



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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Chief Engineer and General Manager

May 27, 2014



VIA ELECTRONIC MAIL

Ms. Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Dear Ms. Townsend:

Comment Letter – General Order WDRs for Recycled Water Use

The Sanitation Districts of Los Angeles County (Sanitation Districts) serve the wastewater collection, treatment, and disposal needs of approximately 5.5 million people in the County of Los Angeles. Ten of the eleven treatment plants the Sanitation Districts owns and operates are classified as water reclamation plants that produce over 185,000 acre-feet per year (AFY) of highly treated recycled water. Of that amount, nearly 104,000 AFY (56%) were beneficially reused for a variety of applications including urban landscape irrigation, impoundments, agricultural irrigation, cooling tower supply, industrial process water, and environmental enhancement in Fiscal Year 2012-13. The Sanitation Districts have over half a century of experience with water reclamation and recycling, along with the associated regulations.

The Sanitation Districts are encouraged by the State Water Resources Control Board's (State Water Board's) effort to produce a general order authorizing recycled water use (General Order), which has the potential to help with the critical drought and water supply crisis facing the State of California. The Sanitation Districts anticipate availing itself of this Order for some of its future water recycling regulatory needs. However, Sanitation Districts' staff members have identified a number of issues that, if not adequately addressed, would severely compromise the usefulness of this Order for water recyclers throughout the State, thereby limiting its ability to address the drought crisis with increased water recycling.

The enclosed attachment lists, by page and section, each of the issues identified as affecting the General Order's utility. The first section lists "Major Comments" that deal with concerns that, if left unaddressed, will individually and collectively limit the usefulness of the General Order to varying degrees. The second section lists "Other Comments" that are more editorial in nature and would enhance the clarity of the document. Page numbers refer to the April 29, 2014 version of the General Order.

If you have any questions regarding these comments, please contact me at (562) 908-4288, extension 2803 or Mr. Earle Hartling at extension 2806.

Very truly yours,
Grace Robinson Hyde

Ann T. Heil
Supervising Engineer
Technical Services Department

ATH:EH:lmb

ATTACHMENT

Comments on State Water Board General Waste Discharge Requirements for Recycled Water Use

Major Comments

Page 1, Title. The General Order as drafted consists of Waste Discharge Requirements (WDRs) instead of Water Reclamation Requirements (WRRs). Use of WRRs instead of WDRs would better reflect the character of recycled water as a valuable resource instead of a waste.

Page 3, Finding 10(c) excludes the use of recycled water for animal water supply from this proposed Order. While the specific exclusion of domestic water supply for people is appropriate, there are instances where domesticated animals can and have been supplied recycled water as their drinking water supply. This use at California Polytechnic University, Pomona was approved by the Los Angeles Regional Board, after consultations with California Department of Public Health (CDPH), in a letter dated April 19, 1982. Although the specific use for domestic animal watering is not currently contained in Title 22, provisions do exist in Title 22 to allow for other uses not included to be approved of by CDPH (with or without formal revision of Title 22). Therefore, to allow for the potential future use of recycled water for watering animals and to eliminate the implied permanent prohibition, the words “*or animals*” should be stricken from this sentence.

Page 3, Finding 19 refers to not preempting local control of wastewater discharges. This finding is troublesome and should be deleted in its entirety.

Page 7, Finding 23 says, “*This General Order regulates discharges to numerous water bodies...*” This Order specifically regulates the application of recycled water on Use Sites and requires application at agronomic rates. With such a requirement in place, there should be no discharge to any water bodies and the first three sentences in this finding should, therefore, be deleted.

Page 8, Finding 24(a) says, “*Recycled water use shall not create unacceptable groundwater and/or surface water degradation.*” The term “*unacceptable*” is vague and subjective and should be revised for clarity.

Page 8, Finding 25 the second sentence in the first paragraph says, “*In order to do that, we must better match water use to water quality...*” This should be restated to say that “***water uses must be better matched to water quality***”. Also in this finding, the third paragraph states, “*To the extent that the use of recycled water as a source supply results in point source discharges of used recycled water, that water will undergo subsequent treatment...*” This permit does not authorize such discharge so reference to such discharge is confusing and should be deleted.

Page 9, Finding 26 says, “*The Regional Water Board has discretion in enrolling Dischargers under this General Order. If the discharge is not consistent with Basin Plan requirements, the Discharger may elect to improve treatment, or a site-specific order can be prepared.*” This language gives full discretion to the Regional Boards to not allow coverage under the General Waste Discharge Requirements for Recycled Water Use (General Order), without any need to justify denial of coverage. This is in contrast to Finding 28, which sets out limited circumstances under which Regional Boards can deny coverage. Additionally, some Regional Board may misinterpret the phrase “*if the discharge is not consistent with Basin Plan requirements*” to mean that the recycled water must meet all Basin Plan objectives in order to be used, regardless of the findings of any Salt Nutrient Management Plans (SNMPs). Therefore, these two sentences should be deleted. Regional Board discretion to require site-specific permitting should be limited to the circumstances listed in Finding 28.

Page 11, Finding 27 states, “*this General Order requires the applicant to provide confirmation that the owner of the treatment plant has complied with these [Water Code Section 1211] requirements.*” This order should simply require compliance with relevant water rights statutes as a condition of being effective. See comment below on Specification B.3.

Page 11, Finding 28 (various). As with Finding 24(a), the term “*unacceptable*” is used throughout and is vague and subjective. It could be interpreted too broadly. Findings 28a and 28b should be deleted or criteria for determining acceptability established.

Page 11, Finding 28 (f) creates an unsupported nexus between water recycling and Total Maximum Daily Loads (TMDLs). Water recycling is not a “discharge” and references to TMDLs in this Order should be deleted.

Page 12, Finding 30 reveals that there will be an (unspecified) annual fee charged by the State Board for coverage under this Order. Some WRRs currently being administered by the Regional Boards do not require fees. This finding should be clarified as fees can be seen as a disincentive to prospective applicants.

Page 12, Finding 31 states, “*A National Pollutant Discharge Elimination (NPDES) permit is required if recycled water will be conveyed in ephemeral streams, year-round streams, or irrigation ditches that discharge to a surface water body (waters of the United States).*” Not all ephemeral streams, year-round streams, or irrigation ditches that discharge to a surface water body are waters of the United States. Rather than attempt to define waters of the United States in this General Order, this Finding should be changed to simply state that if an entity is discharging to waters of the United States they cannot use this General Order.

Page 13, Finding 32 lists beneficial uses of underlying groundwaters in the various regions of the state. However, the finding erroneously states that these groundwater beneficial uses represent all the beneficial uses for waters of the state in these regions. This finding needs to be amended to make it clear that list of beneficial uses only encompasses groundwater beneficial uses. There are waters of the state that are not groundwaters, including but not limited to some surface waters in closed basins.

Page 14, Prohibition A-2 addresses not applying recycled water to irrigation areas when soils are saturated. An exemption should be provided for frost protection. Example language can be found in recycled water permits issued in the North Coast Region.

Page 14 Prohibition A-3 states “*Recycled water shall not be allowed to escape from the use area(s) as surface flow that would either pond and/or enter surface waters.*” This requirement does not recognize incidental runoff, as allowed under Prohibition A-7. The following language should be added to the beginning of this prohibition, “***Except as allowed under Prohibition A-7,***”.

Page 14 Prohibition A-4 states “*Recycled water shall not be allowed to escape from the use area(s) as an airborne spray that would visibly wet vegetation or any other surfaces.*” There is no basis in Title 22 for this prohibition, as there is already language that prohibits overspray into private residences, picnic areas, and drinking fountains, overspray that causes ponding, and overspray that creates excessive runoff. This provision should be deleted.

Page 15, Prohibition A-6 states, “*The use of recycled water shall not cause rising groundwater discharging to surface waters to degrade surface water quality, exceed surface water quality objectives or adversely affect beneficial uses.*” This should be clarified as to whether the source of the degradation is the groundwater quality itself or is from the recycled water contribution. If the existing groundwater is the source, then it would cause a problem with the surface water even if potable water was being used for

irrigation. If the problem is not directly associated with the recycled water quality, it should not be regulated as if it were.

Page 15, Prohibition A-9 is the same as Finding 10(c) above which prohibits the use of recycled water for animal drinking. The comments are the same.

Page 15, Specification B-1, requires the Administrator to discontinue delivery of recycled water for “*projects that do not comply with the requirements.*” As written, this requirement offers no flexibility for sequentially more severe enforcement measures. It should be revised to require Administrators to have authority to discontinue serviced and use such authority after other approaches to achieve compliance have been ineffective.

Page 15, Specification B-1(a) states that actions associated with recycled water must follow “*All title 22 requirements.*” This could lead to confusion, as different Title 22 requirements apply under different circumstances. For examples, the dual-plumbing requirements in Title 22 only apply to projects employing dual plumbing. For clarity, this should be changed to “*All **applicable** title 22 requirements.*”

Page 16, Specification B-3 requires that the Administrator provide, prior to a change in the point of discharge, certification that the State Water Board Division of Water Rights (DWR) has either approved or determined that their approval is unnecessary, in accordance with Water Code Section 1211. The requirement to make the water recycler secure an affirmative decision on water rights is inappropriate. Rather than include this requirement regarding a certification, the permit should simply reference the appropriate Water Code Section. The following language could be used, “***Water Code Section 1211 requires that prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater, the owner of any wastewater treatment plant shall obtain approval of the State Water Board for that change, except in cases where changes in the discharge or use of treated wastewater do not result in decreasing the flow in any portion of a watercourse.***” If this section is retained in the final General Order, clarification is necessary as to conditions under which an order approving change is not required, such as a salinity threshold or other objective criterion.

Page 16, Specification B-4. See comment for Page 12, Finding 31.

Page 16, Water Recycling Administration Requirement C-2 states, “*The Regional Water Board will coordinate with CDPH to include title 22 engineering report approval requirements as needed.*” In order to avoid having to refile engineering reports for existing projects that are being moved from current WRRs to this General Order, the following should be added to this provision: “***Recycled water distribution systems and/or Users currently covered under existing WDRs, WRRs, master permits or other such Regional Board orders are categorically exempt from having to refile engineering reports for their existing operations.***”

Page 17, Water Recycling Administration Requirement C-6 states, “*The Administrator shall ensure recycled water meets the quality standards of this General Order and shall be responsible for the operation and maintenance of major transport facilities and associated appurtenances.*” Since the transport facilities are sometimes under the direct control of the water purveyors that distribute the recycled water in their service area (i.e., an entity other than the Administrator), the following language should be added to this provision: “***If an entity other than the Administrator has actual physical and ownership control over the recycled water transport facilities, the Administrator may delegate operation and maintenance responsibilities for such system to that entity.***”

Page 17, Water Recycling Administration Requirement C-7 first sentence should be revised to read, “*The Administrator, or its designated agent, shall conduct periodic inspections of the User's facilities...*” That

way, an intermediate in the chain of delivery between the Producer and the User, such as a water purveyor (Distributor) who is not acting as the Administrator, can perform the inspections of reuse sites to which it directly delivers recycled water.

Page 17, Water Recycling Administration Requirement C-10 requires the Administrator to develop recycled water use requirements for activities such as dust control and concrete mixing, and also discusses transportation by tanker-truck of the recycled water; however, this requirement is confusing as written. Recycled water use requirements should not have to be written in cases when the Administrator is not providing the water for such uses. Additionally, transportation should be allowed in vehicles other than tanker-truck such as street sweeping vehicles. For clarification, this requirement should be rewritten to read, ***“If recycled water will be transported by truck for operations approved under title 22 such as dust control, the Administrator shall develop recycled water use requirements for these uses. Users of recycled water for such activities shall complete a recycled water release form or equivalent tracking documentation when receiving recycled water. This General Order allows transportation of recycled water by tanker-truck or other vehicles.”***

Pages 17-18, Water Recycling Administration Requirements C-13 through C-16 should also have the phrase ***“or its designated agent”*** inserted in each provisions first sentence revised after ***“The Administrator”***, as intermediate entities between the Producer and User are generally the local domestic water purveyors (Distributors), who have a more direct involvement with the Users who are their domestic and recycled water customers.

Page 18, Water Recycling Administration Requirement C-16 should also have the phrase ***“appropriate warning signs”*** changed to ***“appropriate identification”*** to be in agreement with Title 22 and to allow for other forms of identification (e.g., tags, stickers, tape, etc.).

Page 18, General Provision D-4 should be deleted as this provision may be interpreted as granting new authority to the Regional Boards. The absence of a SNMP is grounds to exclude a project from coverage by this Order (see Finding 28), which is sufficient leverage to encourage SNMPS.

Page 19, General Provision D-10 requires compliance with ***“all requirements of applicable WDRs or waivers of WDRs, including without limitation WDRs or waivers regulating agricultural discharges to irrigated lands.”*** There should not be any references to other WDRs and Waivers of WDRs included in this Order. The General Order should stand alone in governing its relevant water recycling activities and Administrators, Producers, Distributors and/or Users should not have to read multiple permits and waivers to figure out requirements. This requirement should be deleted.

Page A-1, Notice of Intent requires submittal of approval letter from CDPH for the engineering report. There should be an exemption from this requirement for recycled water projects that are transitioning from existing WRRs or master reuse permits to this General Order. This is critical for systems such as the Long Beach Water Department system that have filed numerous engineering reports over the years as they have gradually expanded their system. This language should be similar to that suggested for Water Recycling Administration Requirement C-2 above.

Page A-2, Section II – Recycled Water Application requires that ***“a water balance and nutrient balance analysis to illustrate agronomic rate application of recycled water in the Use Areas”*** be included in the NOI. An assessment of the effect of the recycled water on groundwater salts and nutrients should have been already performed through the local SNMPS (as detailed in Finding 13 of the General Order). The requirement to perform this analysis for each and every site is impractical and a waste of resources. Rather, the best way to make sure that water and nutrient loadings are appropriate is to ensure adequate communication between recycled water providers and their customers. In lieu of the required nutrient

balances, the Administrator should be required to submit information on its user education and training program (which will include information on agronomic loading) in addition to the other information on its recycled water program required in NOI Section III. If this requirement is not removed, the language in it should be amended to allow for an aggregated analysis for multiple smaller sites in the same class (e.g., urban irrigation) that uses broad assumptions about typical irrigation amounts and plant cover, and that provides a single map and accompanying narrative description.

Page A-2, Section II – Recycled Water Application requires submittal of “Descriptions/maps of use areas.” For systems with hundreds of connection, providing a detailed description and map of each site is not practical or useful. Instead, clarification should be provided indicating that for systems with many small sites, a map identifying the site locations is sufficient.

Page B-1, Requirement B-1; page B-1, Requirement B-2; and page B-4 Requirement C-3.b(v) use the term effluent (i.e., “effluent quality,” “treated effluent,” and “effluent violations”). Use of the term effluent is not appropriate when describing recycled water, as it fails to recognize that recycled water is a valuable resource.

Page B-2, Requirement B-3.a includes a requirement to monitor annually for the Potentially Present Priority Pollutant List (P4 List) developed as part of the NOA, in cases where the recycled water production facility has a design production flow for the entire water reuse system of over one million gallons per day. Placement of this requirement under the “User Program” section of the Monitoring and Reporting Program could be construed as meaning that the P4 List monitoring needs to be conducted at each user site, which would be prohibitively expensive. This requirement needs to be moved to Page B-1, Requirement B.1., which lists monitoring requirements to ensure the quality of recycled water produced. Additionally, in accordance with the Recycled Water Policy, monitoring for the P4 List should only be required for recycled water systems that serve irrigation customers.

Page B-2, Requirement B-3.b lists the observation requirements for monitoring at recycled water sites. These requirements are focused on monitoring for irrigation sites and many of the specific requirements are not applicable to other sites such as industrial sites. To remedy this issue, the phrase “*as applicable*” should be inserted after the word “*following*” so it reads, “...*for the following, as applicable.*”

Page B-2, Requirement B-3.b requires inspections to be conducted while recycled water is being used. This is not practical, as irrigation is done during nighttime hours to minimize evaporation, exposure, and interruptions to recreation. The phrase “*while recycled water is being used*” should be deleted.

Page B-3, Recycled Water Monitoring Requirement B-4 states that, “*An Administrator shall also conduct periodic random inspections ... Inspections shall be performed when recycled water is being used.*” Since irrigation using recycled water is generally required to take place when the public is not present, these required inspections, in most cases, would have to occur in the middle of the night. If that is the intent of this section, then that places an undue burden on both Administrators and User Supervisors.

Page B-5, footnote *** states that, “*User sites to be inspected a minimum of annually for "Applicable Standard Observations" based on the size and complexity of each site in accordance with the Administrator's Water Recycling Program.*” However, Title 22 calls for visual inspections to be done “periodically” on the assumption that larger and more complex sites (e.g., schools) would need annual inspections, while uncomplicated sites (e.g., street medians) would need much less frequent inspections. It is suggested that the words “*a minimum of annually*” be deleted and the words “*at a frequency*” be inserted after “*Applicable Standard Observations*”.

Other Comments

Page 1, Finding 1 should include reference to the most recent (April 25, 2014) drought emergency declaration made by the Governor, including expediting the adoption of this General Order.

Page 3, Finding 12. The term “surface water” should be deleted from the first sentence, as use of recycled water has essentially no potential to increase nutrients in surface water.

Page 4, Finding 14 addresses CEC monitoring, but is silent on the issue of CEC monitoring for non-potable uses. To avoid confusion or misinterpretation, the finding should be expanded to specifically mention such monitoring. It is suggested that the finding be revised as follows, “*The monitoring requirements and criteria for evaluating monitoring results in the Recycled Water Policy and this order are based on recommendations from a Science Advisory Panel.⁷ The Science Advisory Panel evaluated the need for and did not recommend CEC monitoring for non-potable uses. Because this order is limited to non-potable uses, ~~Because this order does not authorize groundwater replenishment activities,~~ monitoring for CECs is not required by this General Order.*”

Page 4, Finding 15 states that “*The applicant shall determine the Potentially Present Priority Pollutants List (P4 List) and submit that with the Notice of Intent (NOI).*” This language is in the form of a requirement and, thus, is inappropriately contained in the Findings.

Page 8, Finding 24(c)(i) uses the acronym “NOA”, which was not previously defined. It is not defined until page 15 in Water Recycling Administration Requirement C-2.

Page 8, Finding 24(c) (iii) says “*Backflow prevention, cross connection tests, and setback requirements for surface impoundments, wells, etc. are contained in title 22.*” Requirements for backflow prevention and cross connection tests are actually contained in Title 17.

Page 10, Finding 26(c) discusses setbacks from recycled water use, but is not specific as to what the setbacks are being applied. Title 22 specifies irrigation and impoundment setbacks from domestic wells and residences (depending on the quality of recycled water being used), which should be included in this Finding, in at least broad terms, for the sake of clarity. The third paragraph of this finding says, “*When needed, disinfection can be performed in a number of ways.*” This sentence should be deleted. If needed, a sentence such as the following can be added instead: “***Technology to achieve the title 22-specified disinfection is widely available and used effectively.***”

Page 16, Water Recycling Administration Requirement C-5 details the need for backflow prevention devices and cross-connection tests. The applicable statute should be referenced: Title 17, Division 1, Chapter 5, Article 2. Furthermore, sections (a) and (b) are not correct interpretations as to when backflow preventers and cross-connection tests are required. They are required at any Use Site where both potable and recycled water are supplied (not necessarily just “dual-plumbed” sites which are specifically defined in Title 22 as irrigation at single family homes and building internally plumbed for recycled water use in toilets, urinals, etc.).

Page 17, Water Recycling Administration Requirement C-11 refers to a “*copy of the Water Recycling Permit*” which “*must be provided to Users by the Administrator.*” It is unclear as to what document this requirement is referring, the Order or some other permit (issued by Administrator?). This reference must be clarified.

Page B-4 Reporting Requirement C-3b(ii) requires that the “*projected annual flow to be delivered*” be reported in the annual report. This is unnecessary since the actual amount delivered during the reporting period is required to be submitted (Reporting Requirement C-3.b(iii)).

Page B-4 Reporting Requirement C-3b(vi) requires inclusion in the annual report of “*1) An update regarding current and future development of the water recycling program, including planning, design and construction of facilities, preparation of required reports and technical documents and progress toward regulatory approvals. 2) Progress and evaluation of any special studies or projects being undertaken related to the program.*” This proposed Order already includes requirements for the filing of reports and other documents necessary for approval of additional Use Sites. Updating the Regional and/or State Water Boards on internal planning or other reconnaissance work performed are not relevant to the regulation and/or enforcement of this General Order. This requirement should be deleted.