

## **Issues Affecting Small Chrome Plating Facilities**

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Small chrome plating shops are faced with issues peculiar to their size. EPA's definition of "small business" is completely out of touch with the truth of the matter. Tighter regulation of the shipment of chemical samples makes process control increasingly difficult. Equipment EPA defines as "affordable" cannot be obtained by small companies. Fire Code is being revised in ways that will put existing shops out of business, and make it impossible for most new start-ups to open their doors. New wastewater regulations are so strict that companies will have to close their loops or abandon the start-up entirely. In the face of a softening economy, an industry formerly comprised of family-owned "mom & pop" shops is increasingly dominated by big business. Vendors (of necessity) devote their time and resources to the largest companies, often leaving small facilities without technical support. Consulting firms are unaffordable for most small businesses, leaving them few options when faced with complex regulatory scenarios. Still, small businesses manage to comply and survive, often as a result of creative strategies by courageous entrepreneurs. Problems and solutions are explored in this paper.

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As I work assisting small chrome plating shops in a changing economic and regulatory climate, a number of pressing issues emerge. Larger facilities have, of course, abundant resources enabling them to survive; those facilities are not the focus of my efforts. Families or small partnerships have historically comprised our chrome plating industry and those small facilities, the essence of American business structure, have to evolve or fall by the wayside. The successful business operation will have to overcome some unique new problems.

In the last ten years, regulations have been promulgated that micromanage every aspect of installation and operation of industrial operations. Companies that thought they designed for compliance and safety find themselves far from ready for modern inspection procedures. Lets look at some individual issues.

The movie “Erin Brockovich” has had quite a negative impact on anything associated with hexavalent chromium. Bad press, and a lack of scientific understanding on the part of the public, casts the chrome plater as the neighborhood villain. While California has the most restrictive regulations (and the least electricity,) the scene is similar throughout America. An adversarial stance on the part of regulators coupled with negative public opinion has resulted in the decimation of the number of small plating shops. Those who survive do so because they work hard to meet the ever-changing challenges that confront them.

Every plater I talk to stresses that environmental problems are their number one issue. Air quality issues have changed greatly over the past years. An elderly hard chrome plater told me of a time when “fume control” was accomplished by putting up a screen to keep chrome from misting out over the neighboring business. When the MACT Standard for Chromium was impacting the industry, a client’s two old (antique) fume scrubbers were upgraded in every way possible. An unofficial performance test showed that they were close but not quite compliant. The client then located and purchased a mesh pad system with good warranties and achieved compliance. Decorative shops have an easier time of it, as fume control is accomplished by the addition of a wetting agent and monitoring by the falling drop test method. EPA has recently come out and checked the compliance status of the chrome platers in my area. Those with their records up to date, who could physically demonstrate the Traube Stalagmometer test, had no further trouble.

The MP&M Effluent Guidelines for Industry make closed loop water systems the only practical scenario for most small operations. Closed loop Zero-Discharge Permits are available in larger cities. Twice-yearly inspections ensure the facility is really following operation and maintenance procedures and operating in compliance. While facilities currently operating will still have achievable discharge limits under MP&M, new startups will face a different scenario. Getting water clean enough to discharge under MP&M would be reason to close the loop and recycle that clean water! In the face of MP&M Guidelines I try my best to persuade a new start-up to close it’s loop from the very beginning.

Tough environmental issues cost money to deal with. My clients have all added environmental surcharges to their invoices so that these expenses are passed along to the customer. Educating the customer about these issues has been successful. No one seems to mind paying a little extra to prevent pollution. If a small shop is to survive, strategies like this are absolutely necessary.

A newer problem for many of my clients is Fire Code Compliance. When, as a result of a local firefighting tragedy as well as that of 9/11, budget was allocated for an aggressive enforcement of Code, the impact on newer businesses and start-ups was devastating. The limits for materials in storage, engineering controls, backup generators and unreasonable interpretations of industry requirements has led to very small operations attempting to circumnavigate the system entirely, or lose months of time in fruitless negotiation. Insistence on compliance with a complex array of new building codes and submittal of silver stamped engineering drawings, and requirement of backup generators to run scrubbers if the power goes off, are just a couple of the obstacles a start-up is now confronted by. The days of getting a small bay in an industrial park and starting a tiny shop that grows over time are gone forever! The small business faces the same start-up expenses as their larger counterparts when facing Developmental Services.

Chemical analysis and tech support are another issue that small shops have trouble with. Many vendors can't take the time to call on a small shop. Analytical work and support including calculation of bath additions are becoming more difficult to obtain. Some distributors don't want to take the liability for telling someone what to pour in their tank. Transportation companies, like UPS and Federal Express, have ever more complex regulations governing sending chemical samples through their transportation networks. Some of my clients have found vendors who are willing to hand-carry samples back to the lab. Others find a local laboratory. Brightener additions and wetting agent adds can, of course, be calculated by time of operation, proving that even without laboratory resources, bath maintenance can be accomplished.

A hidden threat is the Citizens Watchdog Group. Many of these organizations, worthy or not, gain funds to sue large offenders by filing suit against a small business. Frequently, a business owner finds that it is cheaper and quicker to give a \$5000 out of court settlement to make a plaintiff group "go away" than it is to fight a suit in court, even if innocent of wrongdoing. Other suits are absolutely "no-win" situations for a facility that has neglected to comply with some paperwork requirement. \$18-20,000 for a filing omission is quite a blow for a small business owner.

With such a challenging, even hostile business environment to contend with, it is no surprise that our population of small facilities is diminishing. The ones who remain do so because they are especially tenacious and creative in dealing with the issues I have explored. Through interaction with their professional organizations, such as AESF and NAMF, they find solutions to their problems. Regulatory agencies have Small Business Ombudsmen patterned after EPA's National programs. Platers need to be vocal about their predicament, for our lawmakers seem to think of small business as having 500 or so employees, when many shops are operating with 8 to 25. Such small employee

populations make it difficult to offer a benefit package that can attract and retain skilled workers, but in spite of all the pressures, small plating shops hang on. Some even contribute to send a representative to Legislative Action Day in Washington to let our National legislators know of their situation. By proactive actions and information obtained through AESF and NAMF events as well as the EPA sponsored workshops for compliance assistance, many of the greatest challenges facing small chrome plating shops will be resolved, but the industry has to come together and make its' needs and views known. Regulators, vendors, and industry consultants are all significant resources the shop owner can avail himself of. The survivors within our industry will continue to prevail. The persistent entrepreneur will overcome these challenges and continue to find solutions to the problems that they face. My recommendation to us all: team up, network, and let your needs be known. Use your professional resources as tools for growth and survival. Know when to let go of a hopeless issue and find other alternatives. Close your loop! Look for grants for water conservation or pollution prevention efforts. Talk to other platers about how they resolved their situation. Be politically active, and support AESF's Government Relations Program. Networking is the key to any solution. As I work within the industry I find it absolutely essential that I gather information and share it with those who have similar dilemmas. Clients have found chemical suppliers, lawyers, equipment, compliance information, and all manner of items of importance by networking. In these difficult times, it is essential more than ever that we be *real* "friendly competitors".