STATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY PETE WILSON, Governor

DEPARTMENT OF HEALTH SERVICES
DRINKING WATER FIELD OPERATIONS BRANCH
50 D STREET, SUITE 200
SANTA ROSA, CA 95404
(707) 576-2145 FAX (707) 576-2722

October 7, 1996

Ms. Marie Meredith
City of Santa Rosa
Community Development Department
P.O. Box 1678
Santa Rosa, CA 95402-1678

Dear Ms. Merideth:

The Department of Health Services, Division of Drinking Water and Environmental Management has reviewed sections of the City's draft EIR/EIS for the Subregional Long-Term Wastewater Project that pertain to impacts on domestic water systems. The comments given below pertain to Section 4.7 of the EIR/EIS.

1. Alternatives 2A through 4 will have no significant impacts on domestic water supplies and therefore the Department has no comments on these alternatives. 001

2. Alternative 5A is unacceptable to the Department because of the potential impacts on the Sonoma County Water Agency (SCWA) Ranney Collector system. The EIR/EIS concludes that the public health impacts of the discharge component of this alternative are less than significant. However, the Department has a long standing policy of requiring public water systems to use the best quality water source available. The SCWA collector system provides potable water to over 500,000 persons in Sonoma and Marin counties. Placing a discharge point upstream of these collectors provides no advantages over the other proposed discharge project and could degrade the quality of the water withdrawn from the Russian River by the SCWA. 002 003

3. The public health impacts on domestic water systems from inorganic and organic chemicals contained in the treatment plant effluent appear to not be significant at this time. However, constituents have been consistently found in the treatment plant effluent (in low concentrations) which can have detrimental health effects if concentrations increased. This is a concern to the Department with respect to the SCWA number three and four collectors that are downstream of the 5B discharge point to the Russian River. Because this project is intended to be a long term solution, possible future impacts must be assessed. These collectors are natural systems and as such subject to change by from year to year. These changes can make the treatment provided by these collectors more or less effective than they are now. In addition, concentrations of constituents in the plant effluent can change, new standards could reduce existing Maximum Contaminants Levels, and new contaminants could be discovered in the future. While enough data doesn't exist to evaluate all these possibilities at the present 004 005

time, some type of hydraulic analysis should be performed to determine the percentage of treatment plant effluent that would be taken into these collectors under the operational and river flow conditions which can exist when discharge will take place. 005 (cont.)

Any project which has discharge above current levels as a component must include an ongoing monitoring program for constituents of concern. This monitoring program must be designed to sample the treatment plant and pond effluents under the full range of operational conditions experienced by the treatment plant including influent flow rates and different qualitative loading rates. This type of program is necessary to identify any constituents whose concentration may increase in the future. In addition, ongoing research may lower water quality standards for some constituents. Accurate, up to date data will be needed to assess the public health significance of any water quality standard reduction for constituents in the treatment plant effluent. 006

4. The biological hazard assessment for Giardia and Cryptosporidium was based on four samples taken from the treatment plant effluent and four from the Russian River in October, November, and December of 1994. The conclusion that Giardia and Cryptosporidium represent less than a significant public health impact cannot be drawn from such a limited amount of data. Sample results over the full range of plant operational conditions are necessary in order to determine an accurate assessment of the hazard represented by these organisms. In addition, any sampling program should correlate plant operationa conditions to sample results. This is necessary to determine if there is a relationship between treatment plant operational conditions and Giardia and Cryptosporidium levels in the plant effluent. 007

5. Part of the conclusion of less than significant public health impact of Giardia was based on the treatment plant achieving a 99.99 percent reduction in Giardia concentration by disinfection inactivation using chlorination. The City is in the design phase of a project to replace the treatment plant chlorination disinfection system with an ultraviolet (UV) disinfection system. This change in disinfection treatment must be included in the assessment of the public health hazard of Giardia and Cryptosporidium in the treatment plant effluent. 008

The Department appreciates the opportunity to comment on the City's EIR/EIS. We look forward to working with the City to address our comments. If you have any questions please contact me at (707) 576-2729. 009

Sincerely,

Bruce H. Burton

Bruce H. Burton, P.E.
District Engineer
Santa Rosa District Office

Ms. Marie Meredith
October 7, 1996

c: Ms. Robin Cort, Ph.D.
Parsons Engineering Science, Inc.
1301 Marina Village Parkway, Suite 200
Alameda, CA 94501

4910009/Wastewater
EIRCOM.DOC/BHB