COMMENT LETTER 17 - CITY OF SEBASTOPOL, PAUL V. BERLANT (OCTOBER 2, 1996), RECEIVED OCTOBER 4, 1996

Response to Comment 17-1

Comment Summary: The comment states that the Draft EIR/EIS does not include a full cost-benefit analysis of the various alternatives, and suggests that such an analysis should include discussion of long-term economic benefits of reuse, value of wastewater as a commodity, potential for return on investment of various alternatives, and costs or benefits of impacts.

A cost-benefit analysis is not required under CEQA or NEPA, and the comment is correct that a full cost-benefit analysis is not included. However, the Draft EIR/EIS, in Section 4.18, includes evaluations of the Project's impact on service charges and demand fees, value of agricultural production and net economic impact on the regional economy.

Response to Comment 17-2

Comment Summary: The comment questions how the economy of the region might be harmed by the perceived health risk as a result of the discharge.

Exposure to reclaimed water through swimming and other recreational uses was included in the Human Health Risk Assessment, which is contained in Appendix J-3 of the Draft EIR/EIS. Exposure pathways are summarized in Section 4.7, Public Health and Safety, (see Table 4.7-9 on page 4.7-33). The risk assessment concluded that discharge "will not adversely affect drinking water quality at drinking water sources and would not adversely affect human health via other potential exposure pathways" (see page 4.7-61). All of the results are pertinent to potential exposure to reclaimed water through recreational uses, including swimming. Although exposure to reclaimed water will not adversely affect recreational users, actual exposure would be limited because discharge only occurs between October 1 and May 14. During most of the time when recreational use occurs, there would be no discharge. Also refer to Master Response 7, located in Section 6.2 of this document concerning impacts on tourism.

Response to Comment 17-3

Comment Summary: The comment refers to potential groundwater quality impacts to the Sebastopol municipal well field as a result of Laguna discharge.

The analysis in the Draft EIR/EIS was based on review of Department of Water Resources reports showing that inflows to the Sebastopol water supply wells occur primarily through recharge of the Wilson Grove Formation west of the well field. Department of Water Resources reports also indicate that the Laguna de Santa Rosa is a gaining stream. Review of reports provided by the City of Sebastopol (M. C. Yoder Associates 1967, McLaren Environmental Engineering 1985, and Michael J. Dwyer 1991) indicates that groundwater/surface water relationships in the Laguna de Santa Rosa

area vary with the season and with annual rainfall patterns. As stated in *Environmental Engineering Report on Potential Groundwater Impacts from Regional Wastewater Disposal Facilities* (McLaren 1985): "The water table levels fluctuate seasonally, and it appears that the Laguna de Santa Rosa east of Sebastopol is an effluent (gaining) stream throughout most of the year. This means that the stream is fed by groundwater. However, during the period from later summer through fall, when surface water is available, groundwater levels are low and the Laguna becomes an influent (losing) stream east of Sebastopol."

The report (McLaren 1985) concludes that up to 17 percent of the groundwater that enters the Sebastopol municipal wells comes from the Merced Formation (which is the same as the Wilson Grove Formation, the name used in the Draft EIR/EIS) east of the well field. Of the 17 percent only a small portion would be contributed by inflow from the Laguna during late summer and fall. Other contributing sources of groundwater would be recharge from the entire area east of the well field and lateral (westward) flow of water from the Wilson Grove Formation that underlies the Santa Rosa Plain. A small amount of reclaimed water could enter the well field over a long period of time. As stated in the McLaren report, the amount of water would not exceed the 17 percent contribution. This is less than the 20 percent or less contribution criterion established by Department of Health Services and presented under Evaluation Criterion 1b in Table 4.5-3 on page 4.5-22 of the Draft EIR/EIS.

Furthermore, the high concentrations of reclaimed water (80 percent of higher) discussed in the Draft EIR/EIS were calculated for the Delta Pond discharge point which is located down gradient of the Sebastopol municipal wells. Discharge of reclaimed water to Delta Pond would not affect groundwater quality at the Sebastopol wells. Mitigation Measure 2.5.4: Discharge Operations, on page 2-127, indicates that Laguna discharges would occur at Delta Pond except during high flows when discharge could occur at Brown Pond or Meadowlane Pond. Discharge of reclaimed water at Brown Pond or Meadowlane Pond during high flows would not affect the Sebastopol wells because, as stated in the Draft EIR/EIS, the Laguna is a gaining stream during high flows (winter and spring) and Laguna flows would not be recharging the groundwater under these flow conditions.

REFERENCES:

M. C. Yoder Associates, 1967, A Study Regarding Water Supply and Distribution, prepared for the City of Sebastopol, Sonoma County , California, May.

McLaren Environmental Engineering, 1985, City of Sebastopol Potential Groundwater Impacts form Regional Wastewater Disposal Facilities, May 16.

Michael J. Dwyer, 1991, Preliminary Report Ground Water Availability Study Sebastopol, California, February 10.

Response to Comment 17-4

Comment Summary: The comment asks about health risks of consuming crops irrigated with water high in nitrates.

Nitrates in reclaimed water supply necessary nutrients to crops, and can reduce the need for fertilizer application. Reclaimed water contains less than half the nitrogen requirements of crops. There is no health risk associated with uptake of nutrients by crops (including nitrates in reclaimed water). A marketing study conducted in California in 1983 concluded that California food brokers and buyers for food chains felt there was low business risk and a good track record of reclaimed water use with no incidents of adverse effects (The Marketing Arm, 1983, Marketability Research for the Monterey Wastewater Reclamation Study for Agriculture). It is not projected that use of reclaimed water will negatively affect the economy of the region.

Response to Comment 17-5

Comment Summary: The comment inquires about risks associated with public contact with soil, water or airborne spray.

All of these potential exposure pathways are evaluated in Section 4.7 of the Draft EIR/EIS (refer to Table 4.7-9 on page 4.7-33). Appendix J-3 (Human Health Risks from Chemical and Biological Components of Reclaimed Water) of the Draft EIR/EIS concluded that there was not a significant health risk associated with any potential exposure to reclaimed water.

Response to Comment 17-6

Comment Summary: The comment asks for an assessment of flooding impacts on more frequent events than the 100-year flood.

As explained on page 4.4-31 of the Draft EIR/EIS, the Project has no impact on flooding in either flood or near-flood conditions in the Laguna, because inherent hydraulic conditions limit the discharge to much less than 1 percent when high water conditions occur in the Laguna. Thus there would be no change from existing conditions.

Data to support this analysis are contained in Appendix I-8 (Russian River Water Quality Model) of the Draft EIR/EIS, which explains discharge limitations. As indicated on page 29 of Appendix I-8, the total capacity to discharge from Delta and Meadowlane Ponds is approximately 310 cfs. This capacity will not be affected by the Project. The existing 5 percent limitation on discharge means that maximum discharge capacity is reached when River flow is 6,200 cfs (310/0.05). Under Alternative 5B, maximum discharge capacity would be reached at 1,550 cfs (310/0.2). Flooding in the Laguna is largely controlled by River flow, and Laguna flooding does not occur at River flows of less than 6,200 cfs. Thus, the project will not cause any change in Laguna flooding. Consequently, the effect

of Laguna water surface elevations other than the 100-year flood on discharge from Meadowlane Pond has not been evaluated.

Response to Comment 17-7

Comment Summary: The comment recommends irrigation with redwood trees.

Refer to Master Response 18, located in Section 6.2 of this document, concerning irrigation of redwoods.