

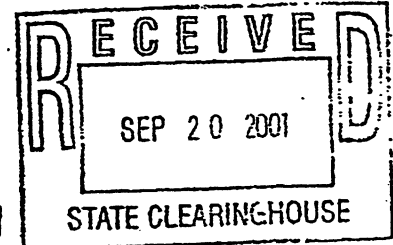
DEPARTMENT OF HEALTH SERVICES
SOUTHERN CALIFORNIA BRANCH
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LETTER AF



September 17, 2001

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Brian Grattidge, Associate Planner
Governor's Office of Planning and Research
P.O. Box 3044
Sacramento, CA 95812-3044

UC Merced Draft Environmental Impact Reports

Dear Mr. Grattidge:

Our office has reviewed the Draft Environmental Impact Reports (DEIR) for the County of Merced University Community Plan (SCH #2001021056) and Long Range Development Plan (SCH #2001021065) and we have the following comments:

1. University Community Plan DEIR, Page 4.8-37

Expected Groundwater Demands at the University Community

This section states that the groundwater demand is calculated based the following water consumption rates: 55 gallons of water per day per capita, 15 gallons of water per day per employee, 10 gallons of water per day per student, and approximately 173 gallons per day per single family dwelling unit in residential landscape irrigation areas. Assuming 2.8 persons per dwelling unit in accordance with Section 64412 of Title 22, California Code of Regulations, the calculated water usage per dwelling unit per day would be $(2.8 \times 55) + 173 = 327$ gallons based on the above water consumption rates.

The 2000 Annual Reports submitted to our office from the following community water systems in Merced County reveal the following annual average daily water usage per service connection:

City of Merced – 1,233 gpd per service connection (flat rate)
Meadowbrook Water Company – 854 gpd per service connection (flat rate)
Hilmar County Water District – 777 gpd per service connection (metered)
Winton Water and Sanitary District – 549 gpd per service connection (metered)

Our office believes that the water consumption rates for the proposed University Community used in the DEIR are much too low based on actual water usage data from community water systems located in Merced County.

AF-1

2. University Community Plan DEIR, Pages 4.15-16 and 4.15-17

Decentralized Wastewater Treatment Systems

This section states that wastewater from single family households could be treated in septic tanks with filters and the treated effluent conveyed to UV disinfection systems which would provide a quality of water considered to be "advanced secondary" treated water. A maximum of 300 homes would be served by a single cluster disinfection system. A recycled water distribution system would be installed and disposal of treated effluent would occur through subsurface drip emitters located six to ten inches below grade in suitable landscaping areas.

The Department has determined that this type of subsurface drip irrigation, with recycled water that is not disinfected tertiary recycled water in accordance with the Department's Water Recycling Criteria, is not acceptable for residential landscaping, parks, playgrounds, schoolyards, or any other areas where public access is unrestricted.

In addition to the need for a higher degree of treatment, the Department is very concerned about the reliability of the operation and maintenance of numerous individual home treatment systems.

AF-2

If you have any questions, please call me at (559) 447-3132.

Sincerely,



Carl L. Carlucci, P.E.
Senior Sanitary Engineer
Merced District
Southern California Branch
Drinking Water Field Operations

cc: Dave Spath, Division Chief, DHS-DDWEM
Richard Haberman, Section Chief, DHS-DWFOB Central California Section
Jeff Stone, DHS-DDWEM Recycled Water Unit
Merced County Environmental Health Department

COMMENT LETTER AF: DEPARTMENT OF HEALTH SERVICES

Response to Comment AF-1:

The potable water consumption rates for the University Community are discussed on page 4.8-37 and are presented in Table 4.8-3 on page 4.8-38 of the UCP DEIR (please see also Chapter 2, Revisions to the DEIR for updated text). While these numbers might be considered “low” when compared to the other community water systems referenced by the commentor, the “mission statement” of the proposed University Community is to promote sustainable development and water conservation. The water conservation rates were determined by Nolte Associates using water-conserving fixtures as standard equipment, and water infrastructure that is starting from “scratch,” instead of retrofitting existing infrastructure. Total water demand calculations also were determined for using a substantial portion of treated wastewater for outdoor irrigation needs.

In the water demand calculations prepared by Nolte Associates in their referenced report (Water Supply, Storage, and Distribution System Conceptual Plan – Technical Memorandum, June 15, 2001) and presented in Table 4.8-3, indoor and outdoor water demand calculations were prepared separately. Nolte Associates’ technical report is available for review at the Merced County UC Development Office located at 3450 “C” Street, Atwater, CA 95301.

Response to Comment AF-2:

The potential effects of using treated wastewater for irrigation purposes are discussed in Impact 4.8-8 on page 4.8-55 of the UCP Draft EIR. Referenced in the discussion for Impact 4.8-8 is UCP Policy IW 5.6, which says that the development of the University Community would “ensure the provision of recycled water at the appropriate quality required for a specific reuse opportunity” and UCP Policy IW 8.4, which says “ensure that wastewater treatment levels meet standards for intended reuse or discharge point.” Therefore, during the initial design phases of the University Community, water recycling systems would be designed to reflect appropriate treatment methods and treatment levels. If, at the time the irrigation systems are designed, the Department of Health Services determines that using “advanced secondary” treated water is unacceptable, irrigation systems for front yards and open spaces would use water treated to an appropriate level.