



California Regional Water Quality Control Board

Los Angeles Region



Linda S. Adams
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: : <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

September 9, 2010

Mr. Peter DeLuca
Thomas Aquinas College
10000 North Ojai Road
Santa Paula, CA 93060

WASTE DISCHARGE REQUIREMENTS AND MONITORING AND REPORTING REQUIREMENTS FOR THOMAS AQUINAS COLLEGE, 10000 NORTH OJAI ROAD, SANTA PAULA, CALIFORNIA (FILE NO. 77-049, R4-2008-0206, CI 6410)

Dear Mr. DeLuca:

Waste Discharge Requirements (WDR) Order No. R4-2008-0206, which was adopted on December 11, 2008, required Thomas Aquinas College (Discharger) to conduct a three-month study of the evapotranspiration rate at the disposal area during critical conditions (wet weather and peak student/faculty population) to demonstrate the impact of the waste discharge to the underlying groundwater. It is also required that the Discharger submit a technical report summarizing the findings of the three month study by August 30, 2009. Upon review of the technical report, the Executive Officer will determine if a groundwater monitoring program is required for the facility.

On August 28, 2009, we received a letter from your consultants, Water Resource Engineering Associates (WREA), transmitting the results of the Percolation and Evapotranspiration Analysis study, which began in May 2009. The WDR Order No. R4-2008-0206 assumed that the Discharger's highest waste generation period was coincidental with the highest precipitation period, but historical data and school scheduling points otherwise.

However, calculations for the evapotranspiration study were completed using the initial assumptions. Therefore, precipitation data from the 100-year storm event plus 50,000 gallons per day (gpd) of influent per day was assumed as worst case scenario for the entire year and for the study, the influent and the effluent were evaluated at the same quantity.

The necessary precipitation information used in the study was obtained from the Ventura County Watershed Protection District (VCWPD) historical gage 173A, known as Santa Paula-Ferndale Ranch immediately adjacent to the Discharger. The evapotranspiration information was obtained from CIMIS website (California Irrigation Management Information System, California State Department of Water Resources) for the Santa Paula and Camarillo Stations. The total sprayfield area is 2.5 acres and the sprayfield cover that has to be irrigated, made up of chaparral and grass or weed, is approximately 0.8 acres. The crop coefficient for both chaparral and grass/weeds according to the CIMIS website is 0.75.

At the request of the Discharger, Earth Systems of California performed percolation tests in a period from July to August 2007 to determine the infiltration rate at the 2.5 acre spray field and

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

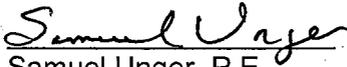
found it to be 1.1 inches per day. The total water to be applied to the sprayfield was calculated to be 7.19 acre-foot during a representative month in January. The study also showed that when the available water coming from precipitation and the wastewater treatment plant effluent is greater than the water required to irrigate the sprayfield cover, storage of the effluent is required. The required storage scenario occurs during high precipitation and high student population periods around the months of December, January, February, and March. A study of the groundwater conditions at the site and the surrounding area based on historical data and results of the study was performed by DMI-EMK Environmental Services, Inc. The study showed that groundwater was not encountered at 40.5 feet below ground surface (bgs) at the sprayfield area.

Based on the results of the study and assuming low infiltration rate of 1.1 inches per day, the evapotranspiration capacity of the spray field exceeds the available water except during high precipitation and high student population months of December, January, February, and March. However, during these periods, the maximum required capacity of 3.09 acre-feet is available from 6.5 acre-feet storage pond at the site.

The study concluded that the disposal of the treated wastewater to the existing 2.5 acre sprayfield will not impact the underlying groundwater as the excess available water is stored in the onsite pond and subsequently dispersed during days without precipitation. The plant is also designed that the effluent at the end of pipe, contains constituent concentration levels lower than those required in the Basin Plan. Therefore, groundwater monitoring wells are not necessary at the disposal site at this time.

If you have any questions regarding this letter, please contact Project Manager, Miss Dionisia Rodriguez at (213) 620-6122 or Section Chief of Groundwater Permitting and Land Disposal, Dr. Rebecca Chou at (213) 576-6618.

Sincerely,


Samuel Unger, P.E.
Executive Officer

cc Mr. Robert Gallagher, County of Ventura, Environmental Health Division
Mr. William C. Stratton, Environmental Health Division, County of Ventura
Mr. Andy Hovey, Ventura Regional Sanitation District
Ms. Heather M. O'Connell, Water Resource Engineering Associates

California Environmental Protection Agency

