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Sent: Thursday, June 10, 2010 2:28 PM

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Cc: 'Bill Cagle'

Subject: Staff Report Addendum Item #F14a

To all,

Orengo Systems, Inc. had been designing, operating and manufacturing STEP (Septic Tank Effluent Pump) systems for almost 30 years. We are the largest and most established STEP manufacture in the world. STEP systems were identified as a viable wastewater collection technology for the proposed Los Osos Wastewater Project. Throughout the technical review process Orengo Systems has continued to offer pertinent data and comments in hopes of assuring that STEP receives a proper evaluation when being compared with conventional sewer.

Additionally we were one of the members of the W.M. Lyles Design Build team that endeavored to present a Hybrid STEP/gravity sewer plan for consideration by San Luis Obispo County. Unfortunately, despite W.M. Lyles stating that our plan would be completed with a maximum guaranteed price and at a cost that they had calculated to be 20% less than a gravity cost that didn't include onsite costs (total cost would have been 40% to 50% less) our team wasn't advanced to the final stage.

While we have an obvious interest in this project we have a greater interest in protecting the integrity of our core business.

Now, as you have the conventional sewer program before you for review, we couldn't help but notice that the staff recommendation acknowledges substantial local debate regarding whether to use a STEP or a gravity collection system. Furthermore the staff recommendation states that the Commission does not believe that there is an LCP or Coastal Act need to revisit treatment plant siting in terms of an evaluation of alternative sites or to revisit the collection system debate between STEP and gravity. Having committed substantial time and resource towards proving detailed and accurate information regarding the possible use of STEP systems in Los Osos we feel compelled to inform you of our concerns regarding data and information that you have received.

We have already sent an independent letter to the Coastal Commission concerning pertinent hazards to the gravity system such as earthquakes, liquefaction and flooding. We respectfully ask that those issues be seriously discussed relative to the LCP and Coastal Act.

Subsequent to this letter, we reviewed the Addendum #F14a. The Addendum details some of the statement that the County utilized is support of favoring gravity sewer. We must advise you that these are issues that the County has continued to exploit time and time again and that we consider these statements incomplete and biased in nature. For your consideration, I have attached a detailed reply to each of the County statements. In a simplified statement I will suggest the following:

1) The County continues to state that the GHG emissions for gravity sewer is lower than STEP. This was achieved with several data manipulations that should be questioned:

a. Large GHG emissions for construction were amortized in an effort to diminish their significance.

- b. GHG emissions were added for nonexistent STEP tanks that may occur in future build-out
  - c. GHG emissions associated with methanol use incurred GHG numbers and do not consider alternative carbon sources with lower GHG emissions
  - d. The GHG emissions for gravity sewer are derived from a biosolids processing scheme that is not consistent with the project before you
  - e. The GHG emissions are calculated on the basis of short interval tank pump-outs (extra truck trips) but on methane production that would be associated with long term pump-out intervals (you can't have both)
  - f. There was no consideration given to options for mitigating methane production from STEP tanks (monitoring, capture, etc.)
- 2) The County continues to state that STEP has a higher soil disturbance area for on-site installation and comparable disturbance overall. This is not true for the following reasons:
- a. Trench excavations for gravity sewer have to be wide enough to satisfy OSHA requirements.
  - b. Deep trench excavations must be wide enough to accommodate suitably sized trench boxes or shoring.
  - c. The onsite disturbance for gravity sewer includes the possibility of removing or collapsing the existing tank and installation of a lateral complete from the house to the main.
  - d. All STEP mains can be installed trenchless if this is a significant driver in the project decision process.
  - e. Minimizing soil disturbance for gravity sewer construction, manholes and lift stations isn't normally a concern for the contractor. Speed of installation is most often the biggest concern. There would be a cost for minimizing soil disturbance in a gravity sewer installation.
  - f. We believe that the total soil disturbance for STEP is about ½ that of gravity sewer.
- 3) The County manipulated cost estimates to show a banded cost that appears equal. They have continued to push this notion. They have had factual data before them that suggests otherwise and yet have chosen not to adjust this statement. Facts are as follows:
- a. The design build team stated that costs for a STEP/gravity hybrid would be 20% less than gravity without including the onsite gravity costs. This points to a cost that in total, would be 40% to 50% lower. This is a real number from a real contractor, not an estimate.
  - b. The scope of the project continues to evolve with the addition of mitigation issues, revised lift station locations, etc. This project in no way resembles the Montgomery Watson design. Despite this, the uncertainty in the estimate has never been evaluated and the cost of mitigation items have never been added to the estimate. Items such as fused pipe, more lift station, trenchless construction, pipes with more gradient, excavation monitoring, just to name a few, could have a substantial impact on the cost.
  - c. The STEP estimates include numerous costs that Orenco has repeatedly stated are incorrect. Despite this the STEP estimate has never been revised.
- 4) You are under the impression that the EIR and fine screening compares STEP and gravity and that gravity was found superior. This is not

true for the following reason:

a. The EIR compared projects, not the collection options. The 4 projects use different treatment and effluent disposal options. Accordingly a direct comparison between STEP and gravity cannot be made and wasn't made. We would suggest that they should have.

5) The County continues to state that the gravity sewer system will be water-tight. We question this statement for the following reasons:

a. We're not aware of any water-tight gravity system. This would be rare in a newly constructed system and impossible in an aging gravity sewer system.

b. This statement is not supported by data that you have under your own jurisdiction. Simply look at the number of I&I reduction projects you finance and the number of sanitary sewer overflow events you have enforcement action on.

c. I&I is sourced from manholes, lift station structures, private laterals, illegal connections. How is this being addressed by bell and spigot pipe?

6) The County questions the logistics of coordinating onsite work with homeowners.

a. There are hundreds and hundreds of thousands of onsite pumping systems owned by public utilities. Other projects have found ways, why is this such an issue here?

I mentioned that the integrity of our core business is being challenged. Our wastewater solutions are marketed and distributed nationally. Incorrect data does and has impaired our ability to compete fairly when we are confident that our solutions are the best solutions. While we understand that this is not your direct concern, we do believe that correcting poor information is part of your responsibility in properly administering the California Coastal Act. We respectfully, ask that you take our comments under consideration.

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