, let's say, four-wheeling), and we save the post-rinsing and drying step. We still need to wipe the car down and remove the dirt, which may take a bit more time because we will be constantly dipping our towel in the bucket and basically moving "panel to panel." So, in some cases we may save time on a less dirty vehicle and we may add a bit more time on very dirty vehicles.

However, we need to look at a few things. Some detailers are now being "forced" to find unconventional ways to wash. This is a fact. In drought areas it can be seen already. Water restrictions are in place and may not go away anytime soon. Even if you're in an area of the country that is not currently water restricted, you probably have been through it at one time or another. It's far better to have an alternative readily available and stay in business, even if washing takes slightly longer, than to be shut down because of water restrictions. I was initially very skeptical of these new methods and of "designer polymer technology." Until you have actually tried it and have seen it work, you may never believe it. It does work and vehicles will get clean, they will have a great gloss, and they will have a slick feel.

Steam

Let's say you work on *very* dirty vehicles all the time. Let's also say you are a mobile detailer working in a cold climate where even if water is allowed, it may freeze on a vehicle during the winter months. We have all had challenges of trying to wash a cold car. Metal and glass hold cold very well and freeze very quickly. Water hitting a cold vehicle can freeze almost instantly. Water hitting the ground will also freeze very quickly. This creates a hazardous situation, making washing a car almost impossible no matter what kind of product you are using. Steam is probably the answer you've been looking for.

A great — not just good, and certainly not a cheap — steam machine can do wonders on the outside of a vehicle. To be able to pre-wet the paint surface (or any surface) with nothing more than extremely hot water vapor can be a huge asset in "green" cleaning. There will be almost no water runoff, and you can use one of these "great" steamers to help wash and rinse the car. It can help clean all areas of the vehicle including wheels, doorjambs, rocker panels, and even engines without slowing you down, or running out of steam.

Again, I was a skeptic until I purchased a high-quality steam machine and saw what it can accomplish. These machines can make a significant contribution to "green" cleaning and actually help you stay in business. It's a great advertising and selling tool to a customer. Don't forget that in cold climates, this machine will keep you working. It can "thaw" vehicles and allow for the products to work. If the temperature is below freezing, it's no problem. The steamer will warm the car up, melt any ice or frost, or even melt snow, allowing you to work in harsh conditions.

One step up from the "great" steamer is the "greater" steamer that will work for you even faster and more effectively. Greater steamer units are heated by propane and are basically a combination steamer and pressure washer — but the water output is far less. The units combine a small amount of water injected along with very hot steam and run at about 600 psi to produce cleaning like you have never seen before. While these units use slightly more water than a conventional steam machine, they will be much faster to use and even more effective. They will also inject your favorite designer polymer cleaning solution at the gun tip to further help clean the vehicle. The water savings are immense and the results are fabulous.

CHANGE ON THE HORIZON

Whether we like it or not, change is coming. Gone will be the old school ways of car washing, possibly even for conventional car washes. However, instead of being resistant to change, embrace some of the newer greener methods. Luckily the technology is *now* available to make these changes. Consumers are looking for detailers who are eco friendly. Consumers are looking for *everything* that is eco friendly. Using these new products and equipment will not only make you an environmentally friendly detailer, it will produce the results that you are used to and maybe even save you some time. It may even keep you in business. And, if you advertise about being green and eco friendly, you will surely attract more customers. You will certainly generate more interest when people see you using different equipment, products, and techniques than they are used to seeing. "Going green" is not just a catch phrase anymore. It's a way of life. Embrace it!

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