November 10, 2020

Stephen Savage
Office of Pesticide Programs (OPP)
c/o Regulatory Public Docket Center (28221T),
U.S. Environmental Protection Agency (EPA)
1200 Pennsylvania Ave. NW
Washington, DC 20460–0001

Subject: DCOIT Registration Review – Draft Risk Assessment (Docket ID No. EPA–HQ–OPP–2014–0403)

Dear Mr. Savage:

On behalf of the Bay Area Clean Water Agencies (BACWA), we thank you for the opportunity to comment on the Registration Review Draft Risk Assessment (RA) for 3(2H)-isothiazolone, 4,5- dichloro-2-octyl (DCOIT), an antimicrobial used in fountains. 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 is concerned that the Draft RA did not examine risks associated with discharges of fountain water treated with DCOIT. Fountain treatments (e.g., EPA Registration Number 707-259) direct users to apply DCOIT to create a concentration of 6 parts per million (6,000 ug/L) in fountain water. This concentration is more than 1,000 times greater than concentrations acutely toxic to sensitive aquatic organisms (which, according to the RA, are as low as 1.4 ug/L). Pool, spa, hot tub, and fountain maintenance usually occurs during dry weather. During dry weather, storm drain discharges of this water can receive very little dilution. For example, in California and the Southwest, small urban creeks often have flows less than 1 cubic foot per second (cfs); some even have flows less than 0.1 cfs (which is on the order of magnitude of the typical flow rate of a fountain discharge through a garden hose). Such low creek flows limit dilution of fountain water discharges. Due to the presence of chemicals like DCOIT that are toxic to aquatic organisms, water regulators and municipal urban runoff programs are working to prevent discharges of antimicrobial-treated swimming pool, spa, hot tub, and fountain water to the storm drain system, instead shifting discharges to the wastewater collection (sewer) system. In the paragraphs below, we outline why these discharges are a concern and request risk management through updated label language for this pesticide.

Our comments focus on the issue of draining location and flow rates when draining treated water to the wastewater collection system. We are writing to request that the DCOIT Registration

Review decision follow the precedent for improved labels for swimming pool, spa, hot tub, and fountain products that was established by the decisions for other antimicrobials with these uses, such as lithium hypochlorite and copper. In those Registration Review decisions, EPA worked carefully through the various issues to develop practical label language that mitigates possible aquatic impacts from discharge of treated water while preventing excess flows into sewer collection systems.

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

Pools may be emptied for cleaning every two to seven years, spas may be drained as often as every three months, and fountains may be emptied for cleaning every one to four 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. 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. Pesticides either pass through into receiving waters or adhere to solids and affect their beneficial reuse.

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 discharges from large pools and fountains 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 Supports Consistent Labeling to Ensure Consultation with Local Authorities

Existing DCOIT-containing fountain product labels do not include "Directions for Use" language regarding the drainage of a fountain. EPA has proposed the following language be added for all products used to treat fountains:

> *"**Discharge Directions for [Commercial] and [Residential] [Pool,] [Spa,] [Hot Tub,] and [Fountain] Uses:** Before draining a treated [pool,] [spa,] [hot tub,] or [fountain]*

[1] Pool Corp (2016). Frequently Asked Questions. Available at http://www.swimmingpool.com/faq.
[2] P.K. Data, Inc. (2012). Phone conversation with staff member Joshua Darling, August 15, 2016.

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

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. We support EPA's intent to place this type of language on all pesticides used in pools, fountains, spas, and hot tubs.

For all fountain products, including those containing DCOIT, we also recommend that the "Environmental Hazards" label statements be applied on the basis of product end use rather than product size. This would mimic EPA's decision for lithium hypochlorite and copper products. As explained in our attached lithium hypochlorite comments, this approach avoids potential conflicting language on product labels.

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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Enclosure: BACWA's September 9, 2016 Letter to Lithium Hypochlorite Registration Review, Proposed Interim Decision, Case # 3084 (EPA–HQ–OPP–2013–0606)

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September 9, 2016

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Subject: Lithium Hypochlorite Registration Review, Proposed Interim Decision, Case # 3084 (EPA–HQ–OPP–2013–0606)

Dear Ms. O'Neill:

On behalf of the Bay Area Clean Water Agencies (BACWA), we thank you for the opportunity to comment on the Proposed Interim Decision for lithium hypochlorite, which is used in swimming pools, spas, and hot tubs. BACWA's members include fifty-five publicly owned wastewater treatment facilities and collection system agencies serving 6.5 million San Francisco Bay Area residents. We take our responsibilities for safeguarding receiving waters seriously and are very concerned about discharges of pesticides into wastewater systems that may compromise effluent quality, biosolids reuse, and compliance with NPDES permit requirements.

While BACWA is not specifically concerned about lithium hypochlorite discharges to sanitary sewers, this proposed decision sets a precedent for improved labels for this entire class of products, including some that might be problematic for wastewater facilities. We appreciate that within the Proposed Interim Decision, EPA has drafted "Directions for Use" label language for the draining of swimming pools, spas, and hot tubs. This is the first such language to be developed to mitigate possible aquatic impacts from treated pool, spa, and hot tub water. We appreciate that this language is designed to help prevent excess flows in sewer collection systems. We encourage EPA to include this language for all other pesticide chemicals used in pools, hot tubs, spas, and fountains. We discuss the importance of this language below and suggest a minor clarification of existing label language.

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 the storm drain system, to sanitary sewer lines flowing to wastewater facilities, or sometimes to surrounding landscaped areas. Yet neither the storm drain system nor wastewater facilities are necessarily prepared to handle the antimicrobial

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

and conventional pesticides in this water.

Due to concerns about these constituents flowing untreated to surface waters, many California stormwater agencies are directing pool, spa, hot tub, and fountain owners to discharge to the 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.

While this is not a pesticide regulatory issue, high-flow swimming pool discharges to the sanitary sewer can create 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) avoids such problems.

BACWA Concurs with the Risk Conclusions for Lithium Hypochlorite
The Proposed Interim Decision identifies the possibility of an acute exposure and associated hazard to fish and aquatic invertebrates. The Decision includes this statement regarding risk:

> *"…Whether or not chlorine residues from discharge waters reach surface waters depends on where the treated water is discharged. Discharge directly into surface waters or into storm drains may expose aquatic organisms to chlorine residues that are potentially harmful. However, exposure can be prevented or minimized if appropriate disposal measures are undertaken."*

BACWA concurs with EPA's conclusions regarding the potential for acute hazard due to direct discharge to surface water or storm drains. We also agree with EPA's assessment that discharge to wastewater treatment facilities limits exposure to the environment.

BACWA Supports the Proposed Labeling as a Mitigation Measure
Pesticide labels that include adequate mitigation are an essential line of defense needed to prevent toxic impacts on receiving waters, especially since the label may be the only source of information on this subject seen by the end users. Existing lithium hypochlorite labels do not include "Directions for Use" language regarding the draining of a pool or spa. The labeling proposed in the Proposed Interim Decision is the first time that any pool/spa antimicrobial product will have such instructions. Specifically, EPA has proposed the following language for "Commercial and residential use: discharge management:"

> "*Before draining a treated pool, spa, or hot tub, 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 or storm drain or natural water*

[22] P.K. Data, Inc. (2012). Phone conversation with staff member Joshua Darling, August 15.

body unless discharge is approved by state and local authorities."

BACWA fully supports the proposed label language. We recognize that across the country jurisdictions vary widely with respect to their regulations regarding the draining of pools, hot tubs, and spas. Because the label language is legally binding, it must be carefully constructed. At the same time, it is important to acknowledge the potential risk to sewers and storm drains during discharge of a commercial or residential system and to provide instructions that inform users of their obligations to ensure that discharge of treated water does not harm aquatic ecosystems or cause sewer line backups. Therefore, we urge OPP to include this type of mitigating language on all pesticide products used for pools, spas, hot tubs, and fountains.

BACWA Recommends Clarification of the "Environmental Hazards" Label Section
Pesticide labels have separate sections for "Directions For Use" and "Environmental Hazards." While there are no "Directions for Use" for lithium hypochlorite regarding pool / spa drainage or other discharges on existing labels, there is an Environmental Hazards section on existing labels.

There are two different labels currently in use for lithium hypochlorite, dependent on the container size (see table). EPA's rationale for these two different labels is presented in EPA's Label Review Manual:[3] The assumption is that users purchasing product in containers equal to or greater than 5 gallons or 50 pounds are only manufacturers and other users who would trigger the definition of an NPDES point source. This distinction is imperfect and, given the newly proposed "Directions for Use" language for commercial and residential users, it could cause labels to have conflicting language. To avoid this, we recommend that the labeling distinction be based on the product's intended use (see table).

Existing "Environmental Hazards" Label Statements for Lithium Hypochlorite	Current Product Category	BACWA's Recommended Product Category
"ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms."	End-use products in containers of less than 5 gallons (liquid) or less than 50 pounds (solid, dry weight).	All end-use product labels - including commercial products - regardless of container size.
"ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA."	End-use products in containers of equal to or greater than 5 gallons (liquid) or equal to or greater than 50 pounds (solid, dry weight).	Only on technical grade and manufacturing use products.

In summary, thank you for a thoughtful analysis of possible acute impacts to aquatic life, for

[3] *"For certain registered end-use products, technical grade products and other manufacturing use products, a "point source discharge" is a possibility because effluent from the manufacturing plant may contain pesticides…. The Agency recommends that …(a) National Pollutant Discharge Elimination System (NPDES) statement (as outlined in PR Notice 93-10) should appear on such products."* U.S. EPA, Label Review Manual, Chapter 8: Environmental Hazards, September 2012.

considering the implications of sewer discharges, and for drafting mitigating language for this antimicrobial product. We hope this is just the beginning of a potential larger effort to incorporate 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, Melody LaBella, at (925) 229-7370 or mlabella@centralsan.org or Karin North at (650) 329-2104 or Karin.north@cityofpaloaloalto.org.

Respectfully Submitted,

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