

### **PCBs Need to Be Monitored Effectively and Permit Limitations for PCBs Should be Added to All Outfalls**

Discharge prohibition 3.10 states: “The discharge of polychlorinated biphenyl (PCB) compounds, such as those once commonly used for transformer fluid, is prohibited, unless specifically authorized elsewhere in this Order.” Despite this, there are no effluent limitations for PCBs, at any of the outfalls. PCBs were frequently used at military and defense facilities during the 1940s and 1950s and are a long-lived mix of chemicals that remain in the environment for decades. The use of PCBs at this site is acknowledged in the Draft Program Environmental Impact Report from 2017 produced by the California Department of Toxic Substances Control for the proposed cleanup of the site. Mentioned in the document is an emphasis on the use of Aroclor 1254/1260 mixtures at the site. On the other hand, an effluent limitation for a major breakdown product of DDT, namely DDE, is included in the tentative permit. That limitation is based on the California Toxics Rule (CTR) freshwater criterion for protection of human health when consuming fish from the waters. The prevalence of the use of DDT throughout southern California is well-documented in scientific literature and, similar to PCBs, it persists in the environment for decades.

No Reasonable Potential Analysis (RPA) appears to have been conducted for PCBs. There has been a lack of both appropriate detection limits and no analysis for the more relevant form of the chemicals (PCB congeners, rather than just Aroclors). The minimum levels (MLs) (analogous to reporting limits) required in the current monitoring program for individual Aroclors are 0.5 ug/l – these MLs were developed by the State in 1997/1998 and are quite outdated. In any case, the standard now is to monitor for PCB congeners which can allow for source tracking if enough congeners are included. The discharger monitored for only for Aroclors through 2022 since previous monitoring programs did not require congener analysis. Actual reporting limits varied but ranged from 0.1 – 0.48 ug/l for each Aroclor. The CTR freshwater criterion for protection of human health from PCBs in water when consuming fish is 0.00017 ug/l, well below the reporting limits in previous monitoring. Thus, none of the monitoring for PCBs conducted to date by the discharger allows for the ability to assess impacts to human health due to the overly high reporting limits and continued reliance on Aroclor analyses.

This is of concern since concentrations of PCBs in recent years based on high resolution (low detection limit) congener analyses by some municipal stormwater (MS4) monitoring groups in the lower Los Angeles River range from .015 - .02 ug/l, clearly well above the human health criterion of 0.00017 ug/l.<sup>1</sup> Tracking sources of these high concentrations is difficult, however, since only a few MS4 monitoring groups are using high resolution methods and analyzing for congeners. Additionally, there is now a State of California Office of Environmental Health Hazard Assessment blanket fish advisory for PCBs covering many areas not previously under advisory, including the Los Angeles River. Sustenance fishing in the lower Los Angeles River is common and the human health criterion is intended to protect humans from excessive PCBs when consuming fish living in these waters. Sources of this highly persistent chemical must be

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<sup>1</sup> [MS4 PCBs](#) spreadsheet, provided pursuant to PRA request

identified through more appropriate analytical techniques and better coordination among entities monitoring stormwater.

PCBs effluent monitoring for Outfalls 1, 2, 11, and 18 is explicitly described in a separate line in Table E-3 and with a footnote that states: "Monitoring for PCBs as aroclors and PCBs as congeners are required." And "Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260, shall be analyzed using USEPA method 608.3. PCBs as congeners shall be individually quantified (or quantified as mixtures of isomers of a single congener in co-elutions as appropriate) using U.S. EPA proposed method 1668c or using a high-resolution EPA-approved method. U.S. EPA recommends that until the proposed Method 1668c for PCBs is incorporated into 40 CFR § 136, Dischargers should use for discharge monitoring reports/State monitoring reports: (1) U.S. EPA Method 608 for monitoring data, reported as aroclor results, that will be used for assessing compliance with WQBELs (if applicable) and (2) U.S. EPA proposed method 1668c for monitoring data, reported as 44 congener results, that will be used for informational purposes to help assess concentrations in the receiving water. To facilitate interpretation of sediment/fish tissue data and TMDL development, PCB congeners whose analytical characteristics resemble those of PCB-8, 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 195, 201, 206 and 209 shall be reported as a sum and individually quantified (or quantified as mixtures of isomers of a single congener in co-elutions as appropriate)."

Monitoring for PCBs in the lower Los Angeles River by MS4 dischargers using method 1668c has included 200+ congeners (all or nearly all of the existing congeners). The sums of these congeners have greatly exceeded the human health criterion for consumption of fish from the waters, as noted above. If only 44 congeners were analyzed as noted above, it is likely the concentrations of PCBs found in the lower Los Angeles River would have been reported as much lower and possibly not exceeding the human health criterion. Therefore, to be consistent with methods used by some MS4 monitoring groups that have already identified very high concentrations of PCBs in the lower Los Angeles River, other stormwater dischargers, including Boeing, should be directed to follow suit and monitor discharges from all outfalls in a compatible way, using unfiltered water samples and utilizing method 1668c with 200+ congeners.

Additionally, Table E-4 in the tentative permit does not explicitly include the requirement to monitor for PCBs in effluent discharged from Outfalls 3 – 10. Rather, the parameters not already listed are listed as "Remaining Priority Pollutants" which might potentially include PCBs but eliminates the footnote requiring monitoring for both Aroclors and congeners. Monitoring for PCBs should be consistent across all the outfalls.

And, both Tables E-3 and E-4, under "Sampling Frequency," do not show either PCBs or Remaining Priority Pollutants (or in fact, many other pollutants) as being required to be sampled once during a discharge event (after a storm as described in footnote b). "Sampling Frequency" is simply shown as once per year rather than once per discharge event. This even though non-stormwater discharges are prohibited (Discharge Prohibition 3.1).