

# Are You Sure You Want Green Cleaning?

“Well, of course I want “green” cleaning in my home,” you say. But what does that mean? If I followed you into Wal-Mart or Home Depot, would I see you making “green” choices?

“Well, I’m not sure,” you say. “I’ve always used Mr. Clean (sodium hydroxide, aka caustic soda), and Spic n’ Span (TSP - tri-sodium phosphate), and Chlorox bleach (which killed a toddler who taste-tested the new lemon flavor).”

By one definition, none of these products are “green” because you would be ill-advised to drink them. (We won’t even talk about your bowl cleaner, oven cleaner, window cleaner, and your drain cleaner.)

On the other hand, these products weren’t formulated to drink. They were formulated to do a job. What if they didn’t do their job? And, if you’re afraid someone in your family will be tempted to lick a surface you’ve just cleaned, all you have to do is rinse.

Dr. Michael Berry, retired research scientist for the E.P.A., sponsored two ground-breaking scientific investigations of the interaction between carpet cleaning and indoor environment quality improvement. After spending a million in taxpayer dollars, guess what he concluded. “Cleaner homes are healthier homes.” Then he wrote the book, “Cleaning for Health, Protecting the Built Environment.” One might tend to get confused enough to think that thorough cleaning with Mr. Clean, Spic n’ Span, and Chlorox was a “green” process. Indeed, by one definition, it is.

Dr. Berry is concerned that the politically correct “rush to green” in the two most health-threatening environments on the planet (government buildings, where maintenance is minimal and by lowest bidder, and health-care facilities where over 2 million people in America are infected every year<sup>1</sup>) has had some pretty ridiculous consequences.

Everyone knows that the politically correct banning of DDT to control insects like disease-carrying mosquitoes means we now have 500 million cases of malaria per year worldwide. You might think that banning DDT was an environmental imperative, but I doubt if the loved ones of those who died of malaria would agree with you. But who’s opinion is most important? (That was a trick question - mine is.)

The irresponsible switch to “green” chemicals (disinfectants that are non-toxic - oxymoron, anyone?) have resulted in massive outbreaks of infectious disease in healthcare facilities (in addition to the 2 million?) according to Dr Berry’s research. And, as maintenance technicians apply new “friendlier” cleaning formulae to remove soil from a surface, and it doesn’t work, the response is to use more. When these non-toxic residues build up, we have a very nice mold farm. For decades, they’ve said that 90% of Americans are subjected to “Sick- building-syndrome” either at work, school, or home. That’s mostly because of mold, which only needs moisture to thrive. That statistic is now getting worse. No problem! We have Walgreens. (Mold and mildew contribute to allergies and other respiratory ailments).

<sup>1</sup>According to a Center for Disease Control study published in USA Today in March, 1998

So far, six organizations have come forward to offer “green” certification:

1. Green Seal
2. The E.P.A.’s Design for the Environment (DFE)
3. Greenlist Program
4. Eco Green
5. Cleangredients
6. California Air Resource Board (CARB)

Among these 6, 8 criteria for defining “green” appear:

1. Impact on the outdoor environment (is it “bio-degradeable?”)
2. Indoor environmental quality (does it make it healthier?)
3. Sustainability (does it use renewable resources)
4. Packaging and recycling issues (does it fill up landfills with new plastic and cardboard?)
5. Reducing use of resources. (Is it concentrated so we don’t ship water across country?)
6. Health impact on occupants of home or business (is it hazardous to the one applying or have an on-going effect on those who live there?)
7. Impact of new “green” chemistry on the construction, texture, or use of surface it is used on (does it etch your bathtub or tile, does it leave a sticky residue, does it cause rapid re-soiling?)
8. Cleaning effectiveness (does it work?)

There’s much to say about each of these, but there are three main problems as it stands right now:

1. None of the certification programs consider all 8 categories - they each have “special interests.”
2. It’s too easy for any manufacturer or service provider to say “we’re green”.
3. Nobody effectively governs it.

I don’t know about you, but I’m no communist. I don’t need “big brother” to provide me with cradle-to-grave security. I can make responsible decisions based on my own “due diligence” as long as the government doesn’t get in the way and hide or confuse the information I need. So far, their “rush to green” efforts in government buildings has been a disaster, according to Dr. Berry. What we need is an intelligent balance of the above 8 considerations. We can make our homes (and health-care facilities) safer and healthier with a poison like bleach if we choose not to drink it, but *do* kill pathogens on surfaces with it. We can choose to purchase one gallon of concentrate instead of 6 gallons of ready-to-use dilute solution where applicable to save gas and tires hauling water around. Chemical companies can project the environmental impact of any chemical approach before they even formulate by asking themselves, “what if everybody buys this product? How will that amount of this substance in the environment effect it?” We can train cleaning technicians (see if you can find one out there who has had any formal training) to use effective chemicals safely and to dispose of dirty solutions and empty containers properly for our children’s sake. But if we don’t take responsibility ourselves and wait for big brother to get it together, we may face another debacle like the malaria pandemic. Politically correct apparently means: everybody dies!

## HOW WE DO “GREEN”

The owners of **A-1 Painless DRY Carpet Care** started out in the hotels of San Francisco, California in 1980 (actually, Steve went to school in Elmwood, then went to be an engineer in California). Because of the heavy smog factor, chemical awareness is much greater in California than any other state. Many of the formula ingredients still used in other states were deemed carcinogenic and banned there in the 1990's. Butyl cellulosolv is one of them - that’s the foul-smelling solvent you smell

when you go into a convenience store too late at night. Starting in the early '80's, we moved away from petroleum distillates and into a water-soluble detergent with good de-greasing qualities, instead. Although our dry time went from around 20 minutes to around one hour, we got better results with less impact on the environment (and my hands and respiratory system). Our patented solution would emulsify gear oil at 4 ounces per gallon while being non-toxic, low residue, bio-degradeable, and with no fumes or even a scent.

The new coating systems forced us into a slightly different approach after 1986, to remain compatible, but our research was kept within these same parameters. Since those days, we mix our own formula using powder where we can (no water to ship - one tablespoon of powder to make one gallon of aqueous solution: less than one ounce of powder to make 8 pounds of liquid cleaner). We add 4 oz. per gallon of a liquid de-greaser, which uses a trace amount of the citrus solvent squeezed out of orange peels found to be more "sustainable", more bio-degradeable, less hazardous to health, and more effective than petroleum distillates. It also has a fresh citrus scent, is really hard on fleas (the only active ingredient in several flea shampoos), kills suds (responsible for gazillions of re-appearing spots), and mixes with water.

Combine our friendly chemistry with the fact that we only use one gallon of cleaning solution to clean 300 square feet of carpet, and compare that to "steam cleaners" who now brag about their equipment that puts out 7 gallons per minute of solution to be extracted somehow. The seemingly small amount of solution they do extract with their sucker winds up in the "recovery tank". Cleaners get busted for dumping their recovery tanks down storm drains because these drains don't go through any reclamation process. They lead straight to the creeks and streams. They must be dumped down sewer drains to be processed before going back into streams, or, many are now dumping into the clients' front yard to avoid the question of whether the recovered cleaning solution has too high a concentration of chemicals for the reclamation system. Remember, spotting procedures may use much more concentrated solutions and wind up in the same recovery tank.

So, with our methods, we use friendly chemistry in small amounts, which is extracted by our mops, which get laundered in my wife's washing machine, flushing soiled solution down the sewer drain to be properly processed and reclaimed. We use so little chemicals, almost none of my suppliers know me by my first name. That saves gas and tires hauling cases (or palates) of solution to my door or around on my truck. Our approach is more effective at sanitizing carpets, rugs, and upholstery than flushing hot water through the carpet in a fraction of a second, so your indoor environment is healthier. We can also use special anti-allergen chemistry that destroys allergens and pathogens without use of toxins! Not everybody knows about that so don't expect me to spill the beans on the World Wide Web!

To sum up:

1. All our chemistry is bio-degradeable (friendly to the environment in quality and quantity)
2. Our cleaning approach is more thorough than simply flushing and our chemistry will sanitize more effectively than flushing with hot water (you must boil creek water for 10 minutes before you can drink it. "Steam-cleaning" does not accomplish this.) So regular carpet cleaning by our methods will keep your home healthier than "steam" without the risk of mold and mildew by ridding your carpet of dust mites and other parasites, mold spores, pollen, chemicals, pesticides, herbicides, fertilizers, tobacco smoke, exhaust residue and other pollutants, spoiling food and

drink residue, and many other contaminants. We can also specifically target bacteria, virus, and fungus.

3. The active ingredients in our formulae are abundant and renewable.
4. The polyethylene bottles (bleach bottles) that our chemicals are shipped in can be recycled as can the cardboard boxes. My wife would never let a cardboard box leave our home before it had been used for something else. Again, we use so little solution with this method by comparison to other approaches, we generate one or two empty gallon jugs per week.
5. Using concentrates and powders eliminates the need to ship water across the country. Not so with consumer items like those found on grocery store shelves. Many of these products are shipped ready-to-use (pre-diluted) for the convenience of the consumer. Many of these products would be quite dangerous in concentrate form for those not trained to properly handle and dilute them before use. This requires bottling plants to be located locally to reduce shipping expense. For example, soda pop is always bottled locally - not shipped from one central bottling facility, though doing so would reduce production costs.
6. We use the citrus solvent to spike our detergent which has a deodorizing effect naturally, and we use a water-soluble deodorant specifically formulated to target food, drink, pet odors which kind of tones down the orange peel smell, so we get a tuity-fruity effect that everyone loves. We have clients who call us in just to make the carpet smell fresh, hoping the smell will last longer than it takes to dry. But we don't use cleaning agents that are hazardous to apply and that leave a residue that would bother kids or pets. So far, do dead canaries.
7. There are more and more new formulae coming on the market that are supposed to be as effective or more effective, and they kill bugs and germs naturally, and they leave less residue, and they are safer, healthier, more environmentally friendly. This is a great trend. We are testing some of these. When we find some that meet or exceed the standards we've kept over the past 25 years, we will adopt them, of course. But we won't do it on the word of the salesman or the government.
8. We guarantee that our cleaning will be the most thorough, the most painless carpet cleaning experience our client has ever had, or we will clean it again. If that does not satisfy, we will refund their money. Our cleaning procedures have to work. And, there is no profit in doing re-do's. Like Dr. Berry says, "a clean home is a healthy home." So we test a product or procedure that promises environmental friendliness to see if it works. If not, we don't adopt it. What's the point? That would be like saying, I'm going to walk to New York to save on jet fuel. For most people, that decision just doesn't work.

As you can see, by virtue of our "low-moisture" approach, we were doing "green" before there was "green". And, being from California (we cleaned carpets there for 16 years), we've been environmentally aware for awhile longer than most from Illinois. We know how to do "green". We know why to do "green". It's just good business. It's good for our clients. It's good for our kids. It's good for our planet.

Steve Carter, owner of A-1 Painless DRY Carpet Care, is a certified carpet and upholstery cleaning specialist since 1980 with a Bachelor of Science degree in Engineering. He is the author of "Why Carpets Die Young", "The Consumer Awareness Guide to Carpet Cleaning", "How We Do 'Green'", and "Do You Need Hardwood Floor Salvation?" which can be found at [www.A-1HealthyHome.com](http://www.A-1HealthyHome.com).