**SCOPE**
**Santa Clarita Organization for Planning and the Environment**
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY
AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
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7-15-13

Ms. Mary Jacobs, P.E.
Planning Section
Sanitation Districts of Los Angeles County
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Whittier, CA 90601

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Re: Sanitation District Chloride Compliance Facilities Plan DEIR. These comments are submitted in addition to those made orally at public hearings held in the SCV.

Dear Ms. Jacobs:

Santa Clarita Organization for Planning and the Environment (SCOPE) is a California non-profit corporation focused on the Santa Clarita Valley and the watershed of the Santa Clara River. Founded in 1987, we are entering our 26th year of volunteer work for the environment in Santa Clarita.

The baseline level of naturally occurring chloride in the Santa Clara River was set at 100mgl in 1989. The Sanitation Districts have been aware of the need to reduce chloride levels in their treatment plant effluent since that time, but have taken no actions to remedy the problem. Instead, they have pursued various legal actions and studies. Requiring gradually increasing connection fees for new development beginning at that time would have provided funds for a treatment remedy without a rate increase shock. We fault the Board for not taking action in this manner and urge the Sanitation Districts to do so now.

Rising salt levels in the watershed of the Santa Clara River are a result of factors related to growth. These include an increase in the number of self-regenerating water softeners and increased importation of State Water Project water which is higher in chlorides than most local ground water[1] to accommodate urban expansion. These factors combined to produce unacceptable chloride levels in effluent released to the Santa Clara River from the two Santa Clarita Valley Sanitation plants.

While elimination of salt based, self-regenerating water softeners have reduced chloride levels in the effluent over the past several years, some of that reduction may also have been the result of higher rainfall, both locally and in the Sierras, a circumstance that would temporarily reduce chloride levels in local supplies, thus reducing chloride levels in the effluent.

[1] For example, water produced from the Valencia E wells that are under the influence of the releases from the Valencia Sanitation Plant produce water with chloride levels as high as 93mcl.

SCOPE has consistently participated in public hearings, workshops and made oral and written comments on this issue to encourage the most cost-efficient solution to reduce salt input to the Santa Clara River watershed and compliance with the Clean Water Act. We were active members of the stakeholder's group, formed to develop a more cost effective way to address this issue and are regular participants in the IRWP Salt and Nutrient Plan process.

## The DEIR Fails as an Information Document

Many parts of the DEIR fail as an informational document because the sections do not disclose the underlying data on which the information is based and makes conclusionary statements.

**Suggested Remedy:**

**Provide additional information, sections ad additional Appendices in the Final EIR to address these issue areas**

**Examples:**

- **Project Objective/Description**

We would like to re-iterate our previously stated NOP concern that the project description does not correctly describe the purpose of this EIR. We objected to the inclusion in the description for adequate space for a Stage VI expansion of the Valencia treatment plant. It is unclear whether this expansion is still included and is now merely disguised as "*Provide a wastewater treatment and effluent management program that accommodates recycled water reuse opportunities in the community while protecting beneficial uses of the SCR".* If it has been eliminated, that fact should be made clear. If the expansion is still included, that fact should also be made clear.

The inclusion of the Stage VI expansion should not be a part of this project because:
1. The purpose of this EIR as discussed in over three years of stakeholder task force meetings was to meet the chloride TMDL, not to allow expansion of the Valencia Sanitation Plant.
2. Such a project requirement would not be necessary if the Sanitation District had not allowed Newhall Ranch to re-direct its first 6000 units through the Valencia Plant, a scenario never reviewed or even contemplated in the Newhall Ranch Specific Plan approved in 2003. That Plan required the construction of a separate plant with a reverse osmosis process that would have substantially reduced the chloride levels in the Piru area.

- **The DIER fails to identify a preferred project**

The DEIR clearly states in section 8.5.4 the CEQA requirement to identify the Agency's preferred alternative, but then fails to do so. Instead, it vaguely identifies Alternative 4 as the "highest ranked alternative" through its own arbitrary and confusing ranking system, but never identifies it as a preferred alternative. Indeed, it cannot be a preferred alternative since it doesn't meet the goals and objectives of the project (see SCOPE Comments on Alternative 4 for more detail.

- The DEIR merely states the CEQA Guideline requiring a description of the baseline:

### *8.5.3 CEQA Baseline*

*The CEQA Guidelines (§15125) requires that an EIR include a description of the physical environmental conditions in the vicinity of a proposed project at the time the Notice of Preparation (NOP) is published. This environmental setting will normally serve as the baseline by which the lead agency determines whether an impact is significant. The lead agency may also consider a baseline condition that reflects fluctuations resulting from cyclical trends, such as drought and wet weather. The CEQA baseline represents the environmental setting at a fixed point in time, which may differ from a no project alternative. A no project alternative allows for*

*growth at the project site that would likely occur without any required additional approvals. The No Project Alternative for this project is described in Section 20.*[2]

Another area of the EIR describes the baseline as the current, polluted state of the river. The baseline should be described as the river in its natural state. The goal of this project is to return to the baseline of lower chlorides, not the polluted state of the river.

- The DEIR rates the Alternatives on various environmental impacts, but the ratings seem arbitrary. There is no explanation as to why any particular rating is chosen.
- **Lack of Data**

Several Sections lack back up data so that a reviewer finds it impossible to make any meaningful evaluation of how the District arrived at its assumptions.

- **Conclusionary Statements with no explanation or supporting data**

For example, why was UV disinfection not included for alternative 1? How was the ranking system established? The DEIR states that reduced discharge in the SCR resulting from the proposed project would reduce flows in the river downstream of the VWRP for a few miles. How many miles? How was this calculated?

- **Global Warming**

As we requested in our comments on the Notice of Preparation, the EIR should evaluate and compare the various alternatives for their impact on global warming. This includes not only greenhouse gas generation, but also other energy requirements that will not be provided through a renewable energy source. The EIR should include rooftop solar or wind (located in areas that do not impact migratory paths or bird nesting areas) as mitigation for greenhouse gas generation.

DWR and others have estimated that climate change will also reduce availability of State Water Project water due to reductions in Sierra snow fall and a potential increase in rainfall instead of snow[3]. This change will affect many of the assumptions in this EIR regarding supplemental water and chloride levels, yet it is not even discussed.

## Alternative Analysis

### Alternative 1: MF/RO WITH BRINE DISPOSAL via PIPELINE

"Alternative 4 Phase II would result in the greatest impact from addition of the RO pipeline combined with MF/RO and brine disposal facilities, resulting in the highest overall energy use. As a result, Alternative 1 is considered the environmentally superior alternative" (DIER, p.20-17)

In spite of this statement, the Executive Summary "Alternative 1 had a substantially lower score and is not considered further". [4] No explanations or data were provided for the decision to exclude this alternative from further consideration. Also, the statement is inconsistent with other statements made elsewhere in the DEIR, i.e. that Alternative 4 Phases one and two had the lowest score. The Recommended Alternatives goes on to state "Alternative 4, Phased AWRM Phase 1, was the highest ranked alternative.

Such statements accentuate the arbitrary nature of the ranking system used in alternative analysis. Such arbitrary and inconsistent information precludes the public and the decision makers from

[2] DEIR pg. 8-4

[3] See "**Progress on Incorporating Climate Change into Management of California's Water Resources**", 2008, attached

[4] Executive Summary, Comparison of Final Alternatives, Recommended Alternatives , DEIR p. ES-11

making valid decisions based on facts because the facts are not available for review. Thus the DEIR fails as an information document.

**Remedy: Revise the DEIR to make it internally consistent. Include background information and data on how the rankings were generated, including how the financial information was derived.**

## Alternative 2: MF/RO WITH BRINE DISPOSAL via DEEP WELL INJECTION

The DEIR seems to have excluded an analysis of on going Operation and Maintenance costs for deep well injection for brine disposal, although it is difficult to tell since the basis and methods for the cost generation figures were not disclosed.

**Recommendation: This should be included in the FEIR so that the public can review it.**

The DEIR states that the brine disposal system for Alternative 2 would be located in an undeveloped open space area between Valencia Boulevard and Stevenson Ranch Parkway, west of Interstate 5 (I-5) Freeway in unincorporated Los Angeles County. Five injection wells would be constructed at Site along with appurtenant facilities such as injection pumps, chemical storage tanks, and electrical switchgear.[5]

This open space is a Significant Ecological Area. Development in SEAs is subject to well-defined County regulations and ordinances that are not met by this DEIR. Instead, the DEIR seeks to defer analysis and mitigation by stating that it has not yet identified the location of the wells, but any oak removals would be replaced at a 1:2 ratio or 1:10 ratio for heritage oaks.

This statement is internally inconsistent since the DEIR clearly states later in the same chapter that it has evaluated and chosen two potential sites:

> "Site A and Site B screening areas include a large number of potential parcels. These potential parcels were screened for feasibility using the following criteria: (1) minimum footprint of 0.5 acre of land with a minimum dimension of 80 feet (minimums required for DWI construction and operation), (2) location outside of a floodplain and not under power transmission lines, and (3) appropriate zoning and development status. Feasible parcels were then evaluated using the following criteria: (1) conveyance pipeline distance from the VWRP, (2) compatible surrounding land use, (3) development suitability, (4) distance from formation outcrop and/or fault, (5) distance from screening area boundary, and (6) ability to site additional bottom hole location(s). This process resulted in two top-ranked parcels for Site A and two for Site B as shown on Figure 6-9."[6]

This identified mitigation is required by the LA County Oak Ordinance. In addition that ordinance requires replacement with the same species of oak that was removed, but the mitigation identified in the EIR fails to state that replacement will be with the same species. Deferral of Mitigation and analysis is not acceptable. The SEA 64 is not only a protected area for the Valley Oak Savannah, a rare oak woodland community in Los Angeles County, it is home to many protected bird and plant species that were not even mentioned in the DEI, in spite of the fact that this information is readily available through LA County's SEA Technical Advisory Committee. This information should be included in the DEIR.

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[5] SCVSD Chloride Compliance Facilities Plan and EIR 6.7.1.2 and 7.2.1.1 Project Description, Brine Disposal via DWI

[6] Section 6.6.2.1, pg. 6-44

Locations for replacement oaks have been difficult to identify in recent years due to the numbers of permitted removals. Valley Oaks also require a large area for propagation. Where will the District plant these oaks? Was the cost of replacement included in the cost of this alternative?

**Recommendation: If this alternative is chosen and when well-sites are identified, commit to a focused EIR to address and properly mitigate the biological impacts as identified by the EIR. Or, alternatively, commit to avoidance of Valley Oaks, biological surveys for sensitive raptors, reptiles and amphibians before construction and avoidance of the breeding season for any identified sensitive species.**

**Deep Well Injection**

As stated in our NOP comments:

- The EIR should include the application to the EPA Drinking Water Division for the permit to use deep well injection as the means of disposing of the briny wastewater. The permit should include the District's Emergency Plan and Back Up proposal.
- The EIR should also include modeling to estimate the length of time it will take to fill up such a deep well and a description of how the briny effluent will be disposed of after that time.
- If these wells are to be shared in the future with Newhall Land and Farming's proposed Sanitation Plant for the Newhall Ranch project, this fact must be disclosed since it is relevant to the projected service life of the well.

In its discussion of the risk of induced seismicity due to well injection, the DEIR cites to "Resumption of Wellfield Feasibility Study ¨C Technical Memorandum, and then states:

> "A detailed evaluation of induced seismicity is beyond the scope of this analysis. However, the topic has been in the news recently and a study on the relationship between injection or extraction of fluids from the Earth and increased seismicity was published (National Research Council, 2012). While the potential for induced seismicty caused by proposed injection activities is not known, the risk of negative public perception and potential risk of legal action due to unrelated activity should be considered."

The DEIR also states under conclusions "Injection of fluid in the subsurface has been linked to increased seismic activity in several areas around the country".[7] Were the costs of potential legal actions included in the cost analysis for this alternative?

The DEIR makes it clear that the feasibility of deep well injection is very uncertain.

> "Like any work related to the earth's subsurface, the projected DWI facilities are based on data that is often inferred rather than exact. The permeability and pressure of the formation are primary characteristics that govern the amount of flow a particular well can inject. These characteristics will not be known until a well has been drilled and tested. Even then, the permeability may change over time if minerals in the brine react with the soil being injected into."[8]

So, if the wells fail, or have a limited lifespan, what is the alternative plan? Did the District include the potential cost of investigating and opening additional well disposal sites in its

[7] P 7, 6.6.2 MF/RO With Brine Disposal via DWI ¨C Alternative Analysis
[8] Section 6.6.2, Pg. 6-43 Santa Clarita Chloride Compliance Draft EIR Comments

financial analysis? We did not see any estimate or analysis of capacity or longevity of the injection wells.

## Alternative 3 ¨C MF/RO WITH BRINE Disposal via TRUCKING

This alternative lacks sufficient background information as to how it would be accomplished and how much it would cost such as the price of property needed from a willing seller etc.

Further, it creates unacceptable air quality, greenhouse gas generation and traffic impacts.

The Santa Clarita Valley is in a region classified as a non-attainment zone under air quality standards for ozone and particulate matter. (See section 10.4.2.3 Cumulative Increase of Criteria Pollutants, Air Quality.) .

Brine disposal by diesel trucks will add NOx to the problem.

> *"Because SCAQMD significance thresholds for pollutants that are already in non-attainment of federal standards would be exceeded, the incremental effect on cumulative air quality for NOx during construction of Alternatives 1,2,3 and Phase II of Alternative 4 would be cumulatively considerable and would results in a cumulative impact on air quality." EIR 20.2.2.2 Air Quality ¨Construction"*

Traffic on the I-5 Freeway is at unacceptable levels. Any analysis of traffic must include future development, including the Newhall Ranch Project. Adding 60 truck trips per day during drought conditions and 40 truck trips per day on average and approximately 90 truck trips per day and 60 truck trips per day on average, when the facilities operate at full capacity, (as stated in your Public Notice of Availability Page 3), is not acceptable. Additionally traffic conditions in other communities are also already operating at unacceptable levels. This includes in the unincorporated community of City Terrace are operating at LOS E or F. information from arch beach consulting Valencia WRP Brine Loading/Unloading Stations TIA 3.0 Existing Conditions, Levels of Service

We concur with the EIR's analysis of a low rating for this alternative. The pipeline to Los Angeles Basin and JWPCP in the City Terrace Trunk Sewer would be a much better solution as stated in the EIR 6 Alternative Analysis Pipeline to Los Angeles Basin and JWPCP p 36.

**Recommendation: Exclude this alternative from further consideration.**

## Alternative 4: PHASED AWRM

The phased AWRM Facilities Figure 7-8 shows this alternative as comprised of UV Disinfection Facilities, MF/RO Facilities and Brine Conveyance Pipeline and to a deep well injection site. Please see our comments under Alternative 2 regarding issues pertaining to the deep well injection site.

**Alternative 4 Does Not Meet Project Objective and should not be included in the evaluation**
The DEIR defines the objectives of this Facilities Plan as follows:

- *Provide compliance with the Chloride TMDL for SCVSD wastewater treatment and discharge facilities*
- *Provide the necessary wastewater treatment facilities and programs for chloride removal while conserving the area designated for future VWRP Stage VI expansion*
- *Provide a wastewater treatment and effluent management program that accommodates*

*recycled water reuse opportunities in the community while protecting beneficial uses of the SCR.*[9]

This alternative does not meet the project goals since the proposed delay in implementation and the speculative nature of the Delta Plan would prevent meeting the stated project objectives. It is unusual for an alternative to be considered that does not meet the project goals and objects. It would also require an increase in the chloride limit for VWRP and SWRP based on use of supplemental water, a permit change that the RWQCB is not likely to grant.

When both phases of Alternate 4 are included, it the highest ranked for environmental impacts and the most costly alternative. It appears not to include the massive costs and impacts to Californians of building the Delta Tunnel project.

The DEIR failed to discuss and address the many issues occur as a result of the use of a supplemental water system in both Phase I and Phase II.

One proposal is to use groundwater to achieve a blend that meets the Chloride TMDL limit. To replace the groundwater used for blending and ensure no net loss of water supply to SCV, additional water would be imported.[10]

The use of low chloride groundwater to achieve a blend that meet the TMDL and replace the loss of groundwater with imported state water which is high chloride and is the main cause of the chloride problem is not an acceptable solution for our community. This is especially offensive because the water from CLWA is "relatively costly" and that cost will be passed off onto the ratepayers.

The major problem with using ground water from the Saugus Formation is that it is contaminated with perchlorate and TCE and PCE, which are carcinogens. Whittaker Bermite and CLWA have an agreement to treat wells and control the pollution plume. However containment is not working as planned and several additional high producing Saugus Wells have been closed in the last two years (V201 and V205). New monitoring wells indicate the plume is continuing to move in a westerly direction. Depending on this source for supplemental water could cause the plume to move at an even faster rate, and require additional well closures. While the DEIR admits and discloses the perchlorate contamination in the Saugus aquifer, it does not mention the VOC contamination or the continued spread of the pollution plume in a westerly direction. Thus, a smaller MF/RO facility would be built at the expense of our groundwater supply. **These impacts must be disclosed, discussed and mitigated in the DEIR.**

Several of the contaminated wells are being treated for perchlorate only. . (There is currently no treatment process in place for TCE and PCE). It is a very expensive process and the treatment program continues to have problems. The VOCs are currently not being treated, but are being blended into the perchlorate treated water. However, the Dept of Health Services has stated that they may require treatment for VOCs in the future.

Using water from the groundwater wells in the Saugus Formation, which underlies almost the entire upper SCR area, could create a far greater environmental problem than the chloride in the state imported water.

**Conclusion: Alternative 4 does not meet the project objectives. It is highly speculative due to its dependence on another statewide project and EIR (the Delta Tunnel Project). It**

[9] DEIR pg. 1-5

[10] Alternative Analysis EIR 6.4.3.2 Supplemental Water P6- 13

**would not be meet the project timeline and could delay the project by decades if the Delta Tunnel project is delayed or not built. It relies on supplemental SWP project water that may be unattainable or ground water that is polluted or already committed. It is not a viable alternative.**

**Recommendation: Remove Alternative 4 from further consideration**

## Supplemental Water

Supplemental water from the Saugus aquifer is proposed in various alternatives and included in the cost analysis.

> "For all scenarios, the supplemental water source is assumed to be Saugus Formation groundwater, which has relatively low chloride levels. The concept of using Saugus Formation groundwater contaminated with perchlorate was investigated. In short, relatively low WRP discharge limits for perchlorate necessitate that such water receive separate treatment for perchlorate removal prior to such flow being added to the SCVSD's sewer system."[11]

Due to the contamination of the Saugus Aquifer, using water from the groundwater wells in the Saugus Formation which underlies almost the entire upper SCR area, could create a far greater environmental problem than the chloride in the state imported water. (See detailed comments above under Alternative 4)

**Reliance on Saugus Aquifer for Drought Year Pumping**

During future droughts, SCV water agencies intend to meet water supply needs by pumping more water from the Saugus Aquifer (2010 Urban Water Management Plan). According to the DEIR, this scenario will reduce chloride levels because the Saugus aquifer has lower chloride levels than other components of the water supply, thus reducing the chloride level in the overall water supply and in the sewage reaching the SCVSD's wastewater treatment plants. (pg. 4-5). While this may occur some time in the future, it is totally hypothetical. No wells currently exist to provide drought year pumping in the amounts indicated in the UWMP, many additional wells have been closed due to the spread of the pollution plume, and further pumping may be precluded as part of efforts to contain the plume.

The DEIR admits that water from the Saugus Aquifer would have to go through a pre-treatment process before it could be used for blending by the Sanitation Department and that this requirement would substantially increase the cost of using it as supplemental water.

According to the DEIR, while the use of supplemental State Project imported water would allow construction of a smaller MF/RO facilities and a smaller brine pipeline, saving a capital cost of $16 million the cost of supplemental water is high and may not be available because high salt content or other contamination.

**Kennedy Jenks Model Appendix**

Several statements in the Kennedy Jenks Chloride Modeling Study found in Appendix 4-A call attention to the continued problem of high chlorides in State Water Project Water.

[11] Alternative Analysis EIR 6.5.5 Supplemental Water Approaches P 33

- Imported SWP water is one of the primary sources of chloride loading into the SCR; therefore, the operational requirements along the Aqueduct may lead to changes in chloride loading into the river. (pg.59)
- "Water quality in the Delta can be adversely affected by both SWP and CVP diversions, which primarily affect salinity, as well as by urban discharge and agricultural runoff that flows into the Delta, which can increase concentrations of constituents such as mercury, organic carbon, selenium, pesticides, and toxic pollutants and reduce dissolved oxygen." (Page A-1)
- "Sensitivity runs performed in this study are hypothetical cases and are not intended to forecast chloride conditions in Castaic Lake." (pg.57)

Any analysis of local water quality must also be correlated with rainfall, since high rainfall will of course result in a dilution of salt levels. Rainfall history should be included in the DEIR and considered in all calculations. While supplemental water may be adequate and of good quality in high rainfall years, it cannot be depended upon in drought or lower than normal rainfall years, the very years that it would be needed. Thus it is not an acceptable substitute for an RO treatment Facility or even reliable for blending.

The Department of Water Resources and the State Water Resources Control Board have previously conducted numerous studies on this subject. A literature search of existing reports previously commissioned by those agencies should have been included and discussed in the DEIR. The DEIR should also include the effect of the predicted future reduction of the Sierra snow pack from climate change on Delta water quality.

## Use of Chloride Treatment Facilities by the Newhall Ranch Project

As a part of the permit granted for the Newhall Ranch Waste Water Permit, the Regional Water Quality Board required the Newhall Land and Farming Company to not only meet the 100mcl for chlorides for its first 6000 units to be treated by the Valencia Plant[12], but also to pay for this improvement.[13] The cost of building the treatment facilities to accommodate these 6000 units should have been proportionally deducted from the financial analysis for all alternatives. This is especially important since the Valencia Water Co. E-Wells proposed to supply this project register particularly high chloride levels as disclosed in the Newhall Ranch Army Corps EIR/EIS.

### Water Quality Constituents of Concern

**Secondary Standards:**

**(from EIR Appendix )**

| Parameter | MCL | DLR | Units | E-14 | E-15 | E-16 | E-17 |
|---|---|---|---|---|---|---|---|
| Chloride | 250-500-600 | NA | mg/L | 75 | 88 | 89 | 74 |
| | pH 6.5 - 8.5 | NA | units | 7.5 | 7.7 | 7.3 | 7.4 |
| Specific Conductance (E.C.) | 900-1600-2,200 | NA | umho/cm | 1240 | 1290 | 1390 | 1360 |
| Sulfate | 250-500-600 | 0.5 | mg/L | 340 | 330 | 340 | 340 |
| Total Dissolved Solids (TDS) | 500-1000-1500 | NA | mg/L | 900 | 890 | 950 | 960 |

[12] See 2002 MOU between Newhall Land and Farming and the Sanitation Districts, included herein by reference.
[13] See page 15 of the WDR, chloride section added in red.

**Recommendation: Calculate and deduct the cost of treatment for Newhall's portion of these facilities which will be built in lieu of their Newhall Ranch Sanitation Plant and include them in the FEIR.**

## Other Actions the Sanitation District Should Take to Reduce Chloride Levels

- The District has spent considerable time and effort in its water softener removal program, with some success. But many softeners continue to be operated throughout the Valley. We recommend stringent enforcement of water softener removals in both the City and County areas.
- Immediately implement UV Treatment at both local facilities
- Investigate and discourage the use of salt water swimming pools in the SCV
- Develop and implement a salt education program in the SCV
- Discourage local retailers from selling salt for water softeners and other uses
- Require adequate connection fees for new devilment so that salt treatment and mitigation programs can be implemented.

Thank you in advance for addressing our concerns regarding this project.

Sincerely,

Lynne Plambeck
President

Attachments:
1. RWQCB Newhall Ranch WDR Permit, 2012
2. Sanitation District- Newhall Land MOU for Use of Facilities, 2002
3. "Progress on Incorporating Climate Change into Management of California's Water Resources", 2008