

COMMENT LETTER 10 - STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES, DRINKING WATER FIELD OPERATIONS BRANCH, BRUCE H. BURTON, P.E. (OCTOBER 7, 1996), RECEIVED OCTOBER 7, 1996

Response to Comment 10-1

Comment Summary: The comment states that no comments will be provided on Alternatives 2A through 4 since these alternatives will have no significant impacts on domestic water supplies

The EIR/EIS authors appreciate the Department's determination that these Alternatives will not affect domestic water supplies.

Response to Comment 10-2

Comment Summary: The comment states that Alternative 5A is unacceptable to the Department of Health Services because of potential impacts on the Sonoma County Water Agency's Ranney Collector system. The comment notes that although the Draft EIR/EIS concludes that the public health impacts of this alternative are less than significant, the Department has a long standing policy of requiring public water systems to use the best quality water source available.

Refer to Master Response 2, located in Section 6.2 of this document, concerning Project selection.

Response to Comment 10-3

Comment Summary: The comment states that Alternative 5A offers no advantages over other alternatives and could degrade the quality of Sonoma County Water Agency supply.

The Draft EIR/EIS identified one advantage of Alternative 5A over 5B. Table 1-13 shows that Alternative 5B causes a significant impact on dissolved oxygen in the Laguna, as evaluated in Impact 6.9.1 (Dissolved Oxygen); no feasible mitigation has been identified to reduce the impact to less than significant. Alternative 5A does not cause a significant impact on dissolved oxygen in the Russian River. Potential impacts on the Sonoma County Water Agency supply are discussed in Master Response 8, located in Section 6.2 of this document.

Response to Comment 10-4

Comment Summary: The comment states that public health impacts from inorganic and organic chemicals contained in the effluent appear not to be significant at this time but that future changes in the types and concentrations of chemicals contained in reclaimed water may adversely affect the Sonoma County Water Agency's numbers three and four Ranney collectors, if Alternative 5B is selected.

The EIR/EIS authors agree that future changes in water quality are not entirely predictable; however, recent sampling results provide the best available estimate of existing and future water quality. To account for any future changes in the regulation of specific chemicals, the City will work with applicable agencies, including the North Coast Regional Water Quality Control Board and the State Department of Health Services to develop an appropriate monitoring program that would be incorporated in permits for the Project.

Response to Comment 10-5

Comment Summary: The comment notes that the effectiveness of the water treatment system may vary in the future and that standards could be reduced for chemicals with existing Maximum Contaminant Limits (MCLs, drinking water standards) or new standards could be created for chemicals currently without MCLs. The comment further recommends that a hydraulic analysis be performed to determine the percentage of treatment plant effluent that would be taken into the Sonoma County Water Agency Ranney Collectors.

At a subsequent meeting with the Department of Health Services it was determined that existing data could be evaluated to address this comment. Refer to the minutes of the 29 October 1996 meeting with Department of Health Services, which are located in Section 6.4 of this document.

The EIR/EIS authors agree that the treatment plant effectiveness could vary (although data in Appendix H-2 of the Draft EIR/EIS indicate that historical variations are small) and that regulations can change. The City will work with applicable agencies, including the North Coast Regional Water Quality Control Board and the Department of Health Services to develop an appropriate monitoring program that would be incorporated in permits for the Project. Section 2.1 of the Draft EIR/EIS identifies the existing regulations with which the Project will comply. However, the EIR/EIS authors agree that the last sentence in the first paragraph of Section 2.1 should be revised to address compliance with future regulations.

Therefore, the following changes are made to the Draft EIR/EIS:

Page 2-15. The last sentence is revised as follows:

Compliance with these policies and regulations, and future modifications thereof, is required, and will result in avoidance and/or minimization of adverse environmental impacts.

The SCWA has not performed specific tests to determine the percentage of Russian River water (i.e., surface water from the River reach that would contain reclaimed water) that is drawn by the Ranney Collectors. The SCWA currently assumes that the water drawn by the collectors is primarily River water that has been filtered by the river bed overlying the collectors (personal communication, Jim Flugum, Sonoma County Water Agency 14

January 1997). Water balance models in the Draft EIR/EIS and existing assumptions regarding uptake by the collectors are used to compare alternatives.

For Alternative 5A, Russian River Discharge, the point of discharge is 2 miles upstream of the Wohler intakes (Ranney Collectors 1 and 2) and 4 miles upstream of the Mirabel intakes (Ranney Collectors 3, 4, and 5). Water withdrawn from each intake would thus contain reclaimed water at a concentration that is dependent on two factors as follows:

1. The concentration of reclaimed water in the Russian River
2. The fraction of water withdrawn at each Ranney collector that derives from surface water that contains reclaimed water.

Each of these factors is addressed below.

- **Reclaimed Water Concentration in the River.** Using the results from the Water Balance Model in Appendix D-9 of the Draft EIR/EIS, the maximum monthly discharge rate for the 20 percent design discharge rate is predicted to be 28.3 percent. That is, reclaimed water may contribute up to 28.3 percent of the total Russian River flow. This event is expected to be rare; only 4 monthly averages in 70 years are predicted by the model to exceed the 20 percent design discharge rate. Maximum discharge rates for other design discharge rates (1, 5, and 10 percent) are given in Table 1 of Appendix D-9.
- **Fraction of River Water At Ranney Collector.** An unknown fraction of the water withdrawn at each Ranney Collector was drawn from the Russian River channel between the Alternative 5A discharge location and the Ranney Collector (local River water). This fraction of the withdrawn water will contain reclaimed water from the Project and the remainder will not. The fraction that is local River water increases during dry years.

The maximum discharge rate and the maximum local River water fraction are expected to occur during a dry year. If all five Ranney Collectors withdraw only local River water, the reclaimed water concentration in the withdrawn water will be equivalent to the concentration of reclaimed water in the Russian River, and the maximum monthly reclaimed water concentration is 28.3 percent. Under most conditions, however, the concentration of reclaimed water will be less than 28.3 percent because the monthly discharge rate would be less than 28.3 percent and local River water will comprise less than 100 percent of withdrawn water.

For Alternative 5B, Laguna Discharge, only Ranney Collectors 3 and 4 are below the discharge point, i.e. downstream from the confluence of the Russian River and Mark West Creek. Depending on the relative proportions of water drawn by each intake, the concentration of reclaimed water in withdrawn water could be as high as 28.3 percent if only Ranney Collectors 3 and 4 were in use and the collectors were drawing solely local River water. The concentration of reclaimed water will be less than this depending on

whether other Ranney Collectors are in use, local River water fraction, and reclaimed water discharge rate. No reclaimed water from the Santa Rosa Subregional System will be present in SCWA supply if only collectors 1, 2, and 5 were in operation.

Should future standards result in noncompliance, the City would need to comply with these future standards (as described on page 2-15 of Draft EIR/EIS). Measures could include source control for constituents of concern, agreements with the Sonoma County Water Agency to adjust intake points during times of higher discharge levels, or additional wastewater treatment technologies.

Response to Comment 10-6

Comment Summary: The comment states that the City's water quality monitoring program would need to be expanded if additional discharge is proposed.

The City's existing monitoring program is presented in the City's 1995 Report of Waste Discharge. The EIR/EIS authors concur that this program will need to be expanded, depending on the selected alternative. The City will work with applicable agencies, including the North Coast Regional Water Quality Control Board and Department of Health Services to develop the appropriate monitoring program that would be incorporated in permits for the Project.

Response to Comment 10-7

Comment Summary: The comment states that the biological hazard assessment for Cryptosporidium and Giardia is based on four samples, and more data are needed. The comment also requests that Cryptosporidium and Giardia in effluent be evaluated over a range of treatment plant operating conditions.

Appendix H-2 (Reclaimed Water Quality) of the Draft EIR/EIS describes the four samples upon which the biological hazard assessment was based. Appendix H-3 (Reclaimed Water Quality Update) of the Draft EIR/EIS describes additional measurements that were also considered. Additional data have been collected since Appendix H-3 was prepared, and these data are considered in a re-assessment of biological hazards in Master Response 8, located in Section 6.2 of this document.

Response to Comment 10-8

Comment Summary: The comment states that the City is converting to ultra-violet light disinfection and the effect of this conversion on the public health hazard of Cryptosporidium and Giardia should be evaluated.

The ultra-violet disinfection conversion project was not addressed in the Draft EIR/EIS because the City of Santa Rosa had not decided to implement the conversion prior to issuance of the Draft EIR/EIS. Since then, however, the City has committed to the ultra-violet conversion project and has described potential impacts in a separate CEQA

document *Initial Study and Negative Declaration for Conversion to Ultra-Violet Disinfection* (February 1997). No significant impacts were identified; greater detail is provided in Master Response 8, located in Section 6.2 of this document.

Response to Comment 10-9

Comment Summary: The comment expresses the Department of Health's appreciation for the opportunity to comment on the Draft EIR/EIS.

The City of Santa Rosa and the EIR/EIS authors appreciate the Department's review of the Draft EIR/EIS, and also thank Department staff for assistance and guidance provided throughout the process of conducting studies.

