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August 22, 2005

Peter D. Venturini, Chief
Air Resources Board
1001 I Street
Sacramento, CA 95812

Dear Mr. Venturini:

Assessment to Evaluate Perchloroethylene Levels at Publicly-Owned Treatment Works

The purpose of this letter is to comment on the Assessment to Evaluate Perchloroethylene Levels at Publicly-Owned Treatment Works (Assessment) dated June 8, 2005. The Assessment was conducted by the Air Resources Board (ARB) Air Quality Measures Branch to comply with the 1996 Consumer Product Regulations (1996 Regulations). Tri-TAC has reviewed the Assessment; however, our conclusions differ from those reached by ARB.

Tri-TAC provides the following comments on the Assessment:

Comment #1

“We have concluded that use of perc in consumer products, prior to the exemption, likely contributed to concentrations of perc in POTW influent. However, we have not found that the exemption led to increased perc concentrations in POTW influent.”

Tri-TAC concurs perchloroethylene (perc) was used in consumer products prior to the exemption. However, the data shows the exemption did contribute to increased influent levels of perc at publicly owned treatment works (POTWs).

Table 1 lists the annual maximum influent perc concentrations for the 12 wastewater treatment plants (plants) included in the Assessment. From 1997-1999, 11 of the 12 plants had a maximum influent perc concentration measuring 2 to 16 times higher than their 1996 maximum influent perc concentration. The year in which the largest increase was measured is not consistent between plants. A possible explanation for the maximums occurring at different times is the sell-through provision. The manufacturers continued selling products made before the 1996 Regulations for several years after 1996 utilizing the sell-through provision. The products reformulated to comply with the 1996 Regulations, which may have contained more perc, were available in different markets at varying times depending on the supply of the older products. Tri-TAC concludes, from the data in Table 1, the exemption led to increased influent levels of perc at POTWs.

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Comment #2

“Influent concentrations of perchloroethylene at POTWs were measurable in 1996, prior to the exemption. Three plants exceeded the discharge limit of 5 micrograms per liter.”

As mentioned above, Tri-TAC agrees influent concentrations of perc were measurable prior to the exemption, and that the effluent at three plants exceeded the perc drinking water standard of five micrograms per liter. Tri-TAC would like to clarify that the perc drinking water standard is only applicable to plants that produce recycled water. The three plants with effluent perc concentrations above five micrograms per liter sent all of their effluent to the ocean in 1996 and did not recycle any wastewater; therefore, these levels did not constitute a permit violation for these plants. Even though all plants are not required to comply with five microgram per liter limit, Tri-TAC supports lowering perc levels at all wastewater treatment facilities to allow for more water reuse opportunities in California.

Comment #3

“Although some plants experienced increased perc levels in 1998 and 1999, which would be consistent with the exemption, the data were inconsistent among plants, and concentrations at some plants decreased.”

As mentioned above in Comment #1, the data in Table 1 shows 11 out of 12 plants did receive higher maximum influent concentrations of perc from 1997-1999. This timeframe would correspond to the introduction of products complying with the 1996 Regulations. Tri-TAC agrees the data from the plants is variable and does not provide a linear relationship between the exemption and increased influent levels of perc; however, the data shows 11 of the 12 plants received higher maximum levels of perc after the exemption.

Comment #4

“Generally manufacturers of products that already contained perc at the time of the exemption did not increase the amount of perc in their products after the exemption.”

Tri-TAC reviewed the January 2004 draft Perchloroethylene Usage Totals Reported for 1996-2002. For your reference, the information provided by ARB to Tri-TAC is attached to this letter. The data shows adhesive, engine degreaser, and fabric protectant/spot remover perc usage totals dramatically increasing following the exemption. This increase of perc in engine degreasers, which have a direct pathway to sewers, prompted Tri-TAC to request an Air Toxic Control Measure (ATCM). The ATCM for Emissions of Chlorinated Toxic Air Contaminants from the Maintenance and Repair Activities was adopted by ARB and fully implemented in 2003.

Comment #5

“POTWs experienced decreased perc influent concentrations in 2003, which is consistent with the ATCM being fully implemented. Also, no POTW exceeded the discharge limit.”

Tri-TAC disagrees with this conclusion. As shown in Table 1, seven of the 12 plants received a higher maximum influent perc concentration in 2003 compared to 1996, whereas only four of the 12 plants received a lower maximum influent perc concentration in 2003 compared to 1996. Therefore, the majority of POTWs

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received elevated levels of perc in 2003. Consumers using automotive products purchased prior to the adoption of the ATCM, other consumer products containing perc, or improper discharges from perc dry cleaners may have caused elevated levels of perc in 2003. All these sources may subside in the next few years due to the passage of the 2004 Consumer Products Regulations (2004 Regulations) and current revisions to the ATCM for Dry Cleaning.

Table 2 shows the annual maximum effluent perc concentrations for the 12 plants included in the Assessment. Please note that effluent from Orange County Sanitation District Plants #1 and #2 is combined prior to discharge, so data from only one effluent location is included in Table 2. East Bay Municipal Utility District's plant exceeded the five microgram per liter drinking water standard in 2003 with an effluent concentration of 15 micrograms per liter. In 2003, this facility discharged to the San Francisco Bay, so the increased perc level did not cause a permit violation, but as mentioned above, elevated levels of perc hinders the ability of sanitation agencies to pursue water reuse projects.

Comment #6

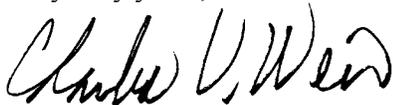
"While we find that consumer products containing perc probably affect POTW influent concentrations, we could not definitely show that the exemption of perc led to increased perc influent concentrations. However, it appears that the Board's actions to prohibit perc, as well as other TACs, in various consumer product categories has led to overall decreases in perc influent concentrations at POTWs."

Based on the data provided in Table 1, Tri-TAC asserts the exemption did contribute to an increase in perc concentrations in POTW influent due to the fact that almost all plants received a higher maximum influent concentration following the exemption. Tri-TAC concurs the influent concentrations from 1996 to 2003 predominately show a stable or decreasing trend due to ARB actions subsequent to the exemption.

Tri-TAC appreciates the diligence of ARB to reduce chlorinated solvents from consumer products. Tri-TAC anticipates further reduction of chlorinated solvent concentrations in POTW influent due to the 2004 Regulations effective this month. Tri-TAC is also following the current revisions to the ATCM for Dry Cleaning to reduce more perc from POTW influent. The 2004 Regulations and ATCM for Dry Cleaning will benefit both air and water quality in California.

If you have any questions or concerns on these comments, please contact Ms. Preeti Ghuman at (562) 699-7411, extension 2904.

Very truly yours,



Charles V. Weir
Tri-TAC Chair

Attachments

C: Jackie Kepke, CH2M-Hill
Preeti Ghuman, LACSD

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