

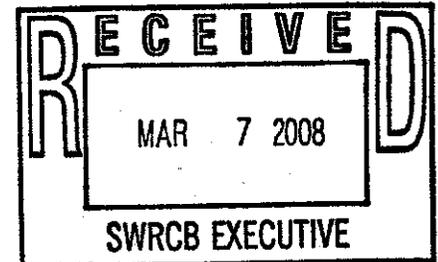
March 10, 2008

Steven L. Hoch

310.500.4611 tel  
310.500.4602 fax  
SHoch@bhfs.com

**VIA E-MAIL [COMMENTLETTERS@WATERBOARDS.CA.GOV](mailto:COMMENTLETTERS@WATERBOARDS.CA.GOV)**

Ms. Jeanine Townsend  
Acting Clerk to the Board, Executive Office  
State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-0100



RE: Comment Letter – Proposed Water Recycling Policy  
City of Oxnard, California

To Members of the State Water Resources Control Board:

This office submits these comments on behalf of the City of Oxnard ("City"). The City thanks the State Water Resources Control Board ("State Board") for its leadership in developing this second version of the Draft Water Recycling Policy ("Draft Policy"). The City commends the State Board's philosophy to promote the use of recycled water and to bring to fruition a statewide approach that fosters a consistent application of requirements to the use of recycled water in order to encourage and broaden its usage. The City supports setting a structure that provides for uniform interpretation of the various recycle requirements in such a way as to reduce uncertainty in the design and operation requirements for recycled water projects.

Further, the City agrees with the State Board in its attempts to support the development of a Recycled Water Policy that recognizes and treats recycled water as a resource rather than a waste product. Indeed, the City agrees wholeheartedly with the Staff Reports comment:

The state needs to encourage the development of recycled water projects in order to address the water demands of its population and industries. (Staff Report, page 1).

As described herein, the City is depending on the use of recycled water as a resource in its water supply plan. It believes that the State of California's current and future water supply concerns mandates uniformity amongst the various Regional Water Quality Control Boards (Regional Boards) in support of recycled water usage. Regulations and policies that impede this goal should be changed. The development of recycled water facilities must be encouraged so that recycled water may be made available, as the Legislation intended, to help meet the growing water requirements of the state.

The City is pleased to offer the following background facts and comments on the Draft Policy and looks forward to the upcoming hearing on this issue.

**1. City of Oxnard**

The City of Oxnard (City) is home to over 190,000 people. To serve this growing population, the City's Water Division relies on imported surface water from the Calleguas Municipal Water District (CMWD), groundwater from the United Water Conservation District (UWCD), and groundwater from the City's

own wells. Local groundwater comprises the greatest portion of the City's water supply. The City blends water from these three sources to achieve an appropriate balance between water quality, quantity, and cost.

As described in details below, to meet its water supply needs through the year 2020, the City's Groundwater Recovery Enhancement and Treatment (GREAT) Program includes wastewater recycling, groundwater injection, storage and recovery, and groundwater desalination. Starting with treated wastewater that would otherwise be discharged to the Pacific Ocean, the GREAT Program will produce a high quality purified recycled water product. This purified recycled water can be used safely for agricultural irrigation, industrial processes, landscape irrigation, and groundwater injection for aquifer recharge and as a seawater intrusion barrier.

**2. State Board Resolutions and the Water Code Support and Require the Use of Recycled Water**

**(a) State Board Resolution No. 77-1**

State Water Resources Control Board Resolution No. 77-1 states:

"1. The California Constitution provides that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that waste or unreasonable use or unreasonable method of use of water be prevented, and that conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare;

2. The California Legislature has declared that the State Water Resources Control Board and each Regional Water Quality Control Board shall be the principal state agencies with primary responsibility for the coordination and control of water quality;

3. The California Legislature has declared that the people of the State have a primary interest in the development of facilities to reclaim water containing waste to supplement existing surface and underground water supplies;

4. The California Legislature has declared that the State shall undertake all possible steps to encourage the development of water reclamation facilities so that reclaimed water may be made available to help meeting the growing water requirements of the State."

**(b) Water Code Section 13576.**

Within Water Code section 13576, the Legislature made the following findings and declarations:

"(a) The State of California is subject to periodic drought conditions.

(b) The development of traditional water resources in California has not kept pace with the state's population, which is growing at the rate of over 700,000 per year and which is anticipated to reach 36 million by the year 2010.

(c) There is a need for a reliable source of water for uses not related to the supply of potable water to protect investments in agriculture, greenbelts, and recreation and to replenish groundwater basins, and protect and enhance fisheries, wildlife habitat, and riparian areas.

(d) The environmental benefits of recycled water include a reduced demand for water in the Sacramento-San Joaquin Delta which is otherwise needed to maintain water quality, reduced discharge of waste into the ocean, and the enhancement of groundwater basins, recreation, fisheries, and wetlands.

(e) The use of recycled water has proven to be safe from a public health standpoint, and the State Department of Health Services is updating regulations for the use of recycled water.

(f) The use of recycled water is a cost-effective, reliable method of helping to meet California's water supply needs.

(g) The development of the infrastructure to distribute recycled water will provide jobs and enhance the economy of the state.

(h) Retail water suppliers and recycled water producers and wholesalers should promote the substitution of recycled water for potable water and imported water in order to maximize the appropriate cost-effective use of recycled water in California.

(i) Recycled water producers, retail water suppliers, and entities responsible for groundwater replenishment should cooperate in joint technical, economic, and environmental studies, as appropriate, to determine the feasibility of providing recycled water service.

(j) Retail water suppliers and recycled water producers and wholesalers should be encouraged to enter into contracts to facilitate the service of recycled and potable water by the retail water suppliers in their service areas in the most efficient and cost-effective manner.

(k) Recycled water producers and wholesalers and entities responsible for groundwater replenishment should be encouraged to enter into contracts to facilitate the use of recycled water for groundwater replenishment if recycled water is available and the authorities having jurisdiction approve its use.

(l) Wholesale prices set by recycled water producers and recycled water wholesalers, and rates that retail water suppliers are authorized to charge for recycled water, should reflect an equitable sharing of the costs and benefits associated with the development and use of recycled water.

(c) **Water Code Section 13350(a)**

Water Code section 13350, et seq. unequivocally demands the use of recycled water in lieu of potable water where appropriate:

“The Legislature hereby finds and declares that the use of potable domestic water for nonpotable uses, including, but not limited to, cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses, is a waste or an unreasonable use of the water within the meaning of Section 2 of Article X of the California Constitution if recycled water is available which meets all of the following conditions, as determined by the state board, after notice to any person or entity who may be ordered to use recycled water or to cease using potable water and a hearing held pursuant to Article 2 (commencing with Section 648) of Chapter 1.5 of Division 3 of Title 23 of the California Code of Regulations...”

**(d) Current and Future Water Supply Concerns**

In light of the current water supply constraints within the State, and the projections for future growth in the State, promoting the use of recycled water must be a fundamental strategy to ensure the availability of adequate water supplies.

There are many current concerns in terms of water supplies as the State Board well knows. Recycled water can be used a resource to offset major issues such as:

- The need to reduce dependence on the State Water Project.
- The need to reduce dependency on depleted groundwater sources.
- Preparation for drought conditions.
- Anticipation of the impacts of climate change.
- Population increase throughout the State.

**3. The City's Planned Use of Recycled Water is a Cornerstone of its Water Planning**

Reflecting the above concerns, like many California municipalities, the City faces a number of challenges related to water resources, including a growing population, greater demand on water supplies, competition over local groundwater resources, more costly and potentially less reliable imported state water, and the need to restore local wetlands.

As a result, Oxnard developed the GREAT Program. An innovative project with significant regional benefits, the GREAT Program combines wastewater recycling and reuse; groundwater injection, storage and recovery; and groundwater desalination to provide regional water supply solutions.

Designed to meet the City's current and future water supply needs, the Program also initiates the delivery of over 20,000 acre feet of recycled water for agricultural irrigation and groundwater recharge, and provides a brackish water byproduct that can be used to help restore vital local coastal wetlands.

The GREAT Program began at the Oxnard Wastewater Treatment Plant with the construction of the Advanced Water Purification Facility (AWPF). Filtration and improved disinfection facilities will be

constructed to allow direct use of recycled water for landscape irrigation and agricultural irrigation of certain crops.

The advanced treated, recycled water from the AWPf will be made available to agricultural users in the Oxnard Plain that are currently using local groundwater and surface water supplies. This recycled water will be of higher quality than the existing supplies and will help relieve over-drafting of the local groundwater basin, which has led to seawater intrusion. In the winter, when irrigation demands drop off, the recycled water will be injected into the groundwater basin to reduce the potential for seawater intrusion into nearby agricultural areas.

By using recycled water in lieu of groundwater, the unused groundwater allocation will be transferred from agricultural users to the City. The City can then extract the groundwater in the optimal locations. Oxnard's GREAT Program provides significant regional benefits. The Program is an excellent example of how challenges can be transformed into opportunities to better serve residents, seek innovative technological means to generate solutions, facilitate partnerships, build public awareness, enhance public confidence and advocate for legislative support.

The development of the GREAT Program was made possible through a cooperative effort with partner agencies throughout the region. Years before the program was publicly unveiled, representatives from the City, Port Hueneme Water Agency, United Water Conservation District, Calleguas Municipal Water Agency, and Fox Canyon Groundwater Management Agency met regularly to discuss regional water supply issues. The ongoing communication has been vital to the Program's overall success. Congresswoman Lois Capps of California's 23rd District introduced legislation to authorize a federal partnership for the GREAT Program. The City of Oxnard Water Recycling and Desalination Act of 2004 authorized the Secretary of the Interior to participate in the design, planning and construction of the GREAT Program.

In late 2004, the City Council certified the environmental impact report for the GREAT Program and the Water Resources Division subsequently initiated design and construction of a wide variety of projects. These include the Advanced Water Purification Facility, the recycled water distribution system, recycled water Aquifer Storage & Recovery Pilot Wells, Blending Station No. 1 Desalter, and the Blending Station No. 5.

#### 4. Comments on Specific Parts of the Policy

##### (a) Incentives

The Draft Policy discusses the appropriateness of incentives. Paragraph 8 states:

Many groundwater basins in California have groundwater that violates or threatens to violate water quality objectives for salts including nitrate established in Basin Plans, and the Basin Plans do not have adequate implementation procedures for achieving or ensuring compliance with the water quality objectives. It is appropriate to provide an incentive for dischargers to assist the Regional Water Boards in developing adequate implementation procedures through the adoption of salt management plans for the affected basins. It is also appropriate for the Regional Water Boards to obtain information, under Water Code Section 13267 or other appropriate means, from dischargers of significant quantities of salts into these groundwater basins.

**City's Comments:**

- The "incentives" are illusive?

The City believes that any and all incentives that the State Board could extend to producers and users of recycled water will increase the number of entities who will seek to take advantage of the incentive. However, the City did not find in the Draft Policy any "incentive", a term added to the current version of the Draft Policy, for any discharger.

It would be expected that such incentives would, at the very least, provide some relief from reporting or other such reduction in administrative requirements, but it does not. To the contrary, the incentive appears to be couched in terms of having dischargers provide additional services to the Regional Board and assuring that if they do not, the Regional Board can require such "assistance" under Water Code section 13267.

- Is the "incentive" limited to those that discharge significant quantities; and what does significant mean?

To the extent the "incentive" exists, is it limited to those that discharge significant amounts as a reading of the entire paragraph would seem to indicate. And if so, discharges should be told what significant means in this situation, or at least by what methodology will measurement be made. Such specifics are necessary in order to provide for a level of certainty.

**(b) Groundwater Recharge Projects**

Groundwater Recharge Projects are defined in Section (II)(B) as:

"Groundwater recharge reuse project" means a project that uses recycled water and that has been planned and is operated for the purpose of recharging a groundwater basin for use as a source of domestic supply or for the purpose of controlling salt water intrusion.

**(i) The Issue of the Regional Board's Setting "MCLs"**

The Draft Policy states:

14. The California Department of Public Health (CDPH) (formerly known as the Department of Health Services or DHS) is responsible for establishing maximum contaminant levels (MCLs) for constituents in drinking water to protect the health of the public who drink water supplied by water utilities. These MCLs are adopted through an extensive scientific and public review process.

15. For groundwater recharge reuse projects, MCLs and other requirements or recommendations provided by CDPH provide reasonable protection of groundwater quality for the beneficial use of municipal supply.

And where these MCLs exist, the Draft Policy states:

IV (A.) For constituents for which CDPH has established an MCL, or recommended a limit for public health protection pursuant to Water Code Section 13523(a), when interpreting a narrative objective for toxicity to develop a numeric effluent limitation for the constituent for protection of public health, the Regional Water Board shall establish the effluent limitation at a concentration equivalent to the MCL or the recommended limit. A Regional Water Board may establish a limitation that is more stringent than the MCL or the recommended limit, if necessary to protect a designated beneficial use other than municipal or domestic use, such as agricultural use.

However, where there is no MCL, the Draft Policy states:

16. Recycled water has the potential to contain constituents not typically found in surface water or groundwater, because it is usually produced from sewage. Hence, for groundwater recharge reuse projects, to protect public health, a Regional Water Board may need to establish a limitation for a constituent for which CDPH has not established an MCL.

IV (B). For constituents for which CDPH has not established an MCL or recommended a limit for public health protection pursuant to Water Code Section 13523(a), a Regional Water Board may interpret a narrative objective for toxicity for protection of human health to establish an effluent limitation for the constituent for a groundwater recharge reuse project, only if it finds that: (a) 1. The constituent is present in the recycled water; (b) 2. the constituent is likely to be persistent in groundwater in the recharge or irrigation area; (c) 3. adequate information is available to characterize the toxicity of the constituent and establish an effluent limitation; and (d) 4. approved analytical methods are available to measure the concentration of the constituent.

**City's Comments:**

- The Draft Policy will create a patchwork quilt of variations amongst the Regional Boards for the same substance thus negating a fundamental purpose of this Draft Policy, i.e. to bring consistency amongst the Regional Boards.

The position of the State Board is that even if the CDPH has established an MCL, a Regional Board may interpret its own narrative objective for toxicity; it may set a concentration equivalent to the MCL for an effluent limitation. That limitation may be more stringent if necessary to protect a designated beneficial use other than municipal or domestic use. Given the differences amongst the narrative objectives for toxicity (Staff Report pages 13-14), this provides for the Regional Boards, and each of them, unfettered ability to create a very different limitations across the state, which does not bode well for the state wide consistency that the Draft Policy was meant to address. Therefore, the City recommends that this portion of the Draft Policy be removed. Reliance on MCLs should be sufficient.

- Both were there is an MCL and where there is not, the Regional Boards should not be given the authority to set their own "equivalent" MCLs or

otherwise interpret its narrative objective for toxicity for protection of human health.

As the State Board recognizes, the "extensive scientific and public review process" regarding setting of MCLs also involved the Office of Environmental Health Hazard Assessment (OEHHA).

...who is the state agency responsible for performing health risk assessments for drinking water under the Safe Drinking Water Act of 1996.<sup>1</sup> The statute requires that the risk assessment be performed "using the most current principles, practices, and methods used by public health professionals who are experienced practitioners in the field of epidemiology, risk assessment, and toxicology."<sup>2</sup> ... OEHHA's expertise and conclusions are clearly key to later development of safe drinking water standards by DHS. (*State Board Order WQ 2005 – 0007: In the Matter of the Petitions of OLIN CORPORATION AND STANDARD FUSEE, INCORPORATED For Review of Cleanup And Abatement Order No. R3-2004-0101 Issued by the California Regional Water Quality Control Board, Central Coast Region SWRCB/OCC FILES A-1654 and A-1654(a)*, Page 5).

Further, in the above referenced State Board Order, the State Board also noted that:

Where no federal, state, or local standard yet exists, it is appropriate to use goals developed by agencies with expertise for public health determinations in deciding whether replacement drinking water is necessary. Any other approach would require regional water boards to make individual, possibly inconsistent public health and toxicological determinations or, in the alternative, to require replacement drinking water whenever there is any detection of a contaminant. This approach ignores the expertise of OEHHA and, in the case of contaminants for which MCLs have been developed, DHS. (*State Board Order WQ 2005 – 0007*, Page 6).

While the subject matter of replacement drinking water is different from the use of recycled water per se, given that some or all of the water recharged by groundwater recharge will likely wind up as drinking water, the City has concerns over the whether or not the methodology to be employed by the Regional Board will at all be similar to that normally used to set MCLs. The City assumes that the Regional Board would take a similar approach as the OEHHA does in setting the Public Health Goals (the first step to setting an MCL) as well as the later steps taken by the DPH. Obviously, the City would likewise assume that the public would have an opportunity to provide input in this decision making. Notwithstanding that, however, the City would like assurances that the Regional Boards are not being authorized to create a limitation which is in some manner posited as a functional equivalent to the MCL as this is solely in the purview of the DPH.

Also, and perhaps more importantly, by the absence of the MCL, the DPH is implicitly stating that it does not believe a given constituent requires an MCL or that there is sufficient information available to make such a determination. In either case, both the Regional Boards and State Boards should not attempt to substitute their analysis for that of the agencies which are required by the State of California

<sup>1</sup> Health & Saf. Code, § 116365.

<sup>2</sup> Health & Saf. Code, § 116365(c).

to set these requirements. Further, on setting these limitations, the City believes that DPH has a greater degree of expertise and responsibility as to the human health issues/risks than any Regional Board.

In essence, the State Board is proposing to delegate this standard setting responsibility to individual Regional Boards for emerging contaminants. And further, it is doing so without considering attenuation/dilution or an alternative compliance point.

**(c) Injection**

The Draft Policy Section VIII(B) states:

For projects that use injection wells, the Regional Water Board shall require that the discharger comply with recommendations provided by CDPH in accordance with Water Code Section 13523 when making its findings of non-degradation in accordance with Water Code Section 13540, or, if the Regional Water Board disagrees with the recommendations, the Regional Water Board shall follow the conflict resolution process described in Section VIII.A.

However, Water Code §13523(a) states:

Each regional board, after consulting with and receiving the recommendations of the State Department of Health Services and any party who has requested in writing to be consulted, and after any necessary hearing, shall, if in the judgment of the board, it is necessary to protect the public health, safety, or welfare, prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water.

**City's Comments:**

- It appears as if the Draft Policy Section VIII(B) is inconsistent with Water Code §13523(a) and as drafted will unnecessarily delay projects and may leave the discharger in limbo or in violation of either the CDPH or Regional Board requirements.

The Water Code requires the Regional Boards to first consult with the DPH and interested parties and then hold hearings. Thereafter, the Regional Boards can render some judgment to either adopt the DPH recommendations or make whatever changes it wishes. The Draft Policy, on the other hand, requires the discharger to adhere to the DPH recommendations unless it disagrees with the DPH at which the Regional Board and the DPH will enter into dispute resolution. Regardless of the Draft Policy, the dictates of the Water Code prevail and integrating both is, at best, a recipe for much confusion. The City believes a better approach so as to permit projects to proceed and to protect the discharger from being put in the middle of the two agencies. The City suggests that the Draft Policy state:

For projects that use injection wells, the Regional Water Board shall require that the discharger comply with recommendations provided by CDPH for the construction, operation and maintenance of the project and same shall be deemed to consistent with the non-degradation

*policies of the State Board. However, if the Regional Water Board disagrees with the recommendations of the CDPH, the Regional Water Board shall follow the conflict resolution process described in Section VIII.A but the discharger shall not be deemed to be in violation of the not-degradation policies of the State Board in the interim while the agencies resolve their differences at which time the State Board will issue any additional requirements agreed to by the CDPH.*

Note: The same issue applies to Draft Policy Section VIII (C) for spreading grounds and the City would make the same suggestion.

5. **Reliance on the MOA**

The Draft Policy states:

In 1996, CDPH and the State Water Resources Control Board (State Water Board) signed a memorandum of agreement on the use of recycled water that describes procedures for issuing water reclamation requirements and for resolving conflicts between CDPH and the Regional Water Boards. In the event that a conflict cannot be resolved under provision V.A of the MOA, the Regional Water Board would take action or not take action. Either this action or inaction could be petitioned to the State Water Board by CDPH, as specified in MOA provision V.B.

**City's Comments:**

- The proponent of a recycled water project should not be shut out of the process.

When a permit is under consideration the project proponent, and any opposing parties, participate in the public hearings on the matter. Under the MOA, the public is excluded.

Section VI(C) of the MOA states:

To assure fulfillment of the purposes and principles set forth in this MOA, the agencies hereto commit themselves to the following programmatic approaches and procedures:

In the event a recommendation of the Department is deemed by the RWQCB staff to be inappropriate for inclusion into water reclamation requirements, it will advise the appropriate District Office of the Department. The two agencies agree to meet and try to resolve any differences.

Section V(A) of the MOA states:

It is the desire of the agencies hereto to establish a speedy, efficient, informal method for resolution of interagency disputes, problems or conflicts. To that end, except as otherwise provided in this MOA, and to the extent not inconsistent with any formal administrative appeals which may be pending, the agencies agree that:

A. Any concerns, issues or disputes, arising between the RWQCB staffs and the Department that cannot be resolved by meetings and discussions between the RWQCB Executive Officer and the Department's District Engineer will be brought to the attention of the Executive Director of the SWRCB. The Executive Director will attempt to resolve the matter to the satisfaction of both parties and will, if necessary, meet and confer with the Chief of the Department's Division of Drinking Water and Environmental Management.

While the City appreciates the need for the two agencies to expeditiously handle these differences of opinion, the exclusion of the public is inappropriate. The decisions made by the two public agencies do have impact on the community at large and therefore the community should be able to participate. In particular, the proponent of the project has often spent considerable sums to bring the project to fruition and the discussions between the agencies are of significant interest to them. Indeed, the proponent may have the answers to many of the questions that may be posed, or may be able to more expediently lead the agencies to the scientific data needed.

**6. Total Nitrogen and Nutrient Management Plans**

The Draft Policy provides for relief from the necessity of a nutrient management plan when recycled water containing less than three milligrams/liter (mg/l) of total nitrogen contributes minimal additional nitrogen to the groundwater. When this occurs, nutrient management practices are not justifiable for these discharges. (Draft Policy Par. 8) Where irrigation projects are above three mg/l, the Draft Policy states:

For all irrigation projects in which the concentration of total nitrogen in the recycled water is more than three mg/l, the Regional Water Board shall require the development and implementation of nutrient management practices and shall require recycled water purveyors to educate customers about the need to consider nutrient concentrations.  
(Draft Policy III(B)(2))

**City Comments:**

- The discussion of nitrogen issues is without support and requires clarification.

The City believes that the Draft Policy and/or the Staff Report should explain the genesis of the selection of this limitation. There is no supporting information to explain where this level came from or why it is appropriate.

- There should be more structure to what an appropriate Nutrient Management Plan are so as to avoid confusion and streamline the process.

The description of these practices is outlined in the Draft Policy:

"Nutrient management" is the act of managing the amount, source, placement, form and timing of the application of plant nutrients and soil amendments. It is done to budget and supply nutrients for plant production, properly use manure or organic by-products as a plant nutrient source, *minimize degradation of surface water and ground water resources, protect air quality by reducing nitrogen emissions*

(ammonia and NOx compounds) and the formation of atmospheric particulates, and *maintain or improve the physical, chemical and biological condition of soil*. In the context of recycled water irrigation, "nutrient management" includes consideration of nutrient concentrations *present in recycled water* when calculating fertilizer application rates. (Draft Policy II(E)). (Emphasis added)

The Staff Report notes that:

To implement these practices, users would have to analyze the nutrient content of soils at their irrigation sites, estimate the nutrient needs of their crops or landscape for each portion of the year, and track the amount of nitrogen applied. Information on nutrient management practices can be found in the California Non-point Source Encyclopedia at <http://www.waterboards.ca.gov/nps/encyclopedia.html>.

A review of the cited document indicates that it does not deal with landscape irrigation projects, but does discuss agriculture. Further, there is no indication in the Staff Report nor in the Draft Policy that compliance with the California Non-point Source Encyclopedia is required as a minimum or "safe harbor" standard. Not only is this an important issue that needs clarification for both provider and discharger, but it is even more significant in that there is a requirement that recycled water providers educate their customers.

The definition provided in the Draft Policy (above) is extremely subjective and leaves a discharger before any single Regional Board to be subject to a varied and possibly conflicting set of determinations as to whether the minimization of degradation is acceptable, air quality is being protected and/or the degree soil is being maintained or improved. No doubt such variance will be dramatically different amongst Regional Boards.

Also, of concern is the issue of taking into account nutrient concentrations *present in recycled water* when calculating fertilizer application rates. There is no temporal nature to this issue, that is, does the recycle water provider need to provide a constant update of the nutrient concentrations which will obviously change seasonally and yearly depending on a wide variety of conditions? Is the recycled water receipt required to seek this information before every application of fertilizer? Must the recycled water provide this information? If so, on what schedule? There are many unanswered questions in this regard and some additional guidance is necessary to prevent violations of the Policy once adopted.

Lastly, while the Draft Policy relates only to irrigation projects, care should be taken that this does not interfere with CDPH's Draft Groundwater Recharge Reuse Regulations which permit only three specific methods to control nitrogen compounds. (see Endnote 7. §60320.020. Control of Nitrogen Compounds. Table summarizing text of Section 60320.020 (Control of Nitrogen Compounds) shown below.

Endnote 7. §60320.020. Control of Nitrogen Compounds.  
 Table summarizing text of Section 60320.020 (Control of Nitrogen Compounds)

	Method 1	Method 2	Method 3
Compliance point and monitoring	<ul style="list-style-type: none"> <li>Recycled water, or a blend of recycled water and deionized water, in or above the mound</li> <li>Samples analyzed for total nitrogen</li> <li>Reduced monitoring available</li> </ul>	<ul style="list-style-type: none"> <li>Recycled water or a blend of recycled water and deionized water filter, prior to surface spreading or subsurface injection, or from within a mound or storage zone prior to reaching the GW table</li> <li>Samples analyzed for total nitrogen, nitrate, nitrite, ammonia, organic nitrogen, DO, and BOD</li> <li>Reduced monitoring available</li> </ul>	<ul style="list-style-type: none"> <li>Groundwater downgradient of the recharge area</li> <li>Samples analyzed for nitrate and nitrite</li> </ul>
Standard(s)	<ul style="list-style-type: none"> <li>5 mg/L total N as an average</li> <li>10 mg/L total N as a maximum frequency</li> </ul>	<ul style="list-style-type: none"> <li>10 mg/L total nitrogen or</li> <li>Limits established in the engineering report for other constituent</li> </ul>	<ul style="list-style-type: none"> <li>MCLs for nitrate and nitrite</li> </ul>
Frequency of sampling	2 per week	As established by the Department and specified in the operations plan	<ul style="list-style-type: none"> <li>Specified in the engineering report and operations plan</li> <li>Relatively frequent monitoring at locations between the recharge area and down gradient domestic wells is required</li> <li>Notify the Department and RWQCB</li> <li>Suspend surface spreading and subsurface injection unless demonstrated that the groundwater no longer exceeds the MCLs</li> </ul>
Consequence of failure	<ul style="list-style-type: none"> <li>Investigate, correct and notify if the average of two consecutive samples &gt;5 mg/L</li> <li>Suspend recharge of recycled water if the 4-week average of all samples &gt;5 mg/L or if more than 25% of samples collected in any two week period exceed 10 mg/L</li> </ul>	<ul style="list-style-type: none"> <li>Investigate, correct and notify based on an average of two consecutive samples over the total nitrogen standard or standard for another constituent</li> <li>Suspend surface spreading and subsurface injection of recycled water until the average of two consecutive samples meets all limits</li> </ul>	<ul style="list-style-type: none"> <li>Method 3 relies on:               <ol style="list-style-type: none"> <li>A demonstration that historic recharge with water containing comparable levels of nitrogen has not caused a problem.</li> <li>Evidence that recharge water can be tracked and monitored throughout the flow path, and</li> <li>Monitoring to show that the MCLs for NO<sub>2</sub> and NO<sub>3</sub> are met in the groundwater.</li> </ol> </li> </ul>
Rationale	Method 1 relies on such a low limit for the total N in the recycled water that the chance that the NO <sub>2</sub> or NO <sub>3</sub> MCL could be exceeded is minute.	Method 2 relies on: <ol style="list-style-type: none"> <li>A low enough limit for the total N in the recycled water that the chance that a NO<sub>2</sub> or NO<sub>3</sub> MCL could be exceeded is low, combined with</li> <li>A set of limits determined for the specific GRWS and explained in the Engineering Report for nitrite, organic nitrogen and for ammonia necessary to limit oxidation to NO<sub>2</sub> or NO<sub>3</sub>, and some set of maximum levels for an excess DO over BOD requirement in the recycled water, and/or a DO requirement in the groundwater as necessary to prevent reduction of NO<sub>2</sub> to NO.</li> </ol>	

\*Note: This table provides a summary of the regulatory requirements and is not intended to be comprehensive.

## 7. Salt Management

The Draft Policy wisely sets out a safe harbor for dischargers complying with applicable rules during which time the Regional Boards develop and adopt salt management plans to fulfill the requirements of Water Code Section 13242. Given that the Los Angeles Regional Board has existing recycled water projects, the following would apply:

- For a groundwater basin with an existing recycled water project, within one year of the effective date of this Policy, the Regional Water Boards shall review existing projects and make a finding as to whether, in the groundwater basin in the area of the discharge, either the water quality objectives for salts or nutrients are being, or are threatening to be, violated, or that degradation of water quality from salts or nutrients is occurring that is inconsistent with Resolution No. 68-16. If the Regional Water Board makes an affirmative finding, then within five years of the date of the finding the Regional Water Board shall adopt revised salt management plans, consistent with the requirements of Water Code Section 13242 for that basin. (Draft Policy III(A)(2)).<sup>3</sup>

<sup>3</sup> The Draft Policy allows for an extension of an additional five years.

However, if the Regional Board does not act, the Draft Policy states:

If the Regional Water Board does not implement a salt management plan within the timeframes specified in Section III.A.1, 2, and 3, all discharges of recycled water shall meet effluent limits established by the Regional Water Board to ensure the discharge does not cause or contribute to a violation of salt or nutrient water quality objectives. (Draft Policy III(A)(4))

**City's Comments:**

- There is no "incentive" here for a Regional Board to proceed with the creation of a salt management plan

There is no "incentive" here for a Regional Board to proceed with the creation of a salt management plan that all dischargers in a region can see, work with and strive to meet the goals set therein. These basin wide goals should be encouraged and to the extent that the State Board can require the Regional Boards to perform this work in a timely manner, or at the very least, report yearly to the State Board the status of the plan and the timeline for its completion, this creates a level of accountability. Such authority for the State Board to act exists under Water Code §§13140, 13142.

- Does the Draft Policy requiring a revised salt management plan for the entire basin even though there is only one project which is in conflict with Resolution No. 68-16

The language in the Draft Policy cited above appears to state where there is existing recycled water projects in a basin, the Regional Board may adopt a revised salt management plan if only one such project is or may degrade the basin in conflict with Resolution No. 68-16. Given that the Draft Policy permits the Regional Board to take action, on a case by case basis if the circumstances warrant more stringent action, (Section I (A) and (B)), is the Draft Policy requiring a revised salt management plan for the entire basin even though there is only one project of concern? If this is correct, it would seem to be an inefficient use of the Regional Boards resources and forces other already conforming projects to possible uncertainty as to the changes. Shouldn't this be viewed as a basin-wide impact?

**8. Interim Requirements**

As noted above, the City believes that the concept of interim requirements as a safe harbor is a positive step in the presentation of the Draft Policy. However, there are some questions and concerns raised by the language employed.

**(a) The 550 mg/l Limitation**

The Draft Policy states:

For all recycled water projects within the basin, the monthly average TDS concentration in the recycled water shall not exceed the monthly average TDS concentration of the source water supply, plus 550 mg/l. The monthly average TDS concentration of the source water supply shall be the flow-weighted monthly average TDS concentration of the public water supply of the service area that generates sewage from which the recycled water is produced. (Draft Policy III(B)(1)).

**City's Comments:**

- Is 550 mg/l a supportable concentration?

The City is aware that from numerous comments to the original Draft Policy that the concentration suggested of 300 mg/l was criticized as being too low. Many suggested this be changed to at least 500 mg/l. While the City believes that the selection of 550 mg/l is a better concentration threshold, the City believes that the State Board should support its decision with appropriate data.

- Concentration of the Source Supply is Problematic

More problematic is the requirement that the "concentration of the source water supply, plus 550 mg/l." This requirement raises certain issues that the Draft Policy and/or the Staff Report should address. These include:

What is meant to encompass "the public water supply of the service area that generates sewage from which the recycled water is produced"?

The City believes what the State Board meant here was that the only water that is relevant for this calculation is the water that actually is used to move the sewage from the location of its inception to the POTW, but this is not clear.

What is the discharger to consider if there is more than one source of water involved?

There are many examples of multiple sources in a service area where each "source" has a different TDS signature. As an example, there may be a service area that draws as a source several groundwater wells spaced significantly far apart and drilled to different depths. The TDS signature in each may be varied. How is the discharger to calculate the concentration of the source? What is the discharger to do in this case? Further, what burden does this place on the recycled water supplier?

What is the discharger to consider if this information is not available to it?

There is no indication that the State Board has determined that the baseline information exists and is available to the discharger expediently or in such a format that it can be used to determine the issue raised above, i.e. multiple sources. How is the discharger then supposed to comply?

- Landscape irrigation projects may not be exempt from monitoring.

The Draft Policy states:

For landscape irrigation projects, the Regional Water Boards shall defer groundwater monitoring until the applicable salt management plan as been approved, unless it determines that site conditions such as shallow groundwater could cause an increased potential for the irrigated site to adversely affect public health or surface water quality. Nevertheless, the Regional Water Board may require recycled water dischargers to monitor for salts, if necessary for salt management plan development and if similar informational burdens are imposed on other parties who may be contributing salt loadings to the underlying groundwater. (Draft Policy III(B)(3)).

While the Draft Policy “defers” monitoring in the first sentence for landscape irrigation projects for the time being, it permits monitoring if the “site conditions...could cause an increased potential...” of concern. While it gives one example, the deference is meaningless if the Regional Board views the potential differently from location to location even if the site conditions are the same from one location to another. To bring consistency to this, the City believes that there should be a deference until the salt management plans are completed with the caveat that the Regional Board has to make a showing that there is an existing demonstrable or threatened effect on public health. This is to alleviate the burden on the landscape irrigator who otherwise could be made to monitor some condition so that the Regional Board can then determine if there may be problem.

Further, the text cited above appears to say that the Regional Board can ask for monitoring under the guise of creating the salt management plan. While the City understands information is needed, the text impedes the use of recycled water for landscape irrigation by creating burdens to the irrigator that on one hand, the State Board defers, and on the other hand, the Regional Board can require.

- Clarity is needed as to the designation of “others who may be contributing salt loadings to the underlying groundwater.”

As stated in the Draft Policy there appears to be a quid pro quo being suggested. That is, any recycled water discharger may be required to monitor for salts for the purpose of creation of a salt management plan, if and only if “others who may be contributing salt loadings to the underlying groundwater.” It is not clear who these others may be, that is, are they other dischargers of recycled water or some other person who may be contributing to salt loading in a different way. Does this mean that once a Regional Board gets one discharger to monitor, then all must? Is there some quantitative contribution being weighed or is it any and all contributions?

#### **9. Control of Self-Regenerating Water Softeners**

The Draft Policy states:

Through control of industrial discharges and self-regenerating water softeners, most recycled water producers can limit to 550 milligrams/liter (mg/l) the increase of TDS from a community's source water supply to its produced recycled water. (Draft Policy, para 12)

For recycled water irrigation projects, discharges of salts to groundwater can be reasonably controlled by implementing a nutrient management plan practices, applying recycled water in an amount that does not exceed the amount needed for the landscape or crops, and controlling salt discharges to collection systems from industrial facilities and self regenerating water softeners. (Draft Policy, para 24)

#### **City's Comments:**

The State Board appears to be asserting the position that the recycled water producers can control the use of self-generating water softeners. While some recycle water producers may have the statutory power to regulate the prospective use of water softeners in their service areas, others may not. Indeed the City could not retrospectively require removal of such equipment least it find itself in litigation on the claim of inverse condemnation. Further, if the City wishes to bar the use of such devices, it must do more then merely say “this is so”. The legislature has decreed that before such action is taken the local

agency must meet a list of rather long and detailed findings. Health & Safety Code §116786. To assume, therefore, that such control of water softeners is readily handy, is incorrect.

10. **Anti-Degradation**

(a) **Clean Water Act**

The Draft Policy states:

Except as provided in Section IV.B, recycled water projects that comply with this Policy, the Porter-Cologne Water Quality Control Act, the Clean Water Act and its implementing regulations, and the applicable Basin Plan, shall be considered to have met the requirements of State Water Board Resolution No. 68-16. (Draft Policy VI(A))

**City's Comments:**

- The purpose for the reference to the Clean Water Act (CWA) is not clear.

The CWA (33 U.S.C. 1251 et seq.) is the cornerstone of surface water quality protection in the United States but generally does not deal with groundwater. The question is, then, as the Draft Policy is meant to deal with groundwater, what is the purpose of the reference to the CWA? If it relates to a dischargers compliance with the NPDES? How does such compliance relate to inadvertent run over or it the intent of the State Board to deal with this in some type of general permit? Does it mean that the recycled water project not only needs to be tested against State Water Board Resolution No. 68-16, but the CWA's three tiered anti-degradation policy as well? The City believes the Draft Policy would be best served by eliminating reference to the CWA.

(b) **Salt and nutrient-related anti-degradation findings v. salt management plans**

The Draft Policy states:

When the State Water Board approves a salt management plan for a specific groundwater basin the salt and nutrient-related anti-degradation findings of that plan shall supersede the anti-degradation findings of this Policy for that groundwater basin. The salt management plans must also include a description of the best practicable treatment or control measures necessary to ensure that recycled water projects do not result in a salt or nutrient-related condition of pollution or nuisance. (Draft Policy VI (C)).

**City's Comments:**

- The salt management and nutrient plan should not be the only document that sets forth best practicable treatment or control measures.

As set forth above, the salt management plan will provide the discharger with a description of the best practicable treatment or control measures for salt and nutrient related conditions even if not set forth in prior or the then current anti-degradation policies for a particular basin. But, this does not address the situation where, given Finding #16 and Provision IV(B), where the Regional Board sets its own limits

when interpreting narrative toxicity objectives. If indeed a Regional Board does set its own limits it should, at the same time, describe what the best practicable treatment or control measures will be for this new constituent. As the City understands it, the Draft Policy states that following such best practicable treatment or control measures will not be considered to be degrading the groundwater of the basin. Therefore, such measures should be spelled out.

- Shouldn't there be a window of time to allow changes from one plan to the other.

As stated in the Draft Policy, once the State Board adopts a salt management plan it immediately supersedes the anti-degradation findings of this Policy for that groundwater basin. Changes take time. Some more than others. The City believes that there should be a requirement for time to be provided to make the changes as may be necessary. This should be written into the policy so as to provide no question that the Regional Boards must provide such reasonable time. Further, there should be a clear indication that the Regional Boards must grant, upon adequate showing, any requirements from a Time Scheduling Order.

#### 11. Ongoing Responsibility

The Draft Policy states:

Nothing in this Policy is intended to expand or limit responsibility for contamination or pollution of groundwater. If drinking water standards become more stringent after a Regional Water Board establishes requirements for a project, the discharger shall be responsible, under Water Code section 13304 or other applicable provisions of law, for any past or continuing discharge that has caused, is causing, or threatens to cause groundwater to violate the new or more stringent drinking water standard(s). This responsibility may include the provision of an alternative water supply or wellhead treatment to any affected parties. (Draft Policy VII (A)).

#### City's Comments:

- The Draft Policy should not alter responsibility for contamination or pollution.

This rendition of the Draft Policy makes improvements on this issue over the prior version but is not completely satisfactory in its content. The City believes only the first sentence was maintained and the remainder of the paragraph deleted.

- The Draft Policy's changed wording from "liability" to "responsibility" does not resolve the issues concerning this portion of the Draft Policy.

The City questions how is the term "responsibility" used here? Is it meant in a civil damage context? Is it meant to connote "responsibility" for remediation? Is the first sentence meant to use "responsibility" as it may be referenced or implied in Water Code §13304 or otherwise?

- Does the Draft Policy mean to provide for strict liability in its reference to WC §13304?

The Draft Policy says that if a discharger shall be responsible if it causes a violation. Care should be taken as to the use of the term "shall" in that it may be interpreted to be mandatory. As the State Board knows, there are some requirements that the Regional Boards make such findings according to a

specific degree of evidence. In fact, the State Board has discussed the appropriate standard of proof to employ in such situations.

Generally speaking it is appropriate and responsible for a Regional Board to name all parties for which there is reasonable evidence of responsibility, even in cases of disputed responsibility. However, there must be a reasonable basis on which to name each party. There must be substantial evidence to support a finding of responsibility for each party named. This means credible and reasonable evidence which indicates the named party has responsibility." In *The Matter Of The Petition Of Stinnes-Western Chemical Corporation Order No. WQ 86-16*, September 18, 1986, citing to *In the Matter of the Petition of Exxon Company, USA, No. WQ 85-7*. (Emphasis added).

The term "substantial evidence" is defined as relevant evidence that a reasonable mind might accept as adequate to support a conclusion. *Hosford v. State Personnel Bd.* (1977) 74 Cal.App.3d 302, 307. Such evidence must be reasonable, credible, and of solid value. *Kuhn v. Dept. of General Services* (1994) 22 Cal.App.4th 1627, 1633; *California Youth Authority v. State Personnel Bd.*, (2002) 104 Cal.App.4th 575, 584-585.

The City therefore asserts that the Draft Policy should be clear that it is not setting forth any new evidentiary standard. Again, this would not be an issue if only the first sentence of the paragraph was maintained.

- The Draft Policy does not define the term "drinking water standards".

The term "drinking water standards" is not defined. Indeed, the only reference in the Draft Policy to such a term is in this cited paragraph. Further, the term does not indicate if it is to be interpreted solely by the acts and mandates of the CDPH or whether it includes the Regional Boards MCL equivalents. Adding to the confusion is the use of the phrase "after Regional Water Board establishes requirements for a project." That is, does this relate to some operational requirement set by the Regional Board so that the project may proceed, or does it relate to a requirement of the Regional Board when it creates its MCL equivalent, discussed further above.

In the case of *In Re Groundwater Cases* (Cal.App. 1 Dist, 2007) 154 Cal.App.4th 659, the Court of Appeal clearly defined this term in so far as the Safe Drinking Water Act, that it means only MCLs as regulated by the CDPH. What does the State Board mean? The City assumes, but believes the paragraph is very unclear, that the State Board may be referencing this "responsibility" only as to MCLs as the State Board has already held that the alternative water supply requires a level at or above the MCL.<sup>4</sup> Clarification is clearly required.

- Seeking to hold dischargers and/or suppliers of recycled water "responsible" for future changes in water quality standards is improper and unwise.

<sup>4</sup> State Board Order WQ 2005 – 0007: *In the Matter of the Petitions of OLIN CORPORATION AND STANDARD FUSEE, INCORPORATED For Review of Cleanup And Abatement Order No. R3-2004-0101 Issued by the California Regional Water Quality Control Board, Central Coast Region SWRCB/OCC FILES A-1654 and A-1654.*

(i) Why it is unwise

To the extent that the policy of this State is to increase the use of recycled water, this assertion by the State Board is inapposite to such a policy. That is, shouldn't the State Board be a champion of protecting recycle suppliers and users from the unknowns that come to light in the future? The State Board is seeking to have the dischargers follow best practicable treatment or control measures now available but there is no way these practices could anticipate future unknowns? The City believes that the State Board should be such a champion. If Legislation is needed to protect suppliers, the State Board should be in the forefront of all efforts to obtain that legislation.

(ii) The Supreme Court and Courts of Appeals do not support the Draft Policy's claim of responsibility

Recent rulings by the California Supreme Court and the Court of Appeals set forth ample reasoning that demonstrate the rationale to support a position that there should be no "liability" to accrue in the future when the water supplier meets the standards at the time of use of the recycled water. The issue of importance here is not that the citations below only relate to drinking water, define the public policy that is equally applicable in this circumstance.

The Supreme Court ruling in *Hartwell v. Superior Court* (2002) 27 Cal.4th 256 created a safe harbor for water utilities regulated by the Public Utilities Commission ("PUC") against personal injury suits relating to "contaminated drinking water". After remand to the Superior Court, and a trial, the Court of Appeals in the *In Re Groundwater Cases* (Cal.App. 1 Dist, 2007) 154 Cal.App.4th 659, stated that Government Code Section 815.6 provides an avenue for immunity for a public agency relating to the service of water. While the context in these opinions was the service of water for public consumption, the logic applies equally here given the strict rules and regulations regarding the quality, treatment, distribution and usage of recycled water. Government Code Section 815.6 provides:

Where a public entity is under a mandatory duty imposed by an enactment that is designed to protect against the risk of a particular kind of injury, the public entity is liable for an injury of that kind proximately caused by its failure to discharge the duty unless the public entity establishes that it exercised reasonable diligence to discharge the duty.

Citing to cases interpreting this statute, the Court of Appeals noted that they establish a three-pronged test for determining whether liability may be imposed on a public entity: (1) the enactment in question must impose a mandatory, not discretionary, duty; (2) the enactment must be intended to protect against the kind of risk of injury suffered by the party asserting the statute as the basis of liability; and (3) the breach of duty must be a proximate cause of the plaintiff's injury. The Court concluded that:

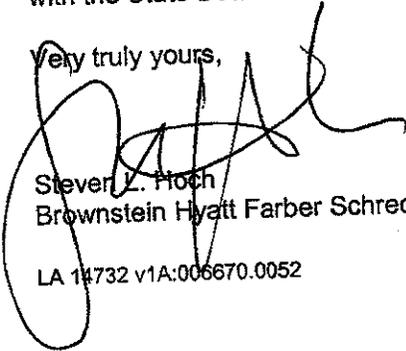
Because we conclude that none of the statutes identified by plaintiffs in their brief to this court can be construed as creating a mandatory duty, we hold that plaintiffs have failed to state a claim against the Public Entity Defendants under Government Code section 815.6. Accordingly, the Public Entity Defendants' sovereign immunity barred the trial court from hearing plaintiffs' claims against the Public Entity Defendants, and their motions to dismiss were properly granted.

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So stating the Court found that as long as the public entities followed the DPH rules and regulations relating to drinking water, they could not be held liable for contaminants not yet determined to be a health issue should some harm become apparent in the future. That is, there can be no future liability for delivery of drinking water with a substance for which an MCL does not exist. How can, then, the State Board create a "responsibility" when the courts have clearly indicated there is none.

The City, again thanks the State Board for this opportunity to comment. We look forward to working with the State Board to increase the use of recycled water, a valuable resource for California's future.

Very truly yours,



Steven L. Hoch  
Brownstein Hyatt Farber Schreck, LLP

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