

MONTEREY COUNTY



DEPARTMENT OF HEALTH Ray Bullick, Director

ANIMAL SERVICES
 BEHAVIORAL HEALTH
 CLINIC SERVICES

EMERGENCY MEDICAL SERVICES
 ENVIRONMENTAL HEALTH

PUBLIC HEALTH
 PUBLIC ADMINISTRATOR/PUBLIC GUARDIAN

August 23, 2011



Jeanine Townsend, Clerk to the Board
 State Water Resources Control Board
 P.O. Box 100
 Sacramento, CA 95812-2000

RE: Comment Letter – Central Coast Onsite Amendments

Dear Jeanine,

Thank you for the opportunity to provide comments on the most recent amendments to the Central Coast Basin Plan. Monterey County has reviewed Resolution No. R3-2011-004 and the corresponding Amended Basin Plan Text and respectfully submits the following comments:

Example

Section	Text
	<i>Monterey County Comment or Question</i>

Comment 1

VIII.D	<p>Certified Professional is a person who demonstrates to the jurisdiction having authority special qualifications (through education, experience, exam, etc.) needed to successfully perform the task at hand.</p> <p><i>Recommend adding clarifying language.</i></p>
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Comment 2

VIII.D.1.c - Eligibility Criteria	<p>For an onsite wastewater system to be eligible for a conditional waiver of the requirements to submit a report of waste discharge and obtain waste discharge requirements:</p> <ol style="list-style-type: none"> 2. The local governing jurisdiction has adopted or updated local ordinances that incorporate the Criteria for New Systems set forth in Section VIII.D.3 of the Basin Plan. <p>The local governing jurisdiction implements an approved onsite wastewater management plan approved by the Water Board (VII.D.2.b) to ensure conformance with the Basin Plan criteria set forth in Section VIII.D.3. and local regulations, and has entered into a memorandum of understanding with the Central Coast Water Board regarding onsite wastewater system management.</p>
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	Will there be a grace period upon SWRCB adoption of this amendment so that local governing jurisdictions will have an opportunity to amend their ordinances or adopt the revised Basin Plan? If not, our local RWQCB could potentially be swamped with the responsibility normally assigned to the local governing jurisdiction.
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Comment 3

VIII.D.2.a – Disclosure and Compliance of Existing Onsite Wastewater Systems	The Water Board, on March 20, 2009 (OAL approval date), adopted a Basin Plan implementation...
	<i>Recommend update of date</i>

Comment 4

VIII.D.3.b. Requirements	<p><i>Monterey County Environmental staff had made the following comment on VIII.D.2.b.6. in a previous draft and received a reply from Regional Board Staff in bold. Due to reorganization, that section is now VIII.D.3.b.7.</i></p> <p>7. 375 gal per day for a 3 bed house: Monterey County currently uses 300. This will drastically increase square footage required per system. Is the Board assuming 4 people per 3 bedroom house or more people? Is it assumed that 375 gallons per day equals 40 grams of Nitrogen? This criteria has been in the Basin Plan since 1983 and assumes 40 grams nitrogen and 375 gpd to be representative of average home. Although those averages also may have included 3 bedrooms, it is not that specific in the criteria.</p>
	<p><i>In reviewing the answer that was provided it appears current studies on average concentration of nitrogen in household wastewater was not taken into consideration. Current literature indicates an average range of nitrogen in household wastewater, ranges from 35 mg/l – 45 mg/l. Using 375 gallons a day for a 3 bedroom house and using 40 grams per day as the average for a 3 bedroom, then the concentration of nitrogen would be 28 mg/l¹, which is not consistent with literature research. Using 35 mg/l as an average nitrogen concentration a household would be producing 49.5 grams/day² and using 45 mg/l a household would produce 63.8 grams/day³. Therefore, if you follow the logic through, then 1 acre is not sufficient for a 3 bedroom house. A minimum lot size should be somewhere in the range between 1.25⁴ acres and 1.6⁵ acres.</i></p> <p><i>However, 375 gallons/day for a three bedroom house appears to be excessive, especially with the many water conservation features being required. Monterey County uses 300 gal/day for a 3 bedroom house. If 300 gallons/day is used then the assumed concentration of nitrogen is 35.2 mg/l⁶ and falls within the average range of nitrogen concentration and is more consistent with literature research. Therefore, the Basin Plan should be amended to either:</i></p>

- a. Increase the minimum lot size to be consistent with math, science, and the present assumptions in the Basin Plan; or
- b. Decrease the amount of sewage flow.

The point of these comments is that assumptions used in the Basin Plan should be consistent with science and research.

$$^1 40 \text{ g} \div 375 \text{ gal.} = (40 \text{ g} \times 1,000 \text{ mg/g}) \div (375 \text{ gal} \times 3.78 \text{ liters/gal}) = 40,000 \text{ mg} \div 1,417.5 \text{ l} = 28.2 \text{ mg/l}$$

$$^2 35 \text{ mg/l} \times 1,417.5 \text{ l} = 49,595 \text{ mg} \div 1,000 \text{ mg/g} = 49.5 \text{ grams}$$

$$^3 45 \text{ mg/l} \times 1,417.5 \text{ l} = 63,787 \text{ mg} \div 1,000 \text{ mg/g} = 63.8 \text{ grams}$$

$$^4 49.5 \text{ g/acre} \div 40 \text{ g/acre} = 1.23 \text{ acres} \sim 1.25 \text{ acres}$$

$$^5 63.8 \text{ g/acre} \div 40 \text{ g/acre} = 1.59 \text{ acres} \sim 1.6 \text{ acres}$$

$$^6 40 \text{ g} \div 300 \text{ gal.} = (40 \text{ g} \times 1,000 \text{ mg/g}) \div (300 \text{ gal} \times 3.78 \text{ liters/gal}) = 40,000 \text{ mg} \div 1,134 \text{ l} = 35.2 \text{ mg/l}$$

Monterey County appreciates the opportunity to submit our comments and concerns regarding amendments to the Central Coast Basin Plan. Should you have any questions, please contact me directly, (831) 755-4584.

Sincerely,

Nicole Fowler
 Supervising REHS, Land Use Services
 Monterey County Health Department
 Environmental Health Bureau

fowlerne@co.monterey.ca.us

Cc: Richard LeWarne, Assistant Director, Monterey County Environmental Health
 Sorrel Marks, Sanitary Engineering Associate, Central Coast Regional Water Quality Control Board