Technical Memorandum Name: **On Site Treatment, January 2008**
Commenter: **David Venhuizen**
Comments Date: **January 26, 2008**
Responses Date: **March 28, 2008**

The following comments were submitted in response to the above listed Technical Memorandum (TM). The TM was developed as part of the EIR process for the project, in order to help facilitate and broaden the discussion of project issues important to the community. The responses should be considered preliminary because the EIR process is not complete, and the information necessary to fully respond has not yet been developed. The project team is grateful to those citizens who took the time to review the TM and provide comments at this early stage in the process. The project team will endeavor to fully address the comments and concerns through the on-going project development process.

	Comment	Response
1	Hello Mr. Ogren, Can you tell me the purpose/role of this document in the overall process? In particular, is there another TM that addresses decentralized concept strategies, or is this review of a completely on-lot management strategy considered to be the only option to the centralized strategy upon which the process has focused?	The overall focus of the series of technical memoranda is to provide engineering background to the team developing the environmental impact report. This TM provides an analysis of individual on site treatment systems, at a detail level that is appropriate to support the environmental analysis. A separate TM on decentralized treatment has also been released.
2	While I understand that the sources cited set forth what they do, they are in some respects not all that accurate. For example, contrast the assertion that RSF-type systems would produce ~30 mg/L total N with the paper I provided to you that shows--doesn't just assert--that ~15 mg/L is to be routinely expected, without regard to all the vagaries of operation in the on-lot environment. (Note the project that demonstrated this was conducted in 1992-94, so it's not like this is breaking news, to which the authors did not have access.) I am in discussion right now about collaborating with a company that believes carbon feed options far less costly and cumbersome than the Nitrex filter can consistently and reliably produce ~5 mg/L total N. Or consider the paper I sent you about drip irrigation, illustrating how the drip field would act as a "drainfield" when the soil moisture is	Table 1 in the On Site Treatment TM estimates that recirculating sand filters can provide between 44% and 82% percent nitrogen removal, which is within the range of 15 mg/L. However, anticipated Regional Water Board discharge requirements would set nitrogen limits below 10 mg/L so additional denitrification would likely be necessary.

	above field capacity, so that the assertion in this TM that dispersal would have to switch from the drip lines to a "drainfield" in winter is essentially baseless. Drip dispersal has been successfully employed year-round even in northern climates. The point is, Carollo--or whoever served as the expertise for this report--needs to get out and discover what is going on in this field, not just rely on books that are several years old, reporting "information" that was dated even when it was written.	
3	While I appreciate that there are indeed significant questions about a completely on-lot management system in Los Osos (and in any case, I didn't know that anyone besides a certain unbalanced person who shall remain nameless was actively advocating that), it looks somewhat like this report was written with an "agenda", if you catch my drift. In any case, there is a range of options between totally on-lot management and a totally centralized system with one treatment center. Again, how/when/where are those options being considered by the process? Thanks for any information/insights you can provide. Best regards, David Venhuizen, P.E	This TM considered individual on site treatment systems. A separate TM considered the model of decentralized treatment. Both of these options will be evaluated in the EIR.