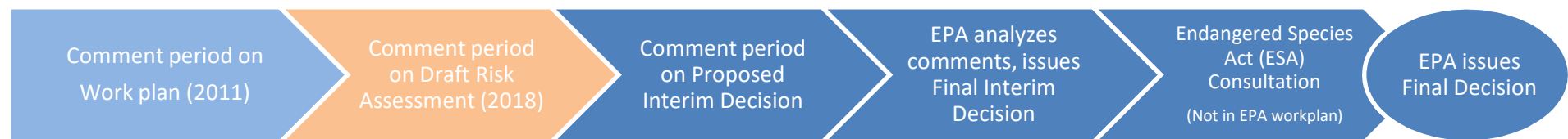


Pesticide: o-Benzyl-p-chlorophenol (OBPCP); EPA-HQ-OPP-2011-0423
Use: Biocide for industrial process water and cooling systems, as well as a hard surface and floor disinfectant.
Why we care: Highly toxic to aquatic invertebrates.
Actions taken: BACWA has tracked this pesticide since the Work Plan was released in 2011.
Status: EPA released the Draft Risk Assessment in December 2018.



Next steps: EPA will issue a Proposed Interim Decision.
Recommendation: No action is needed at this time but this pesticide will continue to be tracked.

From EPA's Draft Risk Assessment:	Response from a POTW Perspective:
"Within this assessment, aquatic exposure and ecological risk were assessed from the use of OBPCP in water cooling towers using the Down the Drain (DtD) model." (p. 5)	Encouraging that EPA used the DtD model for a cooling towers pesticide.
"The registrant submitted acceptable data on the environmental fate of benzyl chlorophenol in wastewater treatment plants (WWTPs), including two Ready Biodegradability (835.3110) studies, a Simulation Test (835.3280), and an ASSI [Activated Sludge Sorption Isotherm] study (835.1110). The results of the sorption and biodegradation studies provide reasonable estimates of dissipation routes that are consistent with the structure and chemical properties of benzyl chlorophenol. However, ASRI [Activated sludge respiration inhibition] data were not submitted. The ASSI test (MRID 50004901) demonstrated that 84 % sorbed by 6-8 hours and the simulation test (MRID 50258701) demonstrated that about 7 % of benzyl chlorophenol is expected to degrade in a WWTP within the 6-8 hour typical treatment time and 63-66 % mineralization occurred by 14-28 days based on CO2 production in the biotic treatments following sorption. Based on the sorption (84 %) and biodegradation (7 %), a removal factor of 91 % was used in Down-the-Drain modeling (Sections 4.2)." (p. 35-36)	EPA used very limited bench-scale data to estimate a relatively high removal efficiency that did not account for variation among POTWs. This part of the modeling is probably not conservative (i.e. it might overestimate removal by POTWs).

<p>“OBPCP is also used as a hard surface cleaner and disinfectant, but aquatic exposure and risk were not assessed due to the fact that OBPCP from this use is not expected to be concentrated in any particular geographic area or time period and once these low quantities of OBPCP reach the WWTP 91% would be expected to be removed before being discharged to surface water.” (p.41)</p>	<p>Ideally EPA would include all relevant pathways to POTWs – including all discharges from indoor uses - in its DtD analysis (DPR hopes to eventually be able to model all discharges). OBPCP is used to disinfect floors by mopping, which could have a pathway to the sewer. It is also used as a laundry disinfectant additive, which has a direct pathway to the sewer.</p>
<p>The risk assessment did not examine the potential for POTW treatment process interference. This is listed as a data gap.</p>	<p>EPA did not receive required data. From the current documents it is unclear what – if anything – will be done to address this.</p>
<p>“Environmental Risk Summary Based on the assumptions used to estimate the (Concentrations of Concern) COCs from water cooling towers, acute and chronic risks exist for freshwater fish and invertebrates. Risks are highest for chronic exposure, with COCs exceeded for much or most of the year for all scenarios. However, acute risks for nonlisted species are presumed only for a high-exposure scenario.”</p>	<p>EPA has assessed the risk in a relatively conservative manner and has noted that for freshwater invertebrates that the chronic risk is exceeded for “much or most” of the year. Because EPA found significant risk it should (in theory) be examining risk mitigation options.</p>