

# Parts Cleaning

## New Methods Help Reduce Costs While Improving Compliance

By Timothy C. Lindsey, Ph.D

Innovative new technologies and management strategies, generally referred to as pollution prevention or “P2,” have been developed that facilitate achieving compliance while reducing costs. Environmentally friendly coating processes such as high-solids coatings, powder coating and e-coat have been developed that drastically reduce solvent emissions. Advances in application technologies such as high volume low pressure laser assisted paint guns have helped technicians apply paint more efficiently with higher quality results while reducing the quantities of paint utilized

by 10 to 30 percent. Additionally green chemistry processes are continually being developed that facilitate the manufacture and utilization of chemicals while minimizing environmental impacts.

For instance, water-based parts cleaning processes are now available that are more effective, safer, require less labor, produce less waste and are less expensive than traditional solvent-based processes.

Many dealerships have been reluctant to make the switch from solvent-based cleaning to water-based cleaning processes while some others have tried the alternatives without success claiming that they do not clean as well and create large quantities of waste that is expensive to dispose of. However, recent developments in aqueous cleaning have resulted in systems that actually clean better than solvents and contain devices that continuously remove oil, grease, and particulate contaminants from the cleaning solution such that it can be used indefinitely.

“We were all blown away by the performance of this aqueous unit that cleans better and faster than mineral spirits. And with constantly clean solution and no hazardous wastes to deal with. I was skeptical about this cleaning innovation... not any more,” remarked Tim Hargrove, service manager at Pauly Toyota in Crystal Lake, Ill.

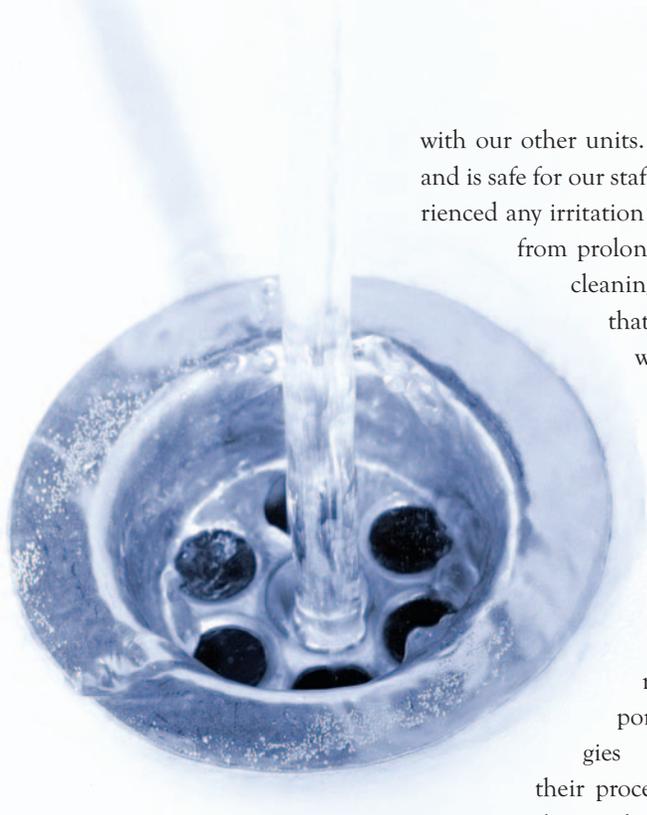
“My techs wanted to get away from the odor of mineral spirits. We had a trial of (an aqueous) parts washer and not only did it have no odor, but one of my technicians commented on the fact that the trial machine cut through grease better than mineral spirits. We were very pleased to see how well it cleaned a timing chain, one of the most difficult parts we have to clean,” explained Vinnie Emerich, service manager at Saturn of North Aurora, Ill.

And Terry Whitlock, service department manager at Burger Chrysler, Jeep Daewoo in Terre Haute, Ind., said, “Within a few days, none of our service techs were using any of our other solvent-based parts washers. It cleans a thousand times better than anything we have used before and it cleans things we couldn't clean before

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with our other units. It also has no odor and is safe for our staff who have not experienced any irritation or long term effects from prolonged exposure to the cleaning solution. Add to that the fact that parts won't rust after they are cleaned and it's pretty hard to beat."

Some companies have judged that the procedures and technologies required to incorporate P2 technologies and practices into their processes are not consistent with core business strategies. In some instances, this problem has been

addressed by outsourcing P2 oriented procedures and technologies to suppliers. This strategy typically involves restructuring supplier contracts such that compensation is granted for services and/or performance in addition to the materials provided. When structured properly, these innovative contracts can create win/win dynamics for both the supplier and the end user.

A chemical supplier can actually increase profits by providing less chemicals if they are properly compensated for bringing P2 practices and technologies to their customers. The end users receive the normal benefits associated with P2 implementation, such as less waste generation and reduced costs, without venturing into technologies that are not

common to their core business. Innovative technologies associated with chemical life extension and recycling require expertise that is generally more closely related to the supplier's core business than the end user's. Therefore, in many instances, it makes more sense for suppliers to adopt innovative P2 practices and technologies and provide them to their customers instead of the end users attempting to do so.

Many companies have successfully implemented the types of practices described above. Doing so has given them competitive advantages through increased efficiency, reduced costs and improved compliance. Numerous resources are now available to help companies adopt P2 strategies that can help them achieve both

business and environmental sustainability. Virtually every state offers technical assistance to businesses interested in implementing P2 measures. Companies interested in taking advantage of this assistance can find technical assistance providers on the National Pollution Prevention Roundtable website <http://www.p2.org/inforesources/p2rxpd.cfm>.

Other good sources of information for fixed op professionals are provided below:

- CCAR Greenlink automotive compliance assistance center <http://www.ccar-greenlink.org/>

- Auto Body: P2Rx Auto Body Environmental Resources: <http://glrppr.org/hubs/toc.cfm>

- Auto Repair: P2Rx Auto Repair Environmental Resources: <http://glrppr.org/hubs/toc.cfm>

- Vehicle End of Life: Great Lakes P2 Roundtable's Auto Salvage Environmental Resources <http://glrppr.org/hubs/toc.cfm>

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