



735 State Street #209, Santa Barbara, CA 93101; (mail) PO Box 90106, Santa Barbara, CA 93190
Telephone (805) 965-7570; fax (805) 962-0651

Friday, March 2, 2018

Dr. Keith Maruya
Southern California Coastal Water Research Project
3535 Harbor Blvd., Suite 110
Costa Mesa, CA 92626

RE: Draft Final Report *Monitoring Strategies for Constituents of Emerging Concern (CECs) in Recycled Water – Recommendations of a Science Advisory Panel*

Dear Dr. Maruya:

Heal the Ocean (HTO), Santa Barbara, has followed the Southern California Coastal Water Research Project SCCWRP panel of experts' approach to monitoring strategies for CECs in Recycled Water since the process started in 2009 - from "Contaminants" to "Chemicals" to "Constituents." As before, we hope you will accept these comments as our wish to have the final report be a truly sufficient guideline that can be instituted by the State Water Resources Control Board.

Just a few brief comments:

- This entire report comes down to a simple equation MEC/MTL, and whether that does or does not exceed 1. This is the same as the previous report. Essentially, it's asking if the environmental concentration is larger than the minimum trigger level.
- In gathering the set of MEC data used in the report, recycled water facilities were solicited. A total of eight facilities got back to the panel. It is not clear from the report how many in total were solicited. In other words, it is not clear if the eight are truly a representative sample of recycled water facilities in the state.
- We can't help but wonder if only recycled water facilities with "good" data to report got back to the Panel? This would put this survey at high risk of [selection bias](#). However, even if every facility reported all its data, there is still a risk of selection bias in the sense that some facilities may not monitor at all. In fairness, the Panel is pushing the scientific envelope by examining so many compounds -- particularly ones that are by definition "emerging" -- thus, seeking data wherever the Panel can get it, from whomever will hand it over, maybe this is the best that can be done short of the State stepping in and requiring disclosure, or requiring an expanded monitoring

regime for more of these chemicals. It's a bit of a chicken and an egg dilemma because the whole purpose of this process, as we understand it, is to better determine what *should* be monitored on a larger scale.

- At the very least, the Panel should be transparent in this report about how many facilities were asked to share data.
- Re: the 90th percentile MEC standard: As best as we can tell, the Panel does not give a rationale in this report or the previous one as to why this standards is not set higher (e.g., why not 95%?), even though the Panel claims it is "conservative". It is argued that the data is highly variable, so it is unreasonable to pick the largest value (i.e., outliers), but in any case, 90th percentile seems relatively arbitrary. It might make sense that the Panel release the full data it has gathered (anonymized so it does not identify any one facility) - would that be possible? We think it should be done.
- Regarding the MTL list: the process by which the Panel chose MTLs should be reviewed. It would be more transparent to include an entire table of the MTL triggers considered, and discarded, or is this being done in an Appendix we haven't seen? It might be worth closer examination to determine why some values are chosen from certain sources and others are not.

We are glad to see that the have indeed taken this up again within a reasonable timeframe. The state should be commended for that.

We hope that our comments are of help.

Sincerely,

A handwritten signature in black ink that reads "Hillary Hauser". The signature is written in a cursive, slightly slanted style.

Hillary Hauser, Executive Director