

**Technical Memorandum Name: Low Pressure Collection System, January 2008**  
**Commenter: TAC – Finance Committee**  
**Comments Date: January 31, 2008**  
**Responses Date: Revised July 29, 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.

	<b>Comment</b>	<b>Response</b>
1	What is basis (rationale) of closing statement: "However, a fully LPS is likely not realistic for Los Osos." (Benefits of small pipe under pressure vs. large pipe Gravity, and reduced need for lift stations appear to compensate for added maintenance and energy relating to LPCS pumps.)	A completely low pressure system is not likely the optimal design for Los Osos. For example, a gravity system can be more cost effective in areas where the in-street mains are relatively easy to install, thereby avoiding the high on-lot costs of grinder pumps.  The various collection systems under consideration (STEP, gravity, low pressure) all appear to have applications in Los Osos where that particular system is well suited. However, it also appears that no system is best suited for every individual situation in the community. There are low lying areas where pressure systems seem to have an advantage; on the other hand, there are areas where simple gravity systems appear more appropriate. The goal of the current process is to sort through these issues to generate the best overall system, given a multitude of issues.
2	How much more would it cost to install larger sump tanks to provide back-up in event of pump failure and/or power outages?	The volume of emergency storage provided is anticipated to be a requirement of the permitting agencies, and the costs would be related to the size of the tank required. Additional storage may not be required, based on the operating history of existing low pressure systems.
3	How many homes will require grinder pumps under: 1) 100% LPCS? 2) STEP? 3) Gravity?	A 100% low pressure systems would require all connections to have grinder pumps. The Fine Screening Report estimates about 240 grinder pumps with a STEP system and 200 grinder pumps with a gravity system.
4	Please provide more specific information on electrical requirements for LPCS, e.g. 1-2 hp? Needing 120V, or 240V electrical? (1 or 2 additional breakers needed?)	The revised tech memo assumes 2 hp grinder pumps for the low pressure collection system, which would require 240 volt service and an additional electrical breaker. The tech memo assumes that between 5% and 20% of homes would require upgrades to their electrical panels to install the extra breaker.
5	What is total projected electrical load for entire	The total electrical load would depend on how

	PZ for: 1) 100% LPCS? 2) STEP/ STEG? 3) Gravity/ LPCS combined? And what are the implications (from PG&E standpoint)?	many pumps are running at any one time. The total power estimates for the collection system range from 425,000 kWh/yr for STEP, 500,000 kWh/yr for gravity, and 860,000 kWh/yr for LPCS. For LPCS, this is approximately equivalent to every house in Los Osos running a 20 watt light bulb all year.
6	Do these cost estimates include provision for remote alarm/ monitoring systems? If not, what would the added cost be?	Yes, the control panel does have the capability for remote alarm reporting. This is about \$200 of the estimated \$4000 cost for grinder pump, tank and controls.
7	What is average cost per household or per linear foot for Low Pressure CS?	The construction costs for a low pressure collection system are shown in Table 9 of the TM. Additional project costs, comparable to Table 7.4 of the Fine Screening Report are also expected.
8	Figure 2 (right side) needs to be corrected, reversing limit of county and that of homeowner.	Comment noted. This is an error.
9	In order to make costs equitable, the cost of installation and maintenance of the grinder pump in the back of lot should be the responsibility of the project, not the homeowner.	The homeowner vs. project cost examples in Figure 2 are consistent with what was presented in the Fine Screening Report for the limited use of grinder pumps with a gravity system. If grinder pumps are used more extensively, the responsibility for costs will have to be reevaluated.