

PEPPERDINE UNIVERSITY

GOVERNMENTAL AND REGULATORY AFFAIRS

January 19, 2010

Wendy Phillips
Chief, Groundwater Permitting and Landfills Section
Los Angeles Regional Water Quality Control Board
320 W. Fourth Street, Suite 200
Los Angeles, California 90033

Dear Wendy:

The attached letter was submitted from Pepperdine's hydrogeologists, Daniel B. Stephens & Associates, Inc., to Pio Lombardo in response to a request to confirm the veracity of his analysis related to Pepperdine's Hydrogeological Monitoring Program ("HMP"). It is unclear to us in what manner this analysis will be used, whether he will reference our HMP reports, and in what proceeding if any. However, in the event that analysis of our HMP reports is used in a proceeding before the Los Angeles Regional Water Quality Control Board, we thought it important to share this information with the Board in whatever manner you see fit.

Thank you for your time on this matter. Please feel free to contact me at (310) 506-4702 if you would like further clarification.

Sincerely,



Rhiannon L. Bailard
Assistant Vice President, Governmental & Regulatory Affairs

January 19, 2010

Pio S. Lombardo
Lombardo Associates, Inc.
23852 Pacific Coast Highway # 502
Malibu, CA 90265-9994

Re: Review of Lombardo Associates, Inc. Interpretation of Pepperdine University HMP Data

Dear Mr. Lombardo,

DBS&A has reviewed your approach to summarizing results presented in Pepperdine's Hydrogeologic Monitoring Program Annual Reports. Our review considered your methods, assumptions, and the overall presentation of the data to evaluate whether it is consistent with the HMP's intended use and inherent limitations. Our review did not attempt to verify whether the data and calculations were accurate.

We disagree with your approach to this analysis and suggest that you model and monitor recharge using site-specific conditions rather than assuming that the results obtained at Pepperdine would apply to another site without further investigation.

While the Pepperdine water balance model provides valuable insight and supports our interpretation that recharge is minimal and related to precipitation rather than irrigation, the model is not a stand alone tool for evaluating recharge. The water balance model results require validation by direct measurements of groundwater elevations and soil moisture. The University utilizes years of on-site irrigation experience based upon soil moisture and groundwater monitoring to avoid over-irrigation that could lead to recharge.

Our investigations indicate that, because of the varied microclimates within the Southern California coastal environment, ETo values cannot be averaged or applied to different locations with a high degree of accuracy. Other site specific factors such as soil texture, topography, and vegetation also strongly influence recharge.

For these reasons, it is our opinion that use of the Pepperdine HMP data in the manner you have described without conducting a site-specific investigation is inappropriate. If you would like to discuss this matter in greater detail, please do not hesitate to contact me directly at (805) 681-2985.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.



Stephen J. Cullen PhD, PG
Principal Hydrogeologist, Senior Vice President
SJC/tpf

cc: Rhiannon L. Bailard, Pepperdine University (1)
Los Angeles Regional Water Control Board (1)