Technical Memorandum Name: **Low Pressure Collection System, January 2008**
Commenter: **Robert Stark**
Comments Date: **January 24, 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.

	Comment	Response
1	Note 1 in table 8 assumes electrical system remodels to be the same for STEP and a grinder pump. The STEP pump is 1/2 hp or less (about the size of a washer) that could plug into any circuit without any trouble. Grinders that are 1 to 2hp require 240 volts that means 2 additional breakers in service box. This is not something that all installations can do as readily as supplying 120 volts.	The revised tech memo assumes 2 hp grinder pumps for the low pressure collection system and that 240 volt service is required.
2	PG&E is concerned with total load as they have to be able to supply that at any time. A step system of 4800 pumps at 1/2hp each is 2400 total. A grinder system assuming an average of 1.5hp each totals 7200. This last total is significant.	Consultation with PG&E will be necessary during project development to address the total power requirements of the project. The distribution of power loads will be evaluated if a low pressure collection system is further considered.
3	Table 6 and other places use $4000 for the capital cost of the grinder module which is reasonable. A comparable STEP pump module (not in the tank) would be less than $1500. This $2500 difference for 4800 units is $12 MILLION. Not exactly small change.	The cost comparisons in the TM and Fine Screening Report consider all of the costs associated with each collection system alternative, including pumps, road restoration, new septic tanks, on lot disturbance, etc. It is not accurate to only compare costs of one item between systems.
4	There are many areas that could gravity flow as you point out. The ability to do this with a STEP system is easy and eliminates a pumping system which can not be done with grinders. It could be done with full flow gravity if you want to take this step backward. The potential savings for this idea is enormous if you look at adding a STEP booster station at all the places that MWH had a lift station.	It is important to note that 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.