



INFILTRATOR®
systems inc.

April 19, 2012

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

5

Re: California Assembly Bill 885
Final Draft Water Quality Control Policy for Siting, Design, Operation,
and Maintenance of Onsite Wastewater Treatment Systems
Infiltrator Systems Inc. Comments

Dear Ms. Townsend,

This letter serves to endorse the March 20, 2012 *Final Draft Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (final draft Policy) and provide minor comments on the most recent version of the document published for public comment by the State Water Resources Control Board (SWRCB). The comments include key issues on drainfield technologies, presented in the body of the letter, as well as some "housekeeping" suggestions presented in an attachment.

Endorsement of the Draft Final Policy

Infiltrator Systems Inc. (Infiltrator) is one of the leading manufacturers of onsite wastewater treatment system products in the United States and Canada, manufacturing drainfield products, septic tanks, and other onsite-related supplies. Infiltrator works with a sizable network of distributors in California, whose businesses will be directly affected by requirements set forth in the final version of the Policy. Infiltrator endorses the proposed final draft Policy with the proposed changes identified below. The draft final policy represents an appropriate and implementable means of allowing the continued use of onsite wastewater treatment systems, while protecting California's water quality and public health interests.

Infiltrator's primary comments pertain to the use of drainfield technologies in the final draft Policy.

Other general comments are provided for your review in Attachment 1 to this letter.

Comments Pertaining to Drainfield Technologies

Infiltrator would like to express its appreciation to the SWRCB for considering Infiltrator's November 14, 2011 comments and addressing proposed changes to the draft Policy dated September 30, 2011. Specifically, the proposed modifications that were incorporated into the final draft Policy include a reference to **IAPMO-certified dispersal system technologies** in Tier 2 and Tier 3.

The additional comments provided below include a request for modest changes to the draft policy language to reflect the new reference to "IAPMO certified dispersal system technologies" and include associated technical revisions necessary to maintain policy consistency and accuracy with regard to the reference to these technologies.

Sections 9.4.5 and 10.6.5

Infiltrator's November 14, 2011 comments suggested allowing for the use of "IAPMO-**approved**" dispersal systems. After submitting this written comment and conferring with IAPMO representatives, Infiltrator has

since determined that the appropriate terminology would be "IAPMO-certified" dispersal system technologies. Infiltrator proposes substituting "certified" for "approved" in Section 9.4.5 and 10.6.5, as shown below. This terminology more accurately reflects the internal processes in place at IAPMO.

1

9.4.5 Decreased leaching area for IAPMO-certified dispersal systems using a multiplier less than 0.70.

10.6.5 Decreased leaching area for IAPMO-certified dispersal systems using a multiplier less than 0.70.

Section 8.1.11

2

Section 8.1.11 under Tier 1 provides that increased drainfield allowance for "gravel-less chamber systems" is only allowed under Tier 2. There are two modest technical issues raised with this language. First, the reference to "gravel-less chamber systems" in Tier 2 and Tier 3 has been replaced with the "IAPMO" reference. Second, the statement as currently worded is in error, as the increased allowance is specified under both Tier 2 and 3, not just Tier 2. The changes proposed below fix both of those technical glitches:

8.1.11 Increased allowance for IAPMO-certified dispersal systems is not allowed in Tier 1.

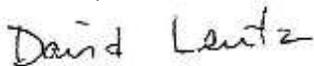
Section 1.0

3

Finally, with respect to the amendments that were made to Sections 9.4.5 and 10.6.5 from the September 30, 2011 to the March 20, 2012 drafts of the Policy, and the proposed modification of Section 8.1.11 above, the definition of "gravel-less chamber" is no longer needed in the Policy. Infiltrator proposes deleting this definition from the document.

Thank you very much for your consideration of these issues. Please contact me at (860) 577-7198 if you have any questions or would like to discuss Infiltrator's comments.

Sincerely,



David Lentz, P.E.
Regulatory Director
Science & Government Affairs

cc: David Holmes, Infiltrator Systems Inc.

Attachment 1

Other Comments on the Draft Final Policy

Other Comments on the Draft Final Policy

Preamble

Under Tier 3 – Impaired Areas, there is a typographic error. The 7th word in the first sentence should be "bodies", rather than "bodes".

4

Section 1

The unit of measure provided in the definition of soil types is in the International System of Units (SI system), while the remainder of the Policy is in English units. I suggest providing the soil particle diameters in both SI and English system units to be consistent with the use of English units elsewhere.

5

Section 7.4

Section 7.4 allows a percolation test to be performed during wet weather or by presoaking. In most instances, wet weather will not saturate the soil matrix in the same way that presoaking will create a saturated condition, leading to the determination of a representative assessment of the saturated hydraulic conductivity and percolation rate.

6

Infiltrator has two suggestions: (1) eliminate the wet weather allowance and require presoaking; and (2) provide a reference method for conducting the percolation test. For example, the University of Minnesota Extension provides step-by-step instructions for percolation testing at <http://www.extension.umn.edu/distribution/naturalresources/DD0583.html>. Perhaps one of the institutions in the California State University system has a similar-type reference that could establish a uniform standard for performing this test and achieving "apples-to-apples" results between test sites.

Section 8

For Tier 1 systems, there is no citation of a daily design flow in gallons per day for single-family residential systems. Section 8.1.3 states that the design shall be based upon expected influent wastewater quality, but a specific value is not provided. Nationally, all state onsite wastewater treatment system policies that I am familiar with cite daily flow values for specific applications (e.g., residential, commercial, institutional). The daily flow is used in combination with the effluent loading rate (Tables 2 and 3) to determine drainfield size.

Requiring the daily flow to be estimated, rather than defined, may lead to future controversy, where a person designing a 4-bedroom home for a couple with no children proposes a value of 150 gallons per day, based upon 75 gallons per person per day. This may be adequate for that particular homeowner, but the subsequent owner with 6 people living in the same 4-bedroom home will have drainfield that is approximately 25% as large as it needs to be to function properly given the flow from 6 people.

7

I propose establishing a daily flow value for single-family residential application at a minimum, and allowing designers to estimate flow for other applications, such as commercial and institutional facilities. A daily flow of 150 gallons per day per bedroom is on the high side of values used across the United States, and would build conservatism into designs under the Tier 1 minimum construction standards.