

**DEPARTMENT OF WATER RESOURCES**1416 NINTH STREET, P.O. BOX 942836  
SACRAMENTO, CA 94236-0001  
(916) 653-5791

March 24, 2016

Jeanine Townsend  
Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814Subject: Comment Letter – Draft Aquatic Weed Control Permit Amendments

Dear Ms. Townsend:

The California Department of Water Resources (DWR) appreciates this opportunity to comment on the State Water Resources Control Board's (Water Board) proposed amendment to the Statewide General National Pollutant Discharge Elimination System (NPDES) Permit for Residual Aquatic Pesticide Discharges to Waters of the United States from Algae and Aquatic Weed Control Applications, Order 2013-0002-DWQ (Aquatic Weed Control Permit) as amended by Orders 2014-0078-DWQ and 2015-0029-DWQ. The proposed amendment adds the pesticide active ingredients hydrogen peroxide, peroxyacetic acid, and sodium carbonate peroxyhydrate to the Aquatic Weed Control Permit. The amendment also adds restrictions on the use of products containing these active ingredients beyond the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) label requirements to protect aquatic life.

DWR operates and maintains the State Water Project (SWP), which supplies water to more than 25 million Californians. DWR routinely monitors SWP water quality stations for the presence of cyanotoxins and taste and odor compounds. Blooms of cyanobacteria or nuisance algae can rapidly appear and grow exponentially, necessitating the need for rapid and effective algaecide treatment. Frequently, blooms encompass the entire waterbody as the result of dispersal by wind and currents, and a large scale treatment is the most effective solution to controlling a free-floating algal bloom.

DWR began using algaecides containing the active ingredient sodium carbonate peroxyhydrate in 2013 to control algal blooms in the SWP. Prior to 2013, DWR relied principally on copper sulfate. The incorporation of sodium carbonate peroxyhydrate algaecides has allowed DWR to reduce its reliance on copper-based algaecides while maintaining effective algal control at our reservoirs with just one application and maintaining water deliveries with no operational outages required.

The proposed restrictions to the application of algaecides containing the active ingredients hydrogen peroxide, peroxyacetic acid, and sodium carbonate peroxyhydrate, if adopted, will prevent DWR from effectively managing algal blooms and will threaten the

delivery of clean water to millions of Californians. Specifically, DWR has the following comments on the proposed amended sections as indicated below:

- 1) *Section IX (C)(7)(a): Apply products containing these active ingredients only to contained, non-flowing waters.*

By limiting application to contained, non-flowing waters<sup>1</sup>, it will impact DWR's ability to deliver water within the supply constraints of water agencies. Some municipalities, due to demand or storage limitations, cannot be without SWP water supplies for prolonged periods of time.

- 2) *Section IX (C)(7)(e): Only treat one-half of the contained water body at a time to minimize impacts to the aquatic system and, do not make subsequent treatments of the untreated area in the same water body within 48 hours of the initial water body treatment.*

The above proposed restriction presents two impacts to DWR. First, limiting treatments to only one-half of the contained water body at a time will significantly decrease treatment effectiveness and increase costs in the smaller forebays and regulating reservoirs present in the SWP. Due to their small size, restricting the treatment to only one-half of the reservoir will allow the remaining algal bloom to disperse throughout the reservoir again, necessitating multiple treatments.

Second, algal blooms commonly occur during warmer summer months when water demand is highest. Requiring the water to be held for 48 hours following a treatment places an uncertainty burden on downstream municipalities whose main water source is the SWP. Therefore, multiple treatments are not possible. This requirement would eliminate our ability to effectively treat harmful algal blooms and result in the delivery of unhealthy water. This restriction imposes an unacceptable risk to the SWP and the people of California.

Together, these two proposed restrictions will result in an adverse impact on DWR's ability to control harmful algal blooms at our reservoirs and would threaten California's water supply. Given that the toxicity of these active ingredients is highly temperature-dependent and the LC50 is between 45 to more than 12,000 mg/L as indicated by the included summary data from a 1997 study, and that no water quality criteria for these active ingredients have been set, the inclusion of the above referenced restrictions to the Aquatic Weed Control Permit does not seem warranted. Furthermore, chemical breakdown occurs rapidly once these compounds come in contact with water, leaving little to no traces that could harm aquatic life. For these reasons, DWR recommends that

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<sup>1</sup> Contained non-flowing waters is defined as "a water body that has no inflow or outflow immediately preceding and for a period of at least 48 hours following application of the pesticide active ingredients hydrogen peroxide, peroxyacetic acid, or sodium carbonate peroxyhydrate."

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the two restrictions above be removed from the proposed permit amendment as they impose unacceptable operational challenges in the delivery of clean water to Californians or alternatives in lieu of these restrictions that would not impose these operational constraints be considered.

Thank you for your consideration of these comments. If you have any questions, please contact, Anthony Chu, Chief of the Environmental Assessment Branch, of my staff at [Anthony.Chu@water.ca.gov](mailto:Anthony.Chu@water.ca.gov) or (916) 653-9978.

Sincerely,

A handwritten signature in blue ink that reads "David Duval for". The signature is written in a cursive, flowing style.

David Duval, Chief  
Division of Operations and Maintenance  
Department of Water Resources

cc:

Behzad Soltanzadeh, Asst Division Chief, Division of Operations and Maintenance  
David Samson, Chief, Civil Engineering Services  
Anthony Chu, Chief, Environmental Assessment Branch  
Diana Gillis, Chief, Delta Field Division  
Jim Thomas, Chief, San Luis Field Division  
John Bunce, Chief, Southern Field Division  
Tanya Veldhuizen, Environmental Assessment Branch