June 7, 2019

Mr. Daniel Halpert
OPP Docket
Environmental Protection Agency Docket Center (EPA/DC)
(28221T)
1200 Pennsylvania Ave., NW.
Washington, DC 20460–0001

**Subject: Chlorine Gas – Draft Risk Assessment (EPA–HQ–OPP–2010–0242)**

Dear Mr. Halpert:

On behalf of the Bay Area Clean Water Agencies (BACWA), we thank you for the opportunity to comment on the Draft Risk Assessment for chlorine gas, which is used in swimming pools, spas, and hot tubs. BACWA's members include 55 publicly owned wastewater treatment facilities and collection system agencies serving 7.1 million San Francisco Bay Area residents. We take our responsibilities for safeguarding receiving waters seriously.

BACWA supports the findings in the Draft Risk Assessment regarding the need to consult with local authorities prior to discharging of pool water in order to avoid exposure to aquatic organisms. As such, we are writing to recommend that the Registration Review decision follows the precedent for improved labels for swimming pool, spa, and hot tub products that was established by the decisions for other pool, spa, and fountain chemicals, such as lithium hypochlorite and copper.

**BACWA's Interest in Pool, Spa, and Hot Tub Pesticides**

Pools may be emptied for cleaning every two to seven years and spas may be drained as often as every three months.[1] The water is discharged to storm drain systems, to sanitary sewer lines flowing to wastewater treatment facilities, or to surrounding landscaped areas. However, neither storm drain systems nor wastewater treatment facilities are necessarily prepared to handle the antimicrobial and conventional pesticides in water.

[1] Pool Corp (2016). Frequently Asked Questions. Available at http://www.swimmingpool.com/faq.

Due to concerns about these constituents flowing untreated to surface waters and Clean Water Act NPDES permit requirements, many California stormwater agencies are directing pool, spa, hot tub, and fountain owners to discharge to their local sanitary sewer. Many wastewater agencies support this practice because some constituents, such as pH and suspended solids, may be effectively reduced through treatment; however, wastewater treatment plants are not specifically designed to remove pesticides. Some antimicrobials, if discharged in sufficient quantities, have potential to interfere with the biological treatment processes at municipal wastewater treatment plants. Additionally, while some agencies have the resources to work with institutional, public and commercial swimming pool operators regarding swimming pool best management practices and the types of pool chemicals they use, the vast majority of swimming pools are privately owned residential pools, the owners of which are not easily reached. With approximately 1.2 million in-ground pools in California and 5 million pools nationwide[2], and countless more spas, hot tubs, and fountains, wastewater agencies have limited authority and resources to regulate the frequency, volume and constituents of discharges.

Further, while this is not a pesticide regulatory issue, high-flow swimming pool discharges to the sanitary sewer can cause a sewer back-up, potentially spilling untreated sewage onto streets and into storm drains, which could also create an acute hazard. Maintaining low flow rates (e.g., discharge through a garden hose rather than a fire hose) prevents such problems.

**BACWA Recommends Consistent Labeling to Ensure Consultation with Local Authorities**

BACWA concurs with EPA's ecological risk characterization which noted that local authorities should be consulted prior to the discharge of chlorine-containing water in order to avoid exposure to aquatic organisms:

> *"As with the other chlorine chemistry pool products, pool owners should consult with the local authorities about the dumping of pool water to ensure that chlorine has dissipated prior to the release of the water to the environment. If not, the discharge of pool water containing chlorine directly into a water source could cause residual chlorine exposure to aquatic organisms."* [3]

We appreciate the acknowledgement that such communication is a significant means for avoiding ecological risks. It is important to inform users of their obligations to ensure that discharge of treated water does not harm aquatic ecosystems or cause sewer line backups. Therefore, BACWA recommends that the label language be updated to match the language for copper products,[4] which would also provide consistent label language across pool, spa, and hot tub chemicals:

> *"Before draining a treated [pool,] [spa,] [hot tub,] or [fountain] contact your local sanitary sewer and storm drain authorities and follow their discharge instructions. Do not discharge treated pool or spa water to any location that flows to a gutter, storm drain or natural water body unless discharge is allowed by state and local authorities."*

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[2] P.K. Data, Inc. (2012). Phone conversation with staff member Joshua Darling, August 15, 2016.
[3] U.S. EPA OPP, Chlorine Gas Human Health and Ecological Draft Risk Assessment, December 12, 2018, Page 14.
[4] U.S. EPA OPP, Copper Compounds Interim Registration Review Decision, August 2018, Page 65.

In summary, thank you for acknowledging the need for consultation with local authorities prior to discharge of pool and spa water. BACWA appreciates this opportunity to support the continued incorporation of such language on all labels for antimicrobials and conventional pesticides used in pools, spas, and fountains.

Thank you for your consideration of our comments. If you have any questions, please contact BACWA's Project Managers:

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Respectfully Submitted,

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