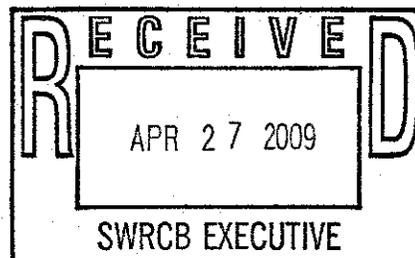




Environmental Utilities  
Administration  
2005 Hilltop Circle  
Roseville, California 95747

April 27, 2009

Charles Hoppin, Chair, and Members  
State Water Resource Control Board  
1001 I Street  
Sacramento, CA 95814



ATTN: Jeanine Townsend, Clerk to the Board  
[commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

RE: **City of Roseville Comments on Draft General Waste Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water (dated 03/27/2009)**

Dear Chair Hoppin and Members of the Board:

The City of Roseville (City) appreciates the opportunity to provide comments on the *Draft General Waste Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water* (Permit). Increased use of recycled water is critical to California's water supply future, and the Permit should facilitate and promote the beneficial use of recycled water for landscape irrigation.

The City supports the best management practices (BMPs) approach to permitting landscape irrigation with recycled water. The City also supports the option of exclusion of Master Reclamation Permit holders from the Permit. The City has operated a recycled water program under a master reclamation permit for twelve years. Under that permit, the City has an extensive oversight and monitoring program. As the draft Permit is written, the City would not choose to be covered under the Permit due to the very onerous monitoring requirements. The City provides adequate oversight and inspection of all recycled water users served by the City to ensure compliance with all State and local regulations.

The oversight and monitoring proposed under the draft Permit would make the City's Recycled Water Program infeasible.

The City's specific comments have been added in the margin in review mode on a Microsoft Word version of the draft Permit. Also, consistent with the specific comments, sections have been deleted and language added in strike-out mode. The marked up version of the draft Permit is attached to this comment letter. Following are the City's general comments and comments on the attachments.

1. The intent of AB 1481 is to create a streamlined process to permit landscape

irrigation use of recycled water. The General Irrigation Permit conceived of in AB 1481 was to create consistency in application of regulations to recycled water landscape irrigation projects and to reduce the onerous requirements. Not only does the draft Permit not accomplish this goal, it would require even more onerous oversight and monitoring than most projects currently permitted.

2. Though the City supports the BMP approach to permitting recycled water irrigation projects, the City cannot support the unnecessarily negative perspective found in the draft Permit. A streamlined general permit should be brief since regulations already exist that cover nearly every aspect of landscape irrigation reuse. References to existing regulations, reference to the Policy, BMP's and specific language addressing notice procedures and possible special case use issues should be sufficient to meet the State's requirement to protect public health and the environment. Reiterating and interpreting regulations will only lead to more confusion. Our "marked up" permit, attached, addresses these issues.
3. The findings portion of the draft Permit characterizes recycled water in such a way that it does not promote reuse. The State Department of Public Health (CDPH) has deemed disinfected tertiary recycled water compliant with Title 22 to be safe for unrestricted recreational reuse. CDPH approves full body contact with this class of recycled water. The Findings indicate this class of recycled water is less safe than CDPH states.
4. Contaminants of emerging concern (CEC's) are addressed in the Recycled Water Policy (Policy) adopted by the State Water Resource Control Board February 7, 2009. The draft Permit need only reference the Policy to address CEC's in the Permit.
5. Detailed regulations on irrigation system design and efficiency are very complicated and difficult to include in a permit. Design requirements are proposed for both potable and recycled water irrigation system design in AB 1881 (Laird) (Water Conservation in Landscaping Act 2006). Rather than overburden the Permit with detailed and sometimes confusing system design requirements, requirements should be deferred to the AB 1881 regulation or the locally adopted ordinance discussed in the bill. Regulating design of landscape and landscape irrigation systems this way will provide uniformity and cut down on the possibility on conflicting regulations.
6. Monitoring and Reporting Program – Daily oversight of each recycled water use area to the level indicated in this section is not feasible. Monitoring daily use of recycled water at individual sites requires use meters to be read daily. Performing this level of oversight is not feasible. Also, each site will have different soil characteristics as well as landscape type. Daily irrigation data will not be useful. Monthly monitoring of each use area is feasible, but quarterly monitoring and reporting is adequate to verify compliance with this permit. Additionally, monitoring for the pounds of nitrogen applied per day is also infeasible. Monitoring for nitrogen applied would entail oversight of fertilizer application at every use site, which is impractical.
7. Attachment C – Section II(c) – Rather than different piping material, identified

pipng should be utilized, i.e. – purple PVC or purple sleeved PVC.

8. Attachment C – Section IV – Rather than duplicate the effort, the entire section on efficient irrigation should be covered under the policy and/or local ordinance that is a result of AB 1881 (Laird) Water Conservation in Landscaping Act 2006. This new policy will have detailed design and operating requirements for both potable and recycled water irrigation systems. The detail necessary to describe the design, operating and maintenance requirements to make an efficient system is beyond the scope of Section IV.
9. Attachment D – It is unnecessary to add a sign detail or specification. Title 22 covers use area signage required to inform the public of recycled water use. It should not be duplicated in the Permit.
10. Attachment F – The format for use area reporting is acceptable. The issue is the frequency of the reporting and the nitrogen application rate. As mentioned previously in this letter, daily oversight to this extent is not feasible. Maintaining a logbook for incidents, cross connection tests, and failures is always a good idea, but daily logs of normal day to day operations and maintenance is onerous and impractical. This reporting needs to be more specific and focused on events rather than day to day business.

The City supports the State Water Board's effort to streamline the process to permit landscape irrigation with recycled water projects. Landscape irrigation with recycled water is a practical and effective way to save potable water supplies for higher use. Disinfected tertiary recycled water has been designated safe for unrestricted recreational reuse by the State Department of Public Health and has been used safely for decades. The City supports a permit that uses BMP's to comply with regulations. The City cannot support a Permit that is so onerous in its oversight and monitoring requirements that it makes water recycling through this permit infeasible.

Sincerely,



Art O'Brien  
Wastewater Utility Manager  
City of Roseville

**STATE WATER RESOURCES CONTROL BOARD  
WATER QUALITY ORDER NO. 2009 - XXXX - DWQ**

**DRAFT GENERAL WASTE DISCHARGE REQUIREMENTS FOR  
LANDSCAPE IRRIGATION USES OF MUNICIPAL RECYCLED WATER  
(GENERAL PERMIT)**

The State Water Resources Control Board (State Water Board) finds that:

1. The California Legislature has declared its intent to promote the use of recycled water. Recycled water<sup>1,2</sup> is a valuable resource and significant component of California's water supply. When used in compliance with the Recycled Water Policy,<sup>3</sup> Title 22, and all applicable state and federal water quality laws, the State Water Board finds that recycled water is safe for approved uses, and strongly supports recycled water as a safe alternative to potable water for such approved uses.
2. This General Permit is intended to satisfy the requirements of Water Code section 13552.5 and is intended for Producers and Distributors<sup>4</sup> of recycled water for landscape irrigation uses. This General Permit is intended to streamline the regulatory process for such uses of recycled water but may not be appropriate for all scenarios due to unique site-specific characteristics and conditions. For this General Permit, "recycled water" is limited to disinfected tertiary recycled water produced by a public entity at a municipal wastewater treatment plant, as defined in Water Code section 13625(b)(1) and section 13625(b)(2). This General Permit is not applicable for the use of water produced from the treatment of other non-municipal wastewaters (e.g., oil field production, food processing, storm water, etc.) at other types of treatment facilities (e.g., industrial wastewater treatment plants).
3. Landscape irrigation with recycled water is a viable strategy to reduce potable water demand and to reduce the volume of water wasted after a single use. Specified uses of recycled water considered "landscape irrigation" projects include any of the following:
  - i. Parks, greenbelts, and playgrounds;
  - ii. School yards;
  - iii. Athletic fields;
  - iv. Golf courses;
  - v. Cemeteries;
  - vi. Residential landscaping, common areas;<sup>5</sup>
  - vii. Commercial landscaping, common areas;

<sup>1</sup> *Recycled Water*. Water which, as a result of treatment of municipal wastewater, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource (Water Code section 13050).

<sup>2</sup> The terms "recycled water" and "reclaimed water" have the same meaning (Water Code section 26).

<sup>3</sup> The Recycled Water Policy was adopted on February 3, 2009 under State Water Board Resolution No. 2009-0011.

<sup>4</sup> Throughout this General Permit, refer to Attachment A for definitions.

<sup>5</sup> Individually owned residences are not eligible for coverage under this General Permit. The Regional Water Boards will address individually owned residences on a case-by-case basis.

- viii. Industrial landscaping, common areas; and
- ix. Freeway, highway, and street landscaping.

4. Recycled water projects eligible for coverage under this General Permit shall meet the following treatment and use standards:

- a. The Producer shall, being a public entity, produce disinfected tertiary recycled water, as defined in California Code of Regulations (CCR) Title 22, sections 60301.230 and 60301.320, at a municipal wastewater treatment plant; and
- b. The Distributors shall comply with the applicable uniform statewide reclamation criteria established pursuant to CWC section 13521 (i.e., CCR Title 22 section 60301 et. seq., hereafter "Title 22 Requirements").
- c. The Producer and Distributor shall ensure that Users comply with the applicable uniform statewide reclamation criteria established pursuant to Title 22 Requirements.
- d. The Producers and Distributor shall satisfy all applicable requirements of the Recycled Water Policy.

5. This General Permit establishes requirements to manage recycled water for landscape irrigation uses in a manner that is protective of public health and the environment. The State Water Board will exercise its authority to the fullest extent possible to encourage the use of recycled water, consistent with state and federal water quality laws. The beneficial use of recycled water for landscape irrigation under this General Permit is environmentally sound and preferable to non-beneficial disposal and waste of water. This General Permit builds on extensive work that has already been done by the Water Boards, CDPH, the 2003 Recycled Water Task Force and many others.

6. This General Permit is applicable to Use Areas where recycled water is used or conveyed for landscape irrigation and is not intended to regulate the treatment of municipal wastewater.

7. To obtain coverage under this General Permit, the Distributor shall submit a complete Notice of Intent (NOI) form (Attachment B), Operations & Maintenance Plan, and appropriate application fee. The Distributor shall assume responsibility for the administration of the recycled water program authorized pursuant to this General Permit. Where multiple Distributors are involved, a single Distributor shall declare responsibility for the administration of the recycled water program authorized pursuant to this General Permit. All Producer(s) shall also sign the NOI

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Comment [b2]: This language is unnecessary.

Deleted: Compliance with this General Permit does not relieve permit holders from the obligation to comply with applicable waste discharge requirements for wastewater treatment plants that produce recycled water

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form as appropriate. The Producer and Distributor may be the same entity. Distributors who submit a complete application package, meet the eligibility criteria of this General Permit, and following the conclusion of a thirty (30) day public review period, will typically be authorized to distribute recycled water for landscape irrigation uses.

8. The application fee shall be equal to the annual fee, pursuant to CWC section 13260. Fee amounts are specified in Section 2200, Chapter 9, Division 3, Title 23, CCR. Users shall be billed for an annual fee equal to the application fee until coverage under the General Permit has been terminated.
9. The Regional Water Quality Control Boards (Regional Water Boards) have evaluated groundwater and surface waters within their jurisdictions for their maximum potential beneficial uses.<sup>8</sup> Some of those use categories are identified in Attachment A. Beneficial uses for specific water bodies can be found in the applicable Water Quality Control Plan (Basin Plan) where the recycled water is used. Basin plans establish water quality objectives to protect the specific designated beneficial uses that may include numerical objectives and / or narrative objectives for chemical constituents in and toxicity of groundwater. Basin Plans establish procedures to quantify the maximum permissible concentrations of constituents for groundwaters designated as municipal, agricultural, and other beneficial uses.

**PATHOGENIC ORGANISMS**

10. To protect public health, this General Permit employs a minimum treatment standard of disinfected tertiary recycled water, as well as exposure control measures including minimum setback distances, signage, method of application, and use restrictions.
11. California Health and Safety Code section 116555 requires that a public water system shall ensure that the system will not be subject to backflow under normal operating conditions. Section 116800 et. seq. authorizes local health officers to maintain a program for the control of cross-connections by water users, where public exposure to drinking water contaminated by backflow may occur. Cross-connection programs may require water users to comply with all orders, instructions, regulations, and notices from the local health officer with respect to the installation, testing, and maintenance of backflow prevention devices.

**SALINITY**

<sup>8</sup> CWC section 13050(f)

Comment (b4): Section 14 is unnecessary percol language.

Deleted: <#>The source of salts is attributed to water soluble inorganic and organic constituents in imported water, soil leached by irrigation, animal wastes, fertilizers and other soil amendments, municipal use, industrial wastewaters, and oil field wastewaters. These salt sources, all contributors to salinity increases, should be managed in a manner consistent with the Recycled Water Policy, including paragraphs 8 and 9(d).

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12. In Water Quality Order No. 2000-07,<sup>9</sup> the State Water Board determined that a Producer cannot shift responsibility for discharged salt to the User. This General Permit requires the Producer to produce recycled water that meets the quality standards of this General Permit and associated waste discharge requirement order(s) for the wastewater treatment plant(s).

13. In the absence of detailed hydrological data, it is the responsibility of both the project proponent and the California Water Boards to exercise sound and reasoned judgment in evaluating the case-specific effects of proposed projects and the available factual data for each project. This General Permit attempts to accomplish the balancing of factors necessary to evaluate most projects in the absence of case-specific information. In doing so, this General Permit also establishes a basic regulatory strategy to manage the salinity of most recycled water used for landscape irrigation. If, after review of the available factual data, the Executive Director determines that the case-specific effects of a proposed project are inconsistent with the requirements of this General Permit and the Recycled Water Policy, the project is not eligible for coverage under this General Permit.

**CHLORINE**

14. Some Producers and Distributors chlorinate recycled water delivered and stored for reuse to prevent regrowth of pathogens and growth of organisms that could cause odor nuisance and operational difficulties in the reclamation system. Chlorine is toxic to fish and other aquatic life at low concentrations.

**UNAUTHORIZED DISCHARGES OF RECYCLED WATER**

15. At some Use Areas, recycled water is discharged into landscape irrigation impoundments that function as storage for irrigation and may also serve an aesthetic purpose. Some impoundments were originally designed and constructed to collect storm water runoff from surrounding areas and allowed to overflow excess water into nearby drainage ways and creeks. Recycled water used for irrigation of golf courses, parks, or other open spaces and landscaped areas may occur in areas containing numerous hills and sloped areas that would promote runoff unless closely managed during irrigation.

<sup>9</sup> San Luis Obispo Golf & Country Club, Central Coast Region, State Board WQO No. 2000-07, p 10-12

**Comment [b5]:** Section 15 should be in the staff report and not in the permit itself.

**Deleted:** <#>Several approaches can be used to manage concerns over salt accumulations in groundwater. In the absence of treatment or a plan to remove accumulated salinity, another viable approach is to manage the rate of degradation by minimizing the salt loads to the groundwater basin. Salinity loads contributed by the reuse of municipal wastewater can be reduced by either precluding anthropogenic derived salts from introduction into the wastewater collection systems (i.e., source control or pretreatment of wastes) or treatment of salts at the wastewater plant (i.e., removal of salts), or both. Another viable option is a salt/nutrient management plan. The State Water Board has addressed the topic of salt management, as it concerns recycled water, in the Recycled Water Policy.

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**Comment [b7]:** Section 23 - 27 can be stated as a simple reference to the State Water Recycling Policy.

**Deleted:** EMERGING CONSTITUENTS/CHEMICALS OF EMERGING CONCERN (CECs)

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¶  
<#>A need exists to increase understanding of CECs that may be present in recycled water used for landscape irrigation. The many evolving issues associated with "emerging contaminants" are presently the subject of a number of studies, including a major study being undertaken by the National Water Research Institute, the Metropolitan Water District of Southern California, and the Orange County Water District (hereafter Study), estimated to be completed in 2009. ¶

¶  
<#>Many water supply agencies, at their own expense, are developing and implementing voluntary studies based on the best available science intended to better characterize ... [1]

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**Comment [b8]:** This is the case regardless of water source.

**Deleted:** In some cases, various chemicals (e.g., copper sulfate, acrolein, etc.) may be added to impoundments for weed, algae, and vector control

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16. When Best Management Practices (BMPs) are implemented, conditions causing runoff, ponding, and windblown spray (drift) are minimized to a negligible amount, and in some cases, eliminated. Attachment C of this General Permit includes a list of BMPs, including specific requirements of the Recycled Water Policy.
17. The control of incidental runoff and compliance with regulatory instruments, including National Pollutant Discharge Elimination System (NPDES) permits, is addressed in paragraph 7(a) of the Recycled Water Policy. This General Permit is in conformance with these requirements.

#### MASTER RECLAMATION PERMITS

18. CWC section 13523.1 authorizes each Regional Water Board, after consulting with CDPH, to issue a master reclamation permit to a Producer or Distributor, or both, of recycled water, in lieu of issuing waste discharge requirements or water recycling requirements.
19. In some cases, especially for municipal wastewater discharges via an ocean outfall, the NPDES permit for the Producer's facility does not include requirements necessary to ensure the protection of beneficial uses of groundwater resources (e.g., agricultural supply, municipal supply). In order to facilitate the use of recycled water, Regional Water Boards adopt master reclamation permits that implement the Title 22 Requirements and consider potential impacts to the beneficial uses of groundwater. Thereby, some master reclamation permits prescribe discharge limitations necessary to ensure the protection of beneficial uses of groundwater resources not otherwise included in a Producer's NPDES permit.
20. A benefit of master reclamation permits is that individual recycled water users are not required to seek individual authorization from a regional water board, thereby avoiding additional regulatory burdens and costs. Producers and Distributors that operate pursuant to a master reclamation permit shall be allowed to retain coverage under the master reclamation permit. Alternatively, a Distributor may request coverage under this General Permit.

#### REGULATORY CONSIDERATIONS

21. The information required by this General Permit is necessary to determine compliance with this General Permit and to ensure compliance with the CWC and the Title 22 Requirements. Improper use or discharge of recycled water represents a threat to the quality of waters of the state and to human health and the environment. A completed NOI form identifies the entities responsible for ensuring proper production, distribution, and/or use of recycled water in accordance with this General Permit.

**Comment (b9):** The General Permit does not authorize discharges. It should suffice to say the General Permit only applies to disinfected tertiary recycled water compliant with Title 22.

**Deleted: <#>** The discharges authorized by this General Permit are limited to the discharge of disinfected tertiary recycled water (as defined CCR Title 22, sections 60301.230 and 60301.320) produced by a public entity at a domestic wastewater treatment plant. Such wastewater treatment plants will generally maintain the same or similar wastewater treatment operations, involve the treatment of the same or similar types of waste, and require the same or similar treatment standards.

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22. The information required by this General Permit will not duplicate the efforts of the regional board.
23. In 1977, the State Water Board adopted Resolution No. 77-1, titled "Policy with Respect to Water Reclamation in California" (Resolution No. 77-1). Resolution No. 77-1, in part, encourages the use of recycled water in the state.
24. A 1996 Memorandum of Agreement (MOA) between CDPH and the State Water Board on behalf of itself and the Regional Water Boards regarding the use of recycled water allocates primary areas of responsibility and authority between these agencies. The MOA provides methods and mechanisms necessary to ensure ongoing and continuous future coordination of activities relative to the use of recycled water in California. This General Permit includes requirements consistent with the MOA.
25. In 1968, the State Water Board adopted Resolution No. 68-16 (hereafter the "Antidegradation Policy") which requires that the authorization to discharge waste maintain high quality waters of the State until it is demonstrated that any change in quality is consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in water quality policies (i.e., the change results in exceedances of water quality objectives).
26. Degradation of groundwater by constituents in recycled water after effective source control, treatment, and control may be determined consistent with maximum benefit to the people of California. This determination is based on considerations of reasonableness under the circumstances of the recycled water use. Factors to be considered include:
- a. Past, present, and probable beneficial uses of the receiving water (as specified in the applicable basin plan);
  - b. Economic and social costs, tangible and intangible, of the recycled water usage compared to the benefits;
  - c. Environmental aspects of the recycled water usage; and
  - d. Implementation of feasible alternative treatment or control methods.
27. This General Permit establishes terms and conditions of recycled water use to ensure that its use does not unreasonably affect present and anticipated beneficial uses of groundwater and surface water for the following reasons:
- a. The Producer is responsible for ensuring that recycled water meets the quality standards of the General Permit and associated waste discharge requirement order(s) for the municipal WWTP(s); and
  - b. Discharge to surface waters, unless otherwise authorized by an NPDES permit, is prohibited.

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Comment [b11]: Recycled water irrigation is not discharge. If recycled water irrigation was considered discharge, then the General Permit would be considered a "discharge" permit.

Comment [b12]: This language should be covered under AB 1881 (Laird) Water Conservation in Landscaping Act (2006).

Deleted: <#>Recycled water will be applied at agronomic rates reflecting the seasonal hydraulic and nutrient requirements of the Use Area;

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Comment (b)(3): This statement is not relevant to recycled water use for irrigation.

Deleted: <#> Degradation of groundwater by some of the typical waste constituents released with discharges from a municipal WWTP after effective source control, treatment, and use control is consistent with maximum benefit to the people of the State. Economic prosperity of State communities and associated industries is of maximum benefit to the people of the State, and therefore sufficient reason to allow limited groundwater degradation, provided that terms of the applicable Water Quality Control Plan and the Recycled Water Policy are met.

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**CALIFORNIA ENVIRONMENTAL QUALITY ACT**

28. To mitigate or avoid environmental effects on water quality, this Permit:

- a. Requires application of recycled water at reasonable agronomic rates considering soil, climate, and nutrient demand;
- b. Requires areas irrigated with recycled water be managed to prevent nuisance conditions or breeding of mosquitoes; and
- c. Establishes a Monitoring and Reporting Program, which includes inspections and regular maintenance of areas irrigated with recycled water.

29. On <DATE>, in accordance with California Environmental Quality Act (CEQA),<sup>10</sup> the State Water Board, acting as the lead agency, adopted Resolution No. 2009-YYYY-DWQ which certified a Mitigated Negative Declaration for this project and determined that the project would have no significant effect on the environment.

30. The State Water Board has notified all known interested agencies and persons of its intent to prescribe general waste discharge requirements for landscape irrigation uses of recycled water and has provided all known interested agencies and persons with an opportunity for a public hearing and an opportunity to submit comments.

31. The State Water Board has consulted with and considered comments from the regional water quality control boards, groundwater management agencies and water replenishment districts with statutory authority to manage groundwater pursuant to their principal act, CDPH, and other interested parties.

32. The State Water Board, in a public meeting on <DATE> heard and considered all comments pertaining to this General Permit.

**IT IS HEREBY ORDERED** that all Producers and Distributors of recycled water, or combinations thereof, that file a complete application package declaring their intention to be regulated under provisions of this General Permit, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, shall comply with the following:

**A. PROHIBITIONS**

- 1. The use of recycled water pursuant to this General Permit is prohibited unless the Producer(s) and Distributor(s) have submitted a complete Notice

<sup>10</sup> PRC, Section 21000, et seq.

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of Intent (NOI) form, Operation & Maintenance Plan, and application fee and have received confirmation of enrollment under this General Permit.

2. The use of recycled water in a manner different than described in the Operation & Maintenance Plan is prohibited.
3. The use of recycled water, pursuant to this General Permit is only for those uses identified in the findings.
4. In conformance with Title 22 Requirements, recycled water shall not be used for direct human consumption or for the processing of food or drink intended for human consumption.
5. The use of recycled water for landscape irrigation, pursuant to this General Permit, within a Groundwater Recharge Reuse Project is prohibited.

Deleted: The use of recycled water, pursuant to this General Permit, for property zoned as "single family residential" is prohibited.

6. The use of recycled water, pursuant to this General Permit, at use areas with an unusually complex plumbing schema, as determined by CDPH, that results in a high risk of cross-connection contamination with potable water supplies, is prohibited.
7. The use of recycled water on water-saturated or frozen ground or during periods of precipitation such that runoff is induced, is prohibited.
8. The direct or indirect discharge from use areas of recycled water to surface waters, either perennial or ephemeral, including wetlands, vernal pools, etc. is prohibited, unless otherwise authorized by an NPDES permit.
9. The application of recycled water within fifty (50) feet, and storage of recycled water within one hundred (100) feet of a domestic well, unless approved by CDPH, and the application of recycled water within fifty (50) feet of surface water is prohibited.

Comment [b15]: Unnecessary to state this use. There are many uses of recycled water not covered by this permit. A simply statement as shown above regarding what sites are covered under this permit.

Deleted: <#>The use of recycled water, pursuant to this General Permit, in cooling towers or other industrial uses is prohibited.

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Comment [b16]: This section is covered under the Statewide Recycled Water Policy.

Deleted: <#>The use of recycled water, pursuant to this General Permit, where there is evidence that Emerging Constituents/Chemicals of Emerging Concern (CECs) are a concern, as determined by CDPH, is prohibited.

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10. Use of any equipment or facilities that have been used to convey recycled water (e.g., tanks, temporary piping or valves, and portable pumps) also used for potable water supply conveyance, is prohibited.
11. The discharge or use of recycled water in a manner that causes or contributes to an exceedance of an applicable water quality objective is prohibited.
12. The use of recycled water for landscape irrigation shall not cause or threaten to cause pollution or nuisance as defined in Water Code section 13050.

Comment [b17]: This is not consistent with Title 22 Section 60310(D).

Deleted: <#>Use or installation of hose bibbs on any irrigation system presently operating or designed to operate with recycled water, regardless of construction or identification, is prohibited.

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13. The application of any material that results in a violation of the Safe Drinking Water and Toxic Enforcement Act (Health and Safety Code section 25249.5) is prohibited.

**B. SPECIFICATIONS**

1. Recycled water shall be managed in conformance with the applicable regulations contained in the Title 22 Requirements.
2. All recycled water provided to Users pursuant to this General Permit, shall be treated in and managed in conformance with all applicable provisions of the Recycled Water Policy.

**Disinfected Tertiary Recycled Water Criteria**

3. The Producer or Distributor shall collectively provide all Users disinfected tertiary recycled water that meets the standards for *disinfected tertiary recycled water* as described in CCR Title 22, sections 60301.230 and 60301.320.

**Recycled Water Utilities, Equipment, Signage, and Use Areas**

4. All recycled water valves, outlets, and quick couplers should be of a type or secured in a manner that only permits operation by authorized personnel.
5. The main shutoff valve downstream of the recycled water meter shall be tagged with a recycled water warning sign. The valve shall be equipped with an appropriate locking device to prevent unauthorized operation of the valve.

<sup>12</sup> sections 6735, 7835, and 7835.1

Comment [b22]: A reference to the specific regulation is sufficient.

Deleted: ~~1~~ All reclamation equipment, pumps, piping, valves, and outlets shall be appropriately marked to differentiate them from potable facilities. All reclamation distribution system piping shall be purple or adequately identified with purple tape, tags, or stickers per Section 116815(a) of the California Health and Safety Code.

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Comment [b23]: A reference to Title 22 Section 64372 is sufficient.

Deleted: ~~1~~ Except as allowed under Section 7804 of Title 17, California Code of Regulations, no physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water. Supplementing recycled water with potable water shall not be allowed except as approved by CDPH.

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Comment [b24]: A reference to Title 22 Section 60310(h) is sufficient.

Deleted: ~~1~~ A 4-foot horizontal and 1-foot vertical separation<sup>11</sup> shall be maintained between all pipelines transporting recycled water and those transporting domestic water. Domestic water pipelines shall be configured above recycled water pipelines.

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Comment [b26]: Already covered in Title 22 Section 60310(e).

Deleted: ~~1~~ Spray, mist, or runoff of recycled water shall not enter dwellings, designated outdoor eating areas, or food handling facilities. Drinking water fountains shall be protected against contact with recycled water spray, mist or runoff.

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6. Recycled water shall be managed to avoid contact with workers. Employees and eating areas shall be protected against any contact with recycled water spray, mist, and runoff.
7. Best Management Practices (BMPs) shall be developed and implemented to achieve a safe and efficient irrigation system. At a minimum, the Producer and Distributor shall ensure that the User shall implement the required BMPs identified in Attachment C and consider implementing other BMPs as appropriate.
8. Recycled water shall not be allowed to escape from the Use Area by airborne spray or by surface flow except in minor amounts such as that associated with BMPs for good irrigation practices.
9. Areas irrigated with recycled water shall be managed to prevent ponding and conditions conducive to the proliferation of mosquitoes and other vectors, and to avoid creation of a public nuisance or health hazard. The following practices shall be implemented, at a minimum:
  - a. Irrigation water must infiltrate completely within a 48-hour period.
  - b. Ditches receiving irrigation runoff, not serving as wildlife habitat, shall be maintained free of emergent, marginal, and floating vegetation.
  - c. Low-pressure and unpressurized pipelines and ditches that may be accessible to mosquitoes shall not be used to store recycled water.
10. The Producer or Distributor shall discontinue delivery of recycled water during any period in which either has reason to believe that the requirements for use as specified herein or the requirements of CDPH are not being met. The delivery of recycled water shall not resume until all conditions have been corrected.

**C. PROVISIONS**

1. A duly authorized representative for each Producer and Distributor shall each sign the completed NOI form (Attachment B). Enforcement actions for violations of this General Permit may be taken against all responsible entities for violations of any part of this General Permit. However, in general, responsibilities for Producers and Distributors are as follows:
  - a. Producers shall be responsible for ensuring that recycled water meets the quality standards of this General Permit and any associated waste discharge requirement order(s) for the WWTP(s).
  - b. Distributors shall be responsible for the operation and maintenance of transport facilities and associated appurtenances necessary to

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- convey and distribute the recycled water from the point of production to the point of use with all applicable Title 22 requirements.
- c. The Producer and Distributor shall be responsible for the application and use of recycled water in the respective Use Areas and for associated operations and maintenance in accordance with all applicable Title 22 requirements and this General Permit. The Producer and Distributor are also responsible for ensuring that Users maintain the minimum land application acreage and impoundment capacity to comply with the terms and conditions of this General Permit.
2. The Producer and Distributor shall comply with Monitoring and Reporting Program No. 2009-XXXX-DWQ and revisions thereto, as specified by the Executive Director.
  3. CDPH may identify in its recommendations with respect to the proposed recycled water use any conditions upon which its approval of a proposed project is based. "Conditions of approval" submitted as part of CDPH's recommendations will be incorporated into a Notice of Applicability for the proposed recycled water use project.
  4. The Distributor shall require each User to designate a recycled water use supervisor for each Use Area, respectively. The recycled water use supervisor shall be responsible for the recycled water system within the Use Area. Specific responsibilities of the recycled water use supervisor, at a minimum, shall include the following:
    - a. Proper installation, operation and maintenance of irrigation systems;
    - b. Control of on-site piping to prevent any cross-connections with potable water supplies;
    - c. Development of and implementation of a set of procedures to verify on an ongoing basis that cross-connections have not occurred between potable water supplies and recycled water supplies;
    - d. Routine inspection and maintenance of backflow prevention devices installed to protect potable water supplies, consistent with section 7605 of Title 17, California Code of Regulations; and
    - e. General responsibilities to ensure compliance with this General Permit and continuous implementation of any Best Management Practices identified as necessary to prevent potential hazards to public health and to protect the environment.
  5. Prior to commencing irrigation with recycled water, the Distributor shall submit an Operations and Maintenance Plan (O&M Plan) to the State Water Board. An O&M Plan shall contain the following elements:
    - a. An Operations Plan. A detailed operations plan for the Use Areas including methods and procedures for implementation of regulations

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regarding recycled water use and maintenance of equipment and emergency backup systems to maintain compliance with the conditions of this General Permit and CDPH requirements (i.e., identification of BMPs implemented to achieve and maintain compliance).

- b. A copy of the approved Title 22 Engineering Report submitted to CDPH and any recommendations or "conditions of approval" provided by CDPH.
  
  - c. A copy of the Producer's or Distributor's established rules and/or regulations as approved by CDPH for Producers, Distributors and Users governing the design and construction of recycled water use facilities and the use of recycled water in accordance with the criteria established in the Title 22 Requirements and this Permit.
  - d. A copy of the written (and signed) agreement between the respective parties responsible for the producing, distributing, and using the recycled water.
  - e. A copy of the duty statement for the recycled water use supervisor responsible for the Use Area.
  - f. Verification that the recycled water use supervisor has attended training regarding the safe and efficient operation and maintenance of recycled water use facilities.
6. Producers and Distributors shall maintain and comply with the O&M Plan, and all portions thereof including the Engineering Report, submitted pursuant to this General Permit.
7. The Distributor shall conduct ensure that periodic inspections are conducted of the Use Areas they supply and establish procedures to monitor and assure compliance with conditions of this General Permit. The Distributor shall also conduct ensure that regular inspections occur to assure cross connections with potable water systems are not made and air-gap devices are installed and operable.
8. The Producer and Distributor shall keep a copy of the O&M Plan and this General Permit, including its Monitoring and Reporting Program, and attachments in a location where they can be easily referenced by operating personnel. Key operating personnel, including the recycled water supervisor, shall be familiar with its contents.
9. The Producer and Distributor shall at all times properly operate and maintain all facilities and systems of treatment and control (and related

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appurtenances) that are installed to achieve compliance with the conditions of this General Permit.

10. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code<sup>12</sup>. To demonstrate compliance with sections 415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
11. All storm water discharges, including conditionally authorized or exempted non-storm water discharges, from recycled water use areas must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to Municipal Separate Storm Sewer Systems (MS4s) under their jurisdiction.
12. It is the responsibility of the Producer and Distributor to make inquiry and to obtain any local, state, and federal governmental agency permits or authorizations prior to the distribution and use of recycled water for landscape irrigation.
13. Coverage under this General Permit is not transferable. The Administrative Distributor shall notify the Executive Director in writing at least thirty (30) days in advance of change in ownership related to the Administrative Distributor, other Distributors, or Producers authorized to use recycled water pursuant to this General Permit. The Administrative Distributor shall use the Notice of Termination (NOT) form in Attachment E to satisfy this provision.
14. The Distributor shall report any noncompliance that may endanger human health or the environment. The Distributor shall immediately report orally, or electronically if available, information of the noncompliance as soon as (1) the Producer or Distributor has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, to the appropriate regional water board office<sup>13</sup> and the Office of Emergency Services<sup>14</sup> at 1-800-852-7550.

A written report shall also be provided to the State Water Board within five (5) business days of the time the Producer or Distributor becomes aware of the incident. The written report shall contain a description of the noncompliance

<sup>13</sup> [http://www.waterboards.ca.gov/waterboards\\_map.shtml](http://www.waterboards.ca.gov/waterboards_map.shtml)

<sup>14</sup> <http://www.oes.ca.gov/>

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and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance.

15. The unauthorized discharge of 50,000 gallons or more of "disinfected tertiary recycled water" shall be reported as described in Provision C.14.
16. The Distributor shall require the User notify the Distributor in writing within thirty (30) days of any changes to recycled water use supervisor personnel or changes to contact information for the recycled water use supervisor.
17. The State Water Board will review this General Permit periodically and will revise requirements when necessary. Specifically, monitoring requirements could be revised to include CEC monitoring, if the State Water Board finds such monitoring to be necessary and appropriate, based on recommendations from the CEC Advisory Panel. Furthermore, the State Water Board would modify this General Permit if a regulatory or statutory change occurs that affects the application of the General Permit, or as necessary to ensure protection of beneficial uses. This General Permit may also be modified, rescinded and reissued, for cause. The Executive Director may also terminate coverage under this General Permit for cause. Causes for modification or termination of coverage include, but are not limited to, changes to statutes, the promulgation of new regulations, adoption of new policy, modification to water quality control plans, or other changes determined necessary to protect beneficial uses of waters of the state.

**CERTIFICATION**

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on XXXXX, 2009.

AYE:

NO:

ABSENT:

ABSTAIN:

\_\_\_\_\_  
Jeanne Townsend  
Clerk to the Board

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