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(9/23/14) Public Hearing  
Small Domestic Wastewater Systems  
Deadline: 7/25/14 by 12:00 noon

July 23, 2014

Chairwoman Marcus and Board Members  
State Water Resources Control Board  
1001 I Street

Sacramento, CA 95814

Via email: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov); [Jeanine.Townsend@waterboards.ca.gov](mailto:Jeanine.Townsend@waterboards.ca.gov)



**Re: Comments on Draft General Waste Discharge Requirements for Discharges to Land by Small Domestic Systems**

Dear Chairwoman Marcus and Board Members:

On behalf of Heal the Bay, a non-profit environmental organization with over 15,000 members dedicated to making Southern California coastal waters and watersheds safe, healthy, and clean for people and aquatic life, we submit the following comments on the draft general Waste Discharge Requirements (“WDR”) for discharges to land by small domestic systems (“Draft Order”). The stated intent of the Draft Order is to streamline the permitting process for small domestic wastewater treatment systems that have relatively low threat to groundwater quality. While we understand the benefits of this streamlined approach, we are concerned the Draft Order as proposed may inadvertently lead to water quality objectives exceedances and impairments of surface water and groundwater. We appreciate the opportunity to provide these comments.

**Effluent Limitations**

The Draft Order identifies salinity, nutrients, and pathogens as constituents of concern that have the potential to degrade groundwater near land discharge locations. However, it does not contain effluent limitations for these pollutants. This is inappropriate. What was the reasoning for only including effluent limitations for biochemical oxygen demand (“BOD”) and total suspended solids (“TSS”) and no other constituents of concern? Influent treated by small domestic systems commonly contains high concentrations of not only BOD and TSS, but also bacteria, nutrients, oil and grease, chlorine, and total dissolved solids – all capable of impairing groundwater and surface water.

In 2013 the Los Angeles Regional Water Quality Control Board adopted a WDR/WRR for a 17,500 gallons per day (“gpd”) (average) wastewater treatment plant, which could be covered by this Draft Order, and found it prudent to include effluent limitations for 16 constituents.<sup>1</sup> As proposed the Draft Order would allow systems five times this size to have significantly weaker requirements. We ask that the Draft Order be revised to include effluent limitations for all constituents capable of impairing groundwater and surface water from land discharge. At a minimum, the Draft Order should be revised to include effluent limitations for nutrients and bacteria.

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<sup>1</sup> Waste Discharge Requirements (WDRs) / Water Recycling Requirements (WRRs) for Encinal Canyon Water Recycling Plant (Rancho Malibu) at Tract 46277, 3600 Encinal Canyon Road, Malibu, California (File No. 90-069, Order No. R4-2013-0019, Series No. 048, CI-7020, Global ID WDR100001505). (Adopted February 7, 2013).



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### **General Order Applicability**

The Draft Order covers small domestic systems with monthly average flow rates under 100,000 gpd that discharge to land areas. This includes wastewater generated from individual residences, rural parks, schools, campgrounds, mobile home parks, road side rest stops, small commercial or residential subdivisions, restaurants, resort hotels/lodges, small correctional facilities, temporary fire-fighting camps, recreational vehicle (“RV”) dump stations, and RV parks. Although we understand the Draft Order’s intent to streamline the permitting process of smaller domestic systems with similar treatment methods, we are concerned that these systems may not all be conducive to a “one-size-fits all” permit. The quality of effluent discharged from small domestic treatment systems varies greatly depending on the size of system, age of the technology, system budget, treatment train, and influent volume and chemistry. This variability makes it extremely difficult to craft general WDRs protective of all beneficial uses. What was the justification behind including all land discharging small domestic systems under 100,000 gpd under one general order and not making any differentiation in requirements? Systems installed on commercial developments, resort hotels/lodges, and small correctional facilities often are small-scale package plants similar in technology to much larger treatment systems. These systems are much different than conventional septic systems installed for individual residences or temporary fire-fighting camps. Having the same regulatory oversight for small scale domestic systems and larger more complex systems may not be protective of groundwater and surface waters.

### **Monitoring Requirements**

Many of the Draft Order’s proposed monitoring and reporting requirements are determined through the issuance of a “Notice of Applicability.” A “Notice of Applicability” authorizes coverage under the Draft Order and contains site-specific monitoring and reporting requirements. Given the variability in size and treatment of systems covered under the Draft Order, the monitoring and reporting requirements should be representative of the effluent volume and system technology. How can we be sure that appropriate monitoring and reporting will be conducted? At a minimum, we suggest creating a tiered monitoring and reporting program that requires larger systems to monitor groundwater and surface water more frequently. Additionally, we suggest that nutrients be added to the surface water monitoring requirements for all systems. This would help to ensure groundwater and surface water impairments are not occurring.

### **Treated Wastewater Application Rate**

The Draft Order allows dischargers to apply treated effluent to Land Application Areas (“LAAs”) during the irrigation season. To prevent ponding and surface runoff from over-application of treated wastewater, we suggest the Draft Order include agronomic rate application requirements, similar to those used in the recently adopted statewide General Waste Discharge Requirements for Recycled Water Use. Requiring agronomic rate application would safeguard against treated wastewater containing high concentrations of pollutants from reaching groundwater and surface water. Furthermore, it is unclear why a 24 hour buffer period was chosen between treated wastewater LAA application and precipitation events. Soils are often saturated for more than 24 hours following a rain event. We ask that wastewater application buffer periods be expanded to be representative of storm size, soil type, and infiltration rate.

### **Wastewater System Setback Requirements**

The Draft Order (Table 4 on page 15) summaries setback requirements for wastewater systems from domestic wells, flowing streams, ephemeral stream drainage, property lines, and lakes or reservoirs. The proposed septic tanks, aerobic treatment units, treatment system, and collection system setback



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distances from domestic wells, flowing streams, ephemeral stream drainage, and lakes or reservoirs are less protective than the adopted Statewide Onsite Wastewater Treatment System policy. What is the justification for the proposed setback distances for septic tanks, aerobic treatment units, treatment system, and collection systems? Setback distances, at a minimum, should be consistent with the Statewide Onsite Wastewater Treatment System policy. Furthermore, the City of Los Angeles Draft Onsite Wastewater Treatment System Management Program Ordinance requires minimum horizontal separation of 600 linear feet from 303 (d) impaired water bodies for nitrogen and bacteria and 900 linear feet separation from active public drinking wells. We recommend the Draft Order include more protective setback requirements.

### **Miscellaneous**

The Draft Order outlines subsurface disposal system requirements for land discharging wastewater systems. It is unclear if any groundwater elevation analysis is required under the Draft Order for siting of these systems. We are concerned that the Draft Order may allow dispersal of effluent to areas with high groundwater levels. We ask that groundwater analysis be conducted before subsurface disposal systems are installed to ensure that groundwater and/or surface water is not impaired by effluent discharge.

The Draft Order recommends, but does not require, dischargers to follow the Report of Waste Discharge ("ROWD") format contained in Attachment B1 for coverage under the general order. We recommend the general order require all discharger to follow the format outlined in Attachment B1 as this information is necessary for accurate assessment of wastewater treatment of small domestic systems.

Thank you for considering our comments. If you have any questions, please contact us directly at (310) 451-1500.

Best Regards,

Peter Shellenbarger, MESM  
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Heal the Bay

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Science and Policy Director, Water Quality  
Heal the Bay