

Hans Kim, member of the AB617 South Los Angeles Community Steering Committee.

In 1998, I assisted my aunt in converting her Rancho Cucamonga cleaner from perchloroethylene (perc) dry cleaning to professional wet cleaning. In so doing, my aunt became the first perc dry cleaner ever to switch to professional wet cleaning.

While assisting my aunt in this transition, I learned to optimize professional wet cleaning as a commercially viable substitute able to process the full range of delicate apparel typically labelled 'Dry Clean' or 'Dry Clean Only' as a cost lower to solvent-based dry cleaning.

Beginning in 1999, I began a switch from being a distributor of hydrocarbon dry clean solvents to becoming a service provider for dry cleaners switching to professional wet cleaning. Since 2000, I have successfully converted over 100 perc and hydrocarbon dry cleaners to professional wet cleaning. Last year, for example, I assisted Jesus Perez in Riverside, who was a presser for De Anza Cleaners then took over ownership of De Anza, and then switched from hydrocarbon to professional wet cleaning.

Since 2016, I have been working with Physicians for Social Responsibility – Los Angeles on our mutual interest in transitioning dry cleaners to non-toxic zero-emission apparel cleaning technologies.

In 2019, I was asked by PSR-LA to assist in Phase 1 of their SCLA-PUSH project. As part of my assistance, I visited every cleaner in South/South Central Los Angeles to identify whether any cleaner was operating with professional wet cleaning equipment. Unfortunately, my survey did not identify a single cleaning using professional wet cleaning in South/South Central LA.

In addition, in 2019, as part of the SCLA-PUSH project, I reviewed an analysis conducted by Dr. Peter Sinsheimer, who served as a technical consultant to the project, which focused on SCAQMD Best Available Control Technology (BACT) for non-perc dry cleaning. This analysis reviewed SCAQMD's criteria for BACT, evaluated different professional apparel cleaning technologies for each criteria using reliable evidence, and concluded that zero-emission professional wet cleaning clearly met SCAQMD's criteria as BACT for non-perc dry cleaning. Based on my over twenty years of experience and expertise, I confirmed that the evidence was accurate in this analysis and affirmed the conclusion that professional wet cleaning should be used by SCAQMD as BACT for non-perc dry cleaning.

Further, I also agreed with this analysis that SCAQMD Rule 1102 should be amended to eliminate the Rule 102 Group II exemption. Currently, this exemption excludes siloxane-based solvent decamethylcyclopentasiloxane (or D5) from Rule 1102 regulation. In addition to ongoing toxicity issues related to D5 identified in Dr. Sinsheimer's study, D5 dry cleaning also requires substantially greater electricity and natural gas use compared to professional wet cleaning.

Beyond eliminating the Rule 102 Group II exemption, an amendment to SCAQMD Rule 1102 should also set a sunset date for existing non-perc dry clean machines covered by the rule. This sunset date should follow the CARB 2007 ruling phasing out perc dry cleaning, which set a sunset date of fifteen (15) years from the date that a new dry clean machine was installed. Setting a 15-year sunset date is important because older dry clean machines emit greater emissions due to the breakdown in pollution control equipment. In addition, the vast majority, if not all of non-perc dry cleaning machines use combustible solvents and older machines are likely to create greater fire hazards.

In addition to these changes in BACT classification and Rule 1102 modifications, incentives should be developed for dry cleaners to switching to zero-emission alternatives and a robust and sustained professional wet cleaning demonstration program should be developed to jump start the transition to this zero emission technology.

In reviewing the initial draft CERP for dry cleaning summarized in Table 5d-1, based on my comments above, I recommend the following changes to this table:

Under column entitled "Action", delete all items and replace with following:

- Set acceptable emissions from non-perc solvent-based dry clean systems regulated by Rule 1102 to zero, based on viability of zero-emission alternatives.
- Phase out existing non-perc dry clean solvent machines after useful life and remove regulatory exemptions for non-perc dry clean solvent machines
- Create incentive opportunities to transition to professional wet cleaning (and other commercially viable zero-emission technologies when identified)
- Community outreach to owners and operators regarding regulatory changes, incentives for zero-emissions technologies, and demonstration workshops on professional wet cleaning (and other commercially viable zero-emission technology when identified)

Under column entitled "Metric(s)" and "Timeline", delete and replace with following:

- Modify BACT (Best Available Control Technology) for non-perc solvent dry clean machines using professional wet cleaning, setting the acceptable emissions at zero. Start: 3rd quarter 2022, End 4th quarter 2022.
- Amend Rule 1102 to eliminated Rule 102 Group II exemption [by striking (b) 13 and (h) II] and phase out non-perc dry clean machines after fifteen years for the date of installation. Start: 3rd quarter 2022, End: 3rd quarter 2023.

- Provide list of incentive opportunities to support transition to professional wet cleaning, (and other commercially viable zero-emission technology when identified). Start: 3rd quarter 2022. End: 2027. At the end of 5th year, assess need for additional incentives.
- Notify all dry cleaners in SCAQMD – including cleaners with Rule 1102 permits as well as other non-perc dry cleaners not currently regulated by Rule 1102 of new BACT classification for non-perc solvents machines. Start: 4th quarter 2022. Timed immediately after new zero-emission BACT set.
- Notify all dry cleaners in SCAQMD – including cleaners with Rule 1102 permits as well as other non-perc dry cleaners not currently regulated by Rule 1102 of Rule 1102 rule change. Start: 3rd quarter 2023. Timed after Rule 2023 amendment completed. Start: 3rd quarter 2022. End: 2027. Assessment end date based on assessment of need for need to extend demo program.
- Support creating professional wet cleaning demonstration program to jump start transition to zero emission professional apparel cleaning alternatives. Start: 3rd quarter 2022. End: 2027. Assessment end date based on assessment on need to extend incentives and/or demo program.