

**COMMENT LETTER 43 - PAUL OGASAWARA (SEPTEMBER 24, 1996),
RECEIVED SEPTEMBER 24, 1996**

Response to Comment 43-1

Comment Summary: This comment asks about the number of existing sewer hookups and the number of hookups planned.

As explained in Appendix D-4 (Wastewater Flow Projections), the Draft EIR/EIS utilizes the number of residences and number of employees to analyze both existing and future wastewater flows. The number of sewer hookups are not as reliable in projecting such flows due to the variability in commercial and industrial users. The number of existing and projected users by type is given in Table 4.3-1 on page 4-12 of Appendix D-4.

Response to Comment 43-2

Comment Summary: The comment asks for a differentiation between industrial, commercial and residential sewage flows.

Table 4.3.2, on page 4-13 in Appendix D-4 (Wastewater Flow Projections) of the Draft EIR/EIS shows the breakdown of residential and other flows. Exhibit A of Appendix D-4 provides detailed data on existing and projected industrial, commercial and residential flows.

Response to Comment 43-3

Comment Summary: This comment asks for a description of quality of industrial, commercial and residential sewage.

The City's influent has a low proportion of industrial waste, and thus relatively low levels of metals and other constituents common to more industrial areas. The City has done a study to characterize industrial sources, and the report, titled *Pretreatment Program: Technically Based Local Limits* (CH2M Hill 1989), is available for review at the Industrial Waste Section of the Laguna Treatment Plant. Because effluent is a blend of all incoming sources of wastewater, effluent (reclaimed water) quality is not differentiated into industrial, commercial, or residential. Appendices H-2 (Reclaimed Water Quality) and H-3 (Reclaimed Water Quality Update) of the Draft EIR/EIS describe reclaimed water quality.

Response to Comment 43-4

Comment Summary: The comment asks what revenues are produced from residential, industrial and commercial sewage producers and what is produced from hookup fees.

Current revenues are not relevant to the analysis of the socio-economic impacts of the Project because the Project is incremental to the existing system. As explained in Section

4.18 (page 4.18-23) the service charge and demand fees reflect projected revenues based upon the number of users and the projection of debt service to cover the costs of the Project. As explained in Response to Comment 43-1, the number of sewer hookups is not considered as reliable for projections due to variability in commercial and industrial users.

Response to Comments 43-5 and 43-6

Comment Summary: The comment asks for present operating costs for the Subregional System.

Total operating costs for the Subregional System in 1995-96 were \$13,019,000. This includes administration; treatment; maintenance; water reclamation; biosolids reclamation; laboratory; and industrial waste. Total labor costs were \$4,835,000, and total energy costs were \$1,269,000.

However, present operating costs of the System are not relevant to the analysis of the socio-economic impacts of the Project because the Project is incremental to the existing system. This analysis, as stated in Section 4.18 of the Draft EIR/EIS, utilizes the cost of the Project alternatives including future operation and maintenance costs, translated to additional service charges and demand fees for evaluating socio-economic impacts. The methodology for the determination of additional service charges and demand fees is described in Section 4.18 (page 4.18-22).

Response to Comment 43-7

Comment Summary: The comment asks for future cost estimates for the project.

The estimated costs for the Project are summarized by alternative in Table 3.4-1 on page 3.4-2 and are presented in more detail in Appendix D-30 (Alternative Projects Construction Cost Estimate) of the Draft EIR/EIS. These include future operations and maintenance costs as well as capital costs.

Response to Comment 43-8

Comment Summary: The comment asks about projected energy use for all options.

Energy use for each Project alternative is shown in Figure 4.17-1, on page 4.17-9 of the Draft EIR/EIS.

Response to Comments 43-9, 43-10 and 43-11

Comment Summary: The comment asks about the cost to treat sewage effluent.

The total costs for treatment in the Subregional System in 1995-96 were \$4,146,000. The labor costs for treatment were \$1,434,000 and the energy costs were \$897,300. Based upon an 18 million gallons per day average dry weather flow (ADWF), the cost per

million gallons to treat sewage would be \$300,000 per million gallons. However, the Project does not propose any alteration in the treatment of sewage in the Subregional System, and therefore treatment costs are not relevant to an analysis of the socio-economic impacts of the Project.

Response to Comment 43-12

Comment Summary: The comment asks about the profit margin calculated for private operation and what are the fines and penalties for sewage spills.

The comment seems to indicate that the questions are for the privately operated Petaluma wastewater project, which is not the subject of this Draft EIR/EIS. No private operation is proposed as part of the Subregional System Long Range Project. Penalties for violations of discharge permits are determined by the Water Quality Control Board on a case-by-case basis.

Response to Comment 43-13

Comment Summary: The comment asks for a description of the system of accountability and reliability for private operation of the sewage treatment facility and a comparison of wages and benefits under private and public operation of the sewage treatment plant.

These questions are not relevant to the Project. Private operation of the Laguna Treatment Plant is not proposed under this Project.

Response to Comment 43-14

Comment Summary: The comment asks for a description of the possibilities for reuse.

The description of Project alternatives in Section 3.1 of the Draft EIR/EIS identifies the reuse components included in the Project, and these components are described in Section 3.3. Reuse components considered but not carried forward are also described in Section 3.1 of the Draft EIR/EIS.

Response to Comment 43-15

Comment Summary: The comment asks about the yearly/monthly cost of using drinking water for landscape irrigation.

The comment is not relevant to the Project. The Project does not propose the use of potable water for irrigation.

Response to Comment 43-16

Comment Summary: The comment asks for a description of how double piping could be installed in an incremental manner and for a cost benefit analysis.

The Project proposes expansion of the urban irrigation system, which is a form of double piping, under all Alternatives. It would be possible for other users to connect to the pipelines which are part of this system in the future, although use of reclaimed water for other than urban irrigation is not proposed as part of the Project. A cost-benefit analysis is not required for the Project under CEQA or NEPA.

Response to Comment 43-17

Comment Summary: The comment suggests that the Draft EIR/EIS should have evaluated enhanced treatment.

The purpose of the Project is not to upgrade treatment methods at the Laguna Treatment Plant, but to develop a reliable method for reuse and disposal of reclaimed water. Thus, modifications to treatment methods are considered only as needed to mitigate environmental impacts associated with specific alternatives. Mitigation Measure 2.5.6 on page 2-131, of the Draft EIR/EIS discusses the potential for nitrogen removal to address nitrogen impacts associated with discharge to the Laguna de Santa Rosa.

Response to Comment 43-18

Comment Summary: The comment states that the Draft EIR/EIS is flawed, since it downplays factors such as loss of tourism, and it recommends a 20% discharge rate even though that rate exceeds all wastewater limits.

The Draft EIR/EIS does not recommend a particular alternative. Potential impacts to tourism are addressed on Pages 4.18-44 and 4.18-45 of the Draft EIR/EIS. Also refer to Master Response 7, located in Section 6.2 of this document. Even though the 20% discharge rate exceeds existing Waste Discharge Requirements, the California Porter Cologne Act includes provisions for California Regional Water Quality Control Boards to consider revising Waste Discharge Requirements to allow discharges of treated effluent at a 20% discharge rate subject to permit conditions. The Basin Plan also allows for consideration of exceptions to current discharge limitations.

Response to Comment 43-19

Comment Summary: The comment proposes construction of a cogeneration plant to produce energy and kill pathogens.

This alternative was proposed during scoping, and was not carried forward because the purpose of the Project is to provide reuse and disposal of reclaimed water, not to modify treatment methods. Refer to Response to Comment 43-17. The City of Santa Rosa already is using cogeneration to provide a portion of the energy requirements at the Laguna Treatment Plant.

Response to Comment 43-20

Comment Summary: The comment suggests that biological studies of increased discharge were inadequate, and proposes enhanced treatment.

Extensive studies of water quality, human health risk, and ecological risk were conducted to evaluate increased discharge. Refer to Sections 4.6, 4.7, and 4.10 of the Draft EIR/EIS. Refer to Responses to Comment 43-17, 43-19, and 43-22 for discussion of enhanced treatment.

Response to Comment 43-21

Comment Summary: The comment points out problems with each of the alternatives presented in the Draft EIR/EIS.

All alternatives have potential impacts. Both NEPA and CEQA require analysis of the No Action (No Project) Alternative. The South County Alternative was designed to avoid areas that would be used by the City of Petaluma; the other cities would not be using land within the Project area. The Community Separator Alternative was dropped from consideration and is not evaluated in the Draft EIR/EIS. The West County Alternative has a number of significant impacts, which are acknowledged in the Draft EIR/EIS. The pumping costs of the Geysers Recharge Alternative are acknowledged in the Draft EIR/EIS. The Draft EIR/EIS has evaluated discharge to the Russian River. Section 4.7 concluded that "Direct discharge of reclaimed water into the Laguna de Santa Rosa or the Russian River will not adversely affect water quality at drinking water sources and would not adversely affect human health via other potential exposure pathways" (see page 4.7-61). Section 4.6 found significant unavoidable impacts to conductivity, dissolved oxygen, and biostimulatory substances in the Russian River (see page 4.6-150). However, with implementation of cumulative projects to reduce nutrient inputs to the Laguna, and with mitigation proposed for project impacts, analysis concluded that 20% design discharge to the Laguna could be implemented without significant water quality impacts.

Response to Comment 43-22

Comment Summary: The comment recommends enhanced treatment by pasteurization and use of cogeneration.

As discussed in Response to Comment 43-19 and on page 4.17-1 of the Draft EIR/EIS, the City already uses digester gas to meet a portion of the energy requirements at the treatment plant. Enhanced treatment does not solve the central problem of the Subregional Long-Term Wastewater Project: disposal of reclaimed water. Removal of pathogens can be accomplished adequately with the City's existing treatment system, and pasteurization would do nothing to address the primary water quality problem identified by the Draft EIR/EIS: high nitrate levels. The City is already working to provide source control to reduce levels of metals and other pollutants. Enhanced treatment would not

eliminate the need to increase either discharge or storage. Conservation and urban irrigation are both included in the Project alternatives evaluated in the Draft EIR/EIS. The Subregional System does not have the authority to control growth, which is managed through the General Plan processes of each of the members of the Subregional System.

Response to Comment 43-23

Comment Summary: The comment asks how 20% discharge could be proposed since it is not currently allowed by the Basin Plan.

The Basin Plan limits discharge to 1% of the Russian River flow, but provides a process for allowing exceptions to this limit if it can be demonstrated that additional discharge would not impair beneficial uses of the river. The purpose of the analyses conducted in the Draft EIR/EIS was to determine whether additional discharge would impair beneficial uses, and to propose mitigation measures to protect those beneficial uses if adverse effects were projected. A 20% discharge would require a permit from the Regional Board, and might require a modification to the Basin Plan.

Response to Comment 43-24

Comment Summary: The comment provides an environmental evaluation of Alternative "4A" as described in the Screening Report.

Alternative 4A was included in the Alternatives Screening process, and a complete environmental evaluation was provided in the Screening Report (Harland Bartholomew & Associates, March 1994). The evaluation provided by the comment differs in many respects from that presented in the Screening Report. The Draft EIR/EIS authors believe the evaluation in the Screening Report to be accurate. Alternative 4A was not carried forward for evaluation in the Draft EIR/EIS.

Response to Comment 43-25

Comment Summary: The comment reiterates the recommendation for pasteurization.

Please refer to Responses to Comments 43-17, 43-19, and 43-22.

Response to Comment 43-26

Comment Summary: The comment is a table entitled "Prototype Cogeneration Facility" which shows estimated costs for and revenues from a suggested cogeneration facility.

Refer to Response to Comment 43-19. The comment does not provide sufficient information to be able to evaluate the costs and revenues presented in the comment.

Response to Comment 43-27

Comment Summary: The comment is a figure entitled “Cogeneration Schematic” which shows the relationships between wastewater treatment facilities and suggested cogeneration facilities.

Refer to Response to Comment 43-19.

