81-2 COUNTY OF SONOMA BOARD OF SUPERVISORS

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EEVE T. LEWIS



MEMBERS OF THE BOARD
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CHAIRMAN
JAMES HARBERSON
VICE CHAIRMAN
JANET NICHOLAS

HELEN RUDEE

sent to City

City of Santa Rosa Dept. of Community Development, City Hall Wayne G. Goldberg, Director P.O. Box 1678 Santa Rosa, CA 95402

Subject: Santa Rosa Subregional Long-term

Wastewater Management Plan: Draft EIR

January 21, 1987

Honorable Members of the City Council and Board of Public Utilities,

Please find enclosed the joint resolution and comments of the Sonoma County Board of Supervisors, South Park Sanitation District and Sonoma County Water Agency on the Draft Environmental Impact Report for the above referenced project. Please also find enclosed copies of separate comments from the Sonoma County Department of Public Health, Department of Public Works, and the Sonoma County Water Agency. The Board is well aware of the competing interests and issues involved with respect to this project and appreciates Santa Rosa's careful deliberations in selecting a long-term wastewater system which will be of the greatest benefit to Sonoma County as a whole.

As you are aware, the County will act as a Responsible Agency under the CEQA in its discretionary review of any wastewater project in the unincorporated area pursuant to Govt. Code Section # 65402 or other applicable County permit requirements. We thank you for the opportunity to provide the following attached comments on the DEIR.

Sincerely,

Ernest L. Carpenter,

Chairman, Board of Supervisors

EC:GC:jr

Encls.

COPY OF THE ORIGINAL ON FILE IN THIS OFFICE.

ATTEST. JAN 2 1 1987

EEVE T. LEWIS, County Clerk & ex-officio Clerk of the Board of Supervisors of the State of California, in & for the County of Sonome.

87-106 (Water Agency) 87-107 (South Park Sanitation District) Resolution No. Date: January 21, 1987

Sonoma County Administration Building Santa Rosa, California

File:

JOINT RESOLUTION OF THE BOARD OF DIRECTORS OF THE SONOMA COUNTY WATER AGENCY, THE BOARD OF DIRECTORS OF THE COUNTY SOUTH PARK SANITATION DISTRICT AND THE BOARD OF SUPERVISORS, COUNTY OF SONOMA, STATE OF CALIFORNIA, SUBMITTING COMMENTS TO THE CITY OF SANTA ROSA AND NORTH COAST AND BAY AREA REGIONAL WATER QUALITY CONTROL BOARDS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT AND EVALUATION OF ALTERNATIVES FOR THE SANTA ROSA SUBREGIONAL LONG-TERM WASTEWATER MANAGEMENT PLAN.

WHEREAS, the City of Santa Rosa, has prepared a Draft EIR for long term expansion of the Subregional Wastewater Management System and submitted the Draft EIR for review and comment to the County of Sonoma, Sonoma County Water Agency and South Park Sanitation District and,

WHEREAS, the City has also prepared a Phase II Report, Evaluation of Alternatives, and

WHEREAS, the County of Sonoma is a Responsible Agency for the project pursuant to the CEQA guidelines. Future permits, agreements, or other entitlements, as well as a determination of consistency with the general plan under the government code section 65402 may be necessary prior to project construction, and

WHEREAS, the selected wastewater alternative will involve disposal of effluent in the County unincorporated area, and

WHEREAS, some transport and disposal alternatives addressed in the EIR could adversely affect the waters of the Russian River and water supplies for numerous public service agencies and thousands of citizens, and

WHEREAS, some disposal alternatives addressed in the EIR offer potential benefits to Sonoma County citizens, and

WHEREAS, the risk of adverse effects resulting from wastewater system failure could be markedly reduced by reliance upon a combination of different disposal methods rather than a single method, and

WHEREAS, reuse and reclamation of treated wastewater provides a benefit to other uses in the County in addition to that of wastewater disposal, and

WHEREAS, the tremendous effort and expense of sewage treatment does not justify selection of disposal methods which do not involve wastewater reuse, and

WHEREAS, the Board of Supervisors has, by Resolution #86-0637A dated April 8, 1986 previously set forth certain criteria to be utilized by the Board in evaluating wastewater alternatives, and

WHEREAS, the departments of Public Health, Public Works, and Planning and the County Water Agency have reviewed the Draft EIR and alternatives and submitted comments to the above Boards, and

WHEREAS, the Boards have reviewed the Draft EIR and Alternatives and staff comments,

NOW THEREFORE BE IT RESOLVED that the Board of Directors of the Sonoma County Water Agency, the Board of Directors of the South Park Sanitation District and the Sonoma County Board of Supervisors jointly submit this resolution and attached letter and comments on the Draft EIR to the City of Santa Rosa, the North Coast Regional Water Quality Control Board, the Bay Area Water Quality Control Board and other agencies as appropriate.

BE IT FURTHER RESOLVED that the General Manager of the Sonoma County Water Agency is authorized to appear before public agencies and represent the attached comments of the Sonoma County Water Agency on the <u>Draft Environmental Impact Report for the Long-Range Wastewater Management Plan of the City of Santa Rosa</u>, dated January 12, 1987, as the position of the Board of Directors of the Agency.

BE IT FURTHER RESOLVED that said Boards will utilize the following policies and criteria in order to evaluate future alternatives for wastewater management:

- Methods of Disposal. Selected methods of disposal shall enhance or retain other beneficial uses of land. Such methods include continued and expanded reclamation of wastewater for agricultural use, creation of upland freshwater marshes, irrigation of golf courses and landscaping, and other beneficial uses.
- 2. Options which further reclamation and reuse of wastewater as a resource should be high priority.
- 3. Wastewater system alternatives should to the extent feasible provide for diversification of treatment and disposal methods so as to reduce the risk of adverse effects resulting from upset conditions.

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- 4. The wastewater system alternatives being considered should be designed based upon the adopted General Plan policies of the service area and other affected jurisdictions, including those of the Sonoma County General Plan.
- Consideration should be given to incorporating other wastewater systems in the County into a regional system.
- 6. Water conservation and inflow/inflitration reduction should be provided to supplement the selected options.
- 7. Strong consideration should be given to monitoring and pre-treatment of industrial wastes.
- 8. Filtration of effluent at the wastewater plant should be provided regardless of the selected disposal alternative.

THE FOREGOING RESOLUTION was introduced by Supervisor Harberson	THE	FOREGOING	RESOLUTION	was	introduced	bν	Supervisor	Harberson	
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NICHOLAS: AYE

HARBERSON: AYE

ESPOSTI: AYE

RUDEE: AYE

CARPENTER: AYE

SO ORDERED

DN: RJOINT/GC (wg)

## 1. PROJECT DESCRIPTION:

The Draft EIR description of the rapid infiltration alternative differs from the descriptions provided in the "Phase 2 Report, Evaluation of Alternatives". Figures 2-1 and 4-4 of the DEIR show the proposed site of the percolation ponds as being southerly of the location shown in Figure 4-1 of the Phase 2 Report.

The DEIR is confusing in its description of the percolation ponds. Are existing gravel pits to be used or are new ponds to be constructed? This information is critical to the determination of water quality impacts, because the existing gravel pits have no soil layer through which wastewater would pass prior to entering the exposed groundwater table.

The amount of land needed for the ponds also differs. The DEIR states that either 100 or 120 acres would be needed, while the Phase 2 Report says 200 acres would be needed.

## 2. EVALUATION OF WASTEWATER MANAGEMENT SYSTEM ALTERNATIVES:

The DEIR discusses impacts of four (4) alternative wastewater systems, each involving a disposal method designed to handle all future effluent during the design period in combination with the existing irrigation program. The DEIR fails to include an alternative involving significant expansion of the irrigation program or an upland marsh in the Laguna area as requested by the County in its response to the NOP for this EIR.

The DEIR fails to include analysis of a number of feasible project alternatives which have been considered by City staff and which involve various combinations of disposal methods. Each alternative is designed for disposal of the full amount of year 2010 effluent with the exception of the portion used for the existing irrigation program. It has been previously suggested by the County that the system not rely entirely upon one disposal mode to handle all future effluent. The DEIR should discuss modified alternatives which include such methods as irrigation, upland marsh, landscaping, water conservation, etc.

The DEIR should evaluate each alternative in terms of its ability to accommodate future expansion. For instance, what water quality impacts would result from the addition of Petaluma, Healdsburg, Windsor or other communities to the subregional system at a later date. Preliminary evaluation of these potential impacts should be conducted at this time prior to commitment to a disposal alternative particularly since environmental constraints or significant impacts may emerge which could have a bearing on the selection of a disposal method.

Some methods of disposal provide community benefits in addition to wastewater disposal. Alternatives involving agricultural irrigation foster the retention of agricultural uses, which indirectly promote community-centered urban growth and retention of open space. The DEIR does not identify the loss of these potential future benefits where applicable.

ebi<sub>st.</sub>

## 3. SIGNIFICANT ADVERSE EFFECTS:

The Draft EIR relies upon an apparent misinterpretation of the word "significant" in its conclusion on page 2-10 that none of the alternatives would have a significant adverse effect on the environment.

Section 15002(g) refers to Section 15382 of the same CEQA Guidelines for further elaboration of the definition of significant effect. Section 15382 notes that not only are "substantial" adverse changes in the environment to be considered, but also "potentially substantial" adverse changes. Throughout the DEIR, adverse impacts are identified as potentially significant yet the summary concludes that no substantial changes will occur. While, there may be no absolute proof of substantial adverse effects there is certainly substantial evidence of potential effects in numerous instances.

In addition, the DEIR provides very little specific information or data regarding potential or actual impacts. Section 15147 of the Guidelines states, "the information contained in the EIR shall include... information sufficient to permit full assessment of significant environmental impacts...". While supporting information and analyses of a technical nature may be placed in an appendix, it must be available to the reviewer. The DEIR repeatedly draws conclusions regarding project impacts without supporting documentation either in the body of the report or in the appendix. Any supporting documentation including studies, reports and other data should be attached to or referenced in the DEIR.

Most importantly, however, the degree of specificity of the analysis does not correspond to the degree of specificity of the project. The DEIR discusses impacts only in broad generalities as would be appropriate in a General Plan EIR. The project, however, is a major construction project which will need corresponding detailed environmental assessment and review. Section 15161 of the CEQA Guidelines states that a project EIR "shall examine all phases of the project including planning, construction and operation". If the City intends to utilize the EIR as a Program EIR pursuant to CEQA Guidelines Section 15168, the level of specificity is also woefully inadequate. Even if the City plans to prepare more detailed Supplemental EIRs at a later date, a more detailed comprehensive analysis still is needed prior to selection of a alternative. Moreover, the basic purposes of CEQA as listed in Section 15002 are not served by the DEIR in its present form, no matter how the Eir is characterized pursuant to CEQA Guidelines Sections 15160 et seq. As a consequence, the DEIR does not conform to policies established in case law and expressed in Section 15003b, c, d, e, and f of the Guidelines.

The City should clearly characterize the type of the DEIR and the purpose to which it will be put as it relates to future discretionary approvals and actions intended to implement the chosen alternative.

# 4. HYDROLOGY, WATER QUALITY & AQUATIC LIFE:

The DEIR displays Russian River flow records and water quality data that are outdated. The updated combined flows authorized by the State Water Resources Control Board from Lake Mendocino and the recently completed Lake Sonoma should be included and accounted for in the analysis.

On page 6-28, the DEIR describes the beneficial water quality impacts of termination of discharge to the Laguna de Santa Rosa. The major factor mentioned is the reduced effect of ammonia on salmonids migration. Yet when the DEIR identifies effects of discharges on the Russian River, nothing is mentioned about the potential adverse effect of ammonia on Salmonids. The DEIR also refers to "recent studies" of Salmonid reaction to wastewater dilutions but doesn't reference the studies or include any supporting documentation which would enable the reviewer to verify the DEIR conclusions.

The KGRA is characterized by unstable geology and soils. The DEIR should discuss the potential for adverse water quality impacts resulting from storage pond failure for the Geysers reinjection alternative. The DEIR should precisely identify storage pond location(s).

The proposed indirect discharge of effluent into infiltration ponds as described in the DEIR is different from the City of Healdsburg's present disposal of effluent directly into the groundwater table previously exposed by gravel extraction. Whether or not Healdsburgs present system will be acceptable to the Regional Board is not relevant to this DEIR. The DEIR should identify the specific present condition of the waters of the Russian River Basin and quantify the resulting changes caused by the proposed wastewater discharges. In doing so, the DEIR should determine the "worst case scenario" for all impacts. If this approach were followed, it is apparent that during dry years, effluent concentrations would be significantly higher than the 20% identified on page 6-32.

What dilution rate could be expected during the high-flow direct discharges to the river, expected to occur once every 3 years?

The assumed minimum dilution of 5:1 is based upon a "typical" year, not on the "worst" year. Since the existing wastewater system has had so many problems due to "atypical" weather conditions, perhaps it would be prudent to assume the "worst" case scenario and use minimum dilution of 0.5:1 as indicated on Table 6-7 for all water quality analyses. The chart on page 6-8 would show considerably less compliance with water quality objectives and criteria under these circumstances, particularly for ammonia, nitrate-nitrogen, cadmium, and mercury.

The DEIR is lacking in background water quality data which is critical to determining the impacts of the rapid infiltration proposal, including the background river concentration of total dissolved solids and suspended solids (Table 6-6), the dissolved

oxygen content and temperature levels of the river and treated wastewater prior to discharge (Table 6-8), the background river levels of ammonia and nitrate-nitrogen, which are assumed to be zero, and the background concentrations of heavy metals in the river.

Where are the data on receiving water and effluent quality collected by the Water Quality Control Board staff?

The DEIR on page 635 states that Alternative 2 would allow compliance with water quality objectives and criteria on Table 6-8. However, the data shown clearly show that the criteria and objectives would not be met for nitrate-nitrogen, cadmium, and mercury, even if dilution were 5:1. If dilution were less, say 0.5:1, the discharges would also not meet standards for ammonia concentration. The likelihood of compliance with the standards for dissolved oxygen and temperature cannot be assessed with the data shown in the DEIR. If the stated probable dissolved oxygen levels are 1-4 m/l then the minimum standard of 7 m/l would not be met. Is the quality of the effluent really as bad as indicated in the DEIR?

The DEIR assumes but does not demonstrate how the proposed 100:1 dilution would be achieved using the ocean outfall method. If the assumption is invalid, then the water quality impacts are understated.

The DEIR description of the process whereby the wastewater mixes with ocean water is confusing. On page 6-41, it states that the effluent is "much less dense" than ocean water and rises rapidly, thus allowing for high dilution. Later, it states that the effluent would be trapped below the thermocline due to the relatively low density of the surface waters. What are the actual density measurements?

In addition, the DEIR indicates that this stratification occurs during all but a few months each year. What months? When does the effluent rise to the surface? How does the upwelling of waters from the ocean floor affect this process? What would be the effect of this upwelling on the migration of the effluent plume from the diffusers? Data relative to ocean water density should be provided in order to determine the extent and direction of plume movement.

Tables 6-9 and 6-10 should show the pre-dilution quality of the existing Santa Rosa wastewater in order to compare the wastewater with the ocean standards (Table 6-10 refers to a single sampling in 1986 which is not shown in the DEIR). The predicted concentrations on Table 6-10 are based upon an assumed 100:1 dilution, yet the DEIR does not demonstrate how 100:1 dilution will be achieved. The lead concentration even at 100:1 dilution appears to at times exceed the standard for ocean disposal. It would appear that the conclusion that ocean outfall will meet standards is not supported by the data in the DEIR.

The DEIR should discuss the potential effects of wastewater discharge on ocean water temperature. What effects on ocean aquatic life could result from temperature changes induced by wastewater discharges which move shoreward during periods of upwelling?

The argument on Page 6-44 that the existing discharges to the river have as much affect on ocean water quality as the alternative of ocean outfall does not seem to have any basis in fact. Actual comparison of the existing 1% winter-only discharge to year-round discharge of virtually all of the effluent in the system would likely not support this conclusion.

The DEIR suggests that the predesign oceanographic and biological studies that would be needed prior to construction of the ocean outfall system be included as project mitigation. Unfortunately these same studies are necessary to identify and describe project impacts. This EIR should not be certified until the studies are conducted.

In reference to the Mussel Watch Control Station, the DEIR states on page 6-44 that ocean outfall at Salmon Creek might "influence conditions in some way, making it a less suitable location for a control station". In what way could discharge influence conditions? Is this significant? On what basis does the DEIR conclude that no substantial change would occur?

The DEIR concludes that discharge to the San Pablo Bay "would be expected to have no gross adverse effect on water quality or aquatic life". What does "gross" mean? Based upon Table 6-12, concentrations of cadmium, chromium, lead, and mercury might exceed the limiting concentrations even if the assumed 10:1 dilution occurs. The Bay disposal alternative could be modified to avoid or substantially reduce potential adverse effects on Bay water quality through expansion of irrigation or addition of an upland marsh and elimination of the underwater outfall. This should be suggested as mitigation for potential water quality impacts in the DEIR.

The DEIR should also suggest, since each alternative has potential impacts on water quality resulting from heavy metals, that some program of "front-end' control be instituted by user agencies to reduce metals entering the treatment plant.

#### 5. PUBLIC HEALTH & SAFETY:

The DEIR should address the issues and concerns expressed in the enclosed comments of the Sonoma County Water Agency pertaining to the rapid infiltration alternatives, particularly:

1. DEIR - predicted concentrations of wastewater in the Russian River are lower than those predicted by the Agency. The agency predicts that wastewater concentrations would vary from a high of 34.8 percent to zero. The mean concentration would be 7.8 percent. Twenty percent would be exceeded in 7 of 120 months. If the wastewater content is as high as 34.8 percent as predicted by the agency, what would be the potential impact on water quality and public health? What additional treatment would be necessary for the wastewater system or the water supply in order to assure water consumers of clean water?

2. If chemical coagulation, sedimentation, filtration, and granular activated carbon absorption treatments are needed, what would be the additional projected cost of the rapid infiltration alternative?

It should be noted that the DEIR attempts to rationalize in favor of the project by stating that no scientific studies have proven that adverse health effects result from long-term exposure of people to small amounts of harmful substances. Nonetheless, public health standards have gradually become more stringent as more is learned about such long-term effects. If the DEIR is intended to be a good faith effort at disclosure of potential adverse effects, it should identify all potential long-term effects and, if possible, suggest mitigation which could reduce those effects. Comparison of the quality of the effluent with presently accepted standards appears to indicate that some harmful substance concentrations might be exceeded. The DEIR should recognize this possibility and suggest mitigation measures to reduce the impact.

The DEIR does not adequately describe the potential public health impacts of pipeline or storage pond failure for the Geysers option if secondary treated water is released into the Russian River Basin.

The DEIR states on page 7-6 that the proposed effluent treatment level for rapid infiltration will contain "very low" concentrations of suspended solids. What specific levels will be produced? How will these levels compare to the existing condition in the river?

There is no supporting evidence showing that the existing effluent from the Laguna plant is "relatively free" of pathogenic organisms and there is no information indicating what is meant by "relatively free". This data should be provided. The DEIR should provide specific measurements of background levels of bacteriological

pollution upstream and downstream of the proposed percolation ponds and water supply facilities. There is no data supporting the statement that water quality is inferior upstream of the Laguna. If this is true, the cumulative effects of the rapid infiltration system should be discussed in Chapter 19.

What is the potential for damage to the percolation ponds caused by flooding? What would be the "down time" necessary to periodically drain and dry the ponds? How much more direct discharge to the river would be likely to occur during this "down time"? What would be the water quality and health impacts of this additional direct discharge?

What source control program is being implemented by the user cities and how will it reduce each of the potential contaminants? How much reduction is anticipated? The DEIR should also quantify the expected reduction in metals which would be removed by the proposed treatment process?

What would be the impact on ocean swimmers who came into contact with effluent discharged through a broken pipe (earthquake) during a situation where the treatment plant failed to operate? Would the body-contact recreation and shellfish standards still be met? Similarly, what would be the impact on recreational opportunity in San Pablo Bay if the pipeline and treatment systems failed simultaneously?

## 6. VEGETATION AND WILDLIFE:

Pipeline routes for all alternatives should provide for a full assessment of potential impacts, particularly during construction and particularly as the impacts relate to creek crossings. Consultation with the Department of Fish and Game in advance of specific design of the crossings should be included as a mitigation measure. General measures for reducing impacts on streams should be provided in the DEIR.

The DEIR does not assess the potential for loss of riparian or wetland habitat along the Russian River as a consequence of construction of the rapid infiltration ponds. What mitigation is available?

Pipeline construction and subsequent failure or damage in the vicinity of the mouth of Salmon Creek or the Russian River could adversely affect wetlands and associated biotic resources designated for preservation in the Sonoma County Local Coastal Plan. The DEIR should provide mitigation for this potential impact.

What would be the expected loss of redwood trees along the Highway 116 pipeline route to the ocean? What construction standards should be followed in order to avoid damage to redwoods in close proximity to the pipeline trench?

#### 7. GEOLOGY AND SOILS:

Given the relative geologic and soil instability of the Geysers area, the DEIR should explore mitigation measures for potential failure of any storage ponds which might be located in the vicinity of the injection site.

The DEIR should include a description or mapping of the geologic hazards and soils for the proposed pipeline route to the rapid infiltration ponds. Experience with soils in the vicinity of the gravel pits has shown that pit slopes can fail if flood waters rise and flow through swales outside of the river channel. Although the SCS erosion rating is low due to the flat terrain, large amounts of water suddenly released over the alluvial soils can cause severe erosion.

Soils knowledge in Sonoma County suggests that finding 120 acres of land with proper filtration capabilities, and not impacted by high ground water conditions for one third of each year, is unlikely. Soil coarse enough for rapid infiltration will not properly filter the wastewater. Soil with a percolation rate of 5 minutes an inch would require approximately 40 feet to ground water to eliminate public health concerns. This will not be the case along the river. Percolation rates of 60 or more minutes an inch would allow ground water at a depth of five feet from the basin bottom, assuming non-saturated conditions. We have not seen the percolation rates necessary to discharge up to 25 million gallons per day. The DEIR should address this impact and provide mitigation acceptable to the public health department.

The DEIR should discuss the relative risks of the bay and ocean outfall alternatives to disruption caused by earthquakes. The deep water outfalls, if damaged, would be costly to repair and probably cause system shut down for extensive periods of time. The ocean outfall crosses the San Andreas Fault at right angles under water while the Bay alternative pipeline would be largely parallel to the fault system.

#### 8. HISTORY AND ARCHAEOLOGY:

The DEIR should expand upon the mitigation measure provided on page 10-2 to include a provision that upon completion of the record survey and testing program, the archaeologists' recommendations shall be carried out prior to initiation of construction. The requirement for archaeological survey should apply to storage ponds, pump stations and all facilities which could impact upon archaeological resources in addition to pipelines.

The historic landmarks identified on page 10-2 as being located along the pipeline corridor to the rapid infiltration ponds appear to be instead located along the northern route to the ocean.

#### 9. RECREATION:

The potential impacts of the various alternatives on recreational opportunities are largely a function of the impacts on water quality and public health. Because the DEIR's conclusions regarding water quality and public health are questionable, it is also likely that the loss of recreational opportunities, particularly for Alternative 2, is understated.

#### 10. LAND USE:

The DEIR does not adequately discuss the overall consistency of each of the alternatives with the Sonoma County General Plan as required in the CEQA Guidelines (Section 15125), particularly the policies concerning preservation of agricultural land and resource use of liquid and solid wastes. The DEIR should also include a discussion of whether any required discretionary County approvals or actions precedent to each of the alternatives (e.g. parcel maps for partial condemnations, encroachment permits, conveyances of pipeline

easements, coastal permits, reclamation plan approvals under the Surface Mining and Reclamation Act of 1975,...etc.) are consistent with the County General Plan; such consistency may directly relate to the feasibility and cost of the various alternatives. The DEIR should also include a discussion of wastewater policies in the proposed updated general plan land use, agricultural, and resource conservation elements.

The DEIR should include the potential conflicts of the ocean outfall alternatives with the Sonoma County Local Coastal Plan, particularly the environmental resource designations in the areas where the outfall pipelines cross the coastal margin. The requirement for obtaining a coastal permit should also be mentioned. The DEIR should include discussion of the LCP policies on pages III-6, III-7, III-13, III-16, and III-17 as well as Coastal Act policies # 30230, 30231, 30233(a), 30236, and 30240 and then relationship to the Alternative 3.

The DEIR refers to "Anderson Valley" on page 12-9, but probably means "Alexander Valley". The DEIR should identify and assess the land use impacts of any proposed storage pond in the Alexander Valley.

The rapid infiltration alternative may be inconsistent with the Aggregate Resources Management (Specific) Plan, depending upon the location of the ponds. The DEIR should discuss this project in relation to that plan. The proposed mitigation measure regarding gravel operation reclamation plans may require a specific plan amendment and if the updated general plan is adopted as proposed, a general plan amendment as well. The DEIR does not identify or describe the impact of the loss of 100 to 200 acres of highly productive agricultural land if the percolation ponds are built.

The DEIR does not identify potential land use benefits of the creation of an upland marsh at the Bay margin.

### 11. PERMITS:

Section 12-5 discusses the various permits and entitlements which must be obtained prior to construction of each alternative. The following should be added:

- a. a coastal permit from the County of Sonoma for pipeline construction through the Coastal Zone
- b. a determination that the project is consistent with the Sonoma County General Plan as provided in Government Code Section #65402
- c. stream alteration agreements from the Department of Fish & Game
- d. encroachment permits for County right of ways

- e. pipeline easements for County right of ways
- f. possible parcel map approvals for partial condemnations in connection with pipeline rights of way over private property
- g. reclamation plan approvals pursuant to SMARA.

## 12. AIR QUALITY:

The DEIR states on page 15-10 that the ongoing pasture irrigation program demonstrates that the concentrations of metals in the wastewater are too low to harm vegetation. But no supporting monitoring data or analysis is provided. If this statement is true then it should be supported. If not, it should be dropped.

#### 13. SOCIOECONOMICS:

The DEIR should discuss the impacts of each alternative on employment in the affected areas. What would be the long-term impact of the Geysers alternative on geothermal operations and related employment? What would be the impact of percolation ponds on businesses and employment dependent upon river oriented recreation? What would be the impact of ocean disposal on coastal dependent fishing, tourism, and recreation? What would be the impact of the Bay alternative on bay oriented recreation and tourism, and other bay dependent businesses?

## 14. GROWTH & SECONDARY IMPACTS:

A. Alternatives are Growth Inducing Even If Consistent With Adopted Plans

Section 18.3 points out that the wastewater management alternatives would remove an obstacle to growth. The section also points out that "when the new system is in place, the constraint on growth will be removed". In light of this, if cannot be said that the alternatives are not growth inducing.

The type of approach taken by the DEIR is contrary to that required by Environmental Planning and Information Council of Western El Dorado County, Inc. v County of El Dorado (1982) 131 CA3d 350 and CEQA Guidelines Section 15125(c) in that it fails to recognize that the various alternatives will have growth inducing impacts and fails to discuss or attempt to mitigate those impacts. This defect may not be cured by simply incorporating by reference general or specific plan EIRs because there have been a number of changes in conditions since these plans were adopted, e.g. jail overcrowding, mental health facility overcrowding and increased congestion in the Highway 101 corridor and on other county roads.

The most obvious impact of any substantial growth in the County would be on the transportation problem along the 101 corridor and supporting County roads, but there are, of course, additional impacts on human services provided by the County that are not provided by cities such as physical and mental health, and criminal justice services.

One of the purposes of CEQA is to require a project sponsor to identify and mitigate substantial adverse impacts. Accordingly, the DEIR has not adequately addressed the mitigation that will be provided to allow the County to finance the social service and transportation needs of the population increase resulting from the project. One form of mitigation would be a sales tax transfer from the city members of the joint powers agreement to the County in proportion to proposed growth (see Government Code &&55700 et seq.).

# B. Alternatives Exceed Existing Plans

Even if the analysis in Section A were not applicable, this section of the DEIR and the portion of the summary section on page 2-8 are still inaccurate and incomplete. The DEIR incorrectly points out that the wastewater project, if designed to accommodate population in excess of the service area's planned growth, would be considered growth inducing. The DEIR also points out that the proposed design capacity for all of the alternatives in fact exceeds the capacity needed to meet planned growth. The DEIR then incorrectly concludes that none of the alternatives are growth inducing.

Selection of the subregional system design period presents a dilemma regarding the growth question. There are obvious economic and environmental benefits in designing and constructing certain facilities for periods longer than addressed in community general plans (usually year 2005). If, in an effort to take advantage of these efficiencies, the selected design period is longer than 2005, then the DEIR must recognize this fact and identify the project as growth inducing. Other mitigation, if available, could then be included for reducing the growth-inducing impact.

On the other hand, if it is the intent of the City to construct a project which does not exceed plan projections, then these efficiencies may not be realized. The discussion of this issue in the DEIR fails to address this project design dilemma. The issue is important to the selection of disposal alternatives because some disposal methods (such as farmland irrigation) offer the potential for incremental expansion while others (such as ocean outfall) are dependent upon future unplanned growth in order to be cost effective. The issue is also central to the discussion of whether one alternative should be selected for 75-85% of future effluent flow or whether a coordinated system of diverse disposal methods in different locations should be constructed. Use of a combination of alternatives increases the potential to design in accordance with adopted growth policies economically and efficiently.

The design period selected for the project alternatives relies upon 2010 growth and assumptions regarding urban expansion which are not in conformance with adopted policies for this additional reason all of the alternatives are growth-inducing.

Page 18-9 of the DEIR begins a discussion of the Santa Rosa region in the middle 21st century. Reference is made to modifications which would accommodate sewage flows through 2040. What modifications are necessary? What currently proposed facilities are designed to accommodate growth to 2040? If additional growth is accommodated such that the City's western urban boundary becomes contiguous to the city-owned and previously annexed spray irrigation fields near the Laguna, what would the additional growth and land use impacts be, particularly with respect to Government Code Section #35012?

What are the impacts of year 2010 and year 2040 growth on traffic, noise, air quality, water quality, etc.? What are the impacts on the Highway 101 corridor and supporting County and City roads? What are the impacts on County funded and provided human, social, and health services and criminal justice services? The DEIR fails to describe these impacts and provide mitigation for them. One form of mitigation would be a sales tax transfer from the city members of the joint powers agreement to the County in proportion to the proposed additional growth. What are the implications for the various communities in the central county area of dependency of 50 years of growth to support its wastewater system?

#### 15. OTHER ENVIRONMENTAL CONSIDERATIONS:

The DEIR should compare the impacts of construction and operation of each of the alternatives with the continued operation of the existing disposal system. What would be necessary in order to avoid growth limitations in the service area? What impacts would result from incremental expansion of the existing storage and irrigation program in the Laguna area? What would be the status of the Tolay Lake project if no other system were approved?

The DEIR fails to identify potentially significant unavoidable adverse effects resulting from each alternative as required in the CEQA Guidelines. Instead it terms each of the potential impacts as not significant. The DEIR should at least provide an explanation of how it determined whether or not a change is substantial enough to be called "significant". A major failing of the report is its unsupported and undocumented conclusions regarding environmental impacts that are often debated by experts who disagree, and are at least potentially significant as far as is known. The burden of reasonable public disclosure of potential impacts should rest with the Lead Agency and its EIR, not with the public and reviewing agencies.

Section 19.4 of the DEIR should examine more closely the potential impacts of alternatives which may be cumulative with other projects in each area. What are the combined effects of the existing

discharges to the Russian River Basin? The Bay? How would the alternatives measurably reduce or increase these effects? The report also fails to address the cumulative effects of ocean disposal with offshore oil drilling and other projects being considered by the federal government, including disposal of decommissioned submarines and excavation of mineral deposits at Gorda Ridge?

The DEIR should describe in detail the potential for irreversible contamination of groundwater and introduction of toxic materials into the food chain that it refers to briefly on page 19-4. How do the alternatives compare regarding the potential for these two impacts to occur in the long-term? How can the DEIR state that these two potential impacts are irreversible and then conclude that no significant impacts will occur?

#### 16. SLUDGE DISPOSAL:

Page 4-20 of the DEIR refers to "recent tests" of sludge showing "very low" concentrations of toxic materials. The test data should be shown in the EIR as well as the sampling methodology so that it can be determined whether or not the tests were conducted on the sludge which has been stored at the treatment facility since prior to the institution of the industrial pretreatment program. If the sludge quality data in Chapter 5 of the Phase 2 Report are indicative only of the quality of the sludge presently emanating from the treatment plant, then it remains questionable whether or not the "old sludge" could or should be land applied.

The DEIR should describe the impact of the present landfilling of sludge. There are both operational and landfill capacity impacts which will occur until the land application method is operational.

In the event that the City embarks on a program of agricultural application of sludge, would the program involve co-disposal of sludge and wastewater? If so, would the irrigation potential of the land be reduced?

The DEIR gives conflicting information regarding the present sludge production from the Laguna plant. Is it 12 or 20 dry tons per day?

The DEIR should suggest how the application rates of privately marketed composted sludge will be controlled so as to avoid phytotoxicity. The program will not help retain agricultural uses in Sonoma County if deed restrictions against agricultural use of farmland is required because of levels of toxic materials. A possible mitigation would be mandatory, strongly-enforced, front-end controls on potentially harmful materials as part of the wastewater system.

The reference in the DEIR at the end of Chapter 4 to Technical Memorandum T23 should be changed, to since, according to city staff, T23 is not available for public review. Apparently Chapter 5 of the Phase 2 Report has replaced T23 as the reference for this subject.