

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2008-0128

MASTER RECLAMATION PERMIT
FOR
FRESNO COUNTY SERVICE AREA NO. 34
MILLERTON NEW TOWN RECYCLING SYSTEM
FRESNO COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Water Board) finds that:

1. Fresno County Service Area No. 34 (hereafter Discharger or Fresno CSA # 34) was formed in 1986 to operate and maintain public utilities for the planned Millerton New Town development. In August 2007, the Discharger submitted a Report of Waste Discharge (RWD) and applied for a Master Reclamation Permit to allow for distribution and use of recycled water within its service area on land owned by various entities including individual homeowners within Millerton New Town development.
2. According to the RWD, the Discharger will replace its existing secondary wastewater treatment facility (WWTF) with a new tertiary WWTF and provide disinfected tertiary treated wastewater for unrestricted irrigation of the Brighton Crest Golf Course, adjacent open space and landscaped areas, recreational and school properties, residential lots, and for fire protection within the Marina Estates subdivision.
3. The term Use Area as used herein includes the Brighton Crest Golf Course, and other open space and landscaped areas within the Millerton New Town development upon which recycled water is or will be used for irrigation. This Order allows the Discharger flexibility in changing the size and use of the Use Areas for recycled water storage or land application. Areas that may receive recycled water are delineated in [Attachment A](#), which is attached hereto and made a part of this Order by reference. Actual Use Areas shall be defined as individual tract plans are finalized.
4. The new tertiary WWTF will be expanded in phases to a final capacity of 1.07 million gallons per day (mgd) to provide sufficient capacity as the community grows. Construction on the first phase (Phase 1) of the new tertiary WWTF with a capacity of 0.2 mgd has been completed. Upon startup, flows to the existing secondary WWTF will be diverted to the new treatment plant and the secondary WWTF will be decommissioned.
5. The tertiary WWTF consists of headworks, a new secondary treatment process, coagulation/flocculation, filtration, disinfection, sludge handling facility, an emergency storage basin, lined effluent storage ponds (permeability less than 10^{-7} cm/sec), and a recycled water irrigation system.

6. This Order is adopted pursuant to Section 13523.1, Chapter 7, Article 2 of the California Water Code (CWC), which authorizes issuance of a Master Reclamation Permit to suppliers or distributors, or both, of recycled water in lieu of issuing individual reclamation requirements to each Recycled Water User.
7. As specified in CWC sections 13523.2 and 13523.5, this Order includes requirements for the Discharger to establish and enforce rules and regulations for recycled water users in accordance with statewide recycling criteria, and to conduct periodic inspections of the recycled water use sites. The rules and regulations shall, at a minimum, include the requirements detailed in [Attachment B](#), which is attached hereto and made a part of this Order by reference.
8. According to the RWD, Fresno CSA #34 will be the producer and distributor of recycled water to Use Areas within the Millerton New Town development. The distribution of recycled water to individual Use Areas will be done under the direction of a responsible management entity (RME) under contract to Fresno CSA #34. Fresno CSA #34 will have the capability of shutting off water service to any recycled water user that fails to comply with the established rules and regulations.

Water Recycling

9. Disinfected recycled water from the tertiary WWTF will flow into lined effluent storage ponds following disinfection. The ponds will serve as the source water for the irrigation pumping station that pressurizes the recycled water distribution system and provide storage during the winter months when irrigation is not needed due to rainfall or saturated soils. Current storage is provided by a lined effluent storage pond with a capacity of 49 acre-feet. Additional effluent storage ponds will be constructed at selected locations within the Millerton New Town development to provide additional storage as the community and the tertiary WWTF expand.
10. As the effluent will be treated to meet the requirements for disinfected tertiary recycled water, it is approved for use on food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop; parks and playgrounds; school yards; residential landscaping; unrestricted access golf courses; and any other irrigation use not specified in Title 22, section 60304, and not prohibited by other sections of the CCR.
11. The Discharger plans to use recycled water for irrigation of a golf course as well as open space and landscaped areas. These areas contain numerous hills and sloped areas that would promote runoff unless closely managed during irrigation. In addition, the golf course may use ponds to store recycled water, which during wet weather may overflow and enter surface waters. Such runoff cannot occur except under an NPDES permit, and the Discharger and User are required to provide all runoff controls necessary to keep wastewater irrigation runoff inside the Use Areas and out of drainage channels or surface waters.

12. According to the Western Fertilizer Handbook, the annual nitrogen uptake by turf grass in the proposed Use Area is greater than 150 lbs/acre. Based on current self-monitoring data, the average nitrogen concentration of the effluent is about 17 mg/L (for existing secondary treatment system), which is comparable to similar facilities with no industrial component. Based on a nitrogen concentration of about 17 mg/L and a permitted average daily flow rate of 0.2 mgd (for Phase 1), nitrogen uptake is the limiting factor and the Discharger will need approximately 70 acres of land for water recycling. The existing Brighton Crest golf course, owned by the Clarksfield Company, will provide sufficient land for irrigation at agronomic rates during Phase 1. At the proposed build out of 1.07 mgd, the Discharger will need an estimated 369 acres of land to meet nitrogen uptake rate for turf grass. This may change with operation of the new tertiary treatment system, which has the potential to provide nitrogen reduction, if required. The RWD states that the annual total nitrogen application to the Use Areas will not exceed 150 lbs/acre.
13. As operator of the recycled water system named in the Master Reclamation permit, Fresno CSA #34 is responsible to maintain the minimum land application acreage and recycled storage pond capacity to comply with the terms and conditions of this Order.

Basin Plan, Beneficial Uses, and Water Quality Objectives

14. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board.
15. The recycled Use Area lies within the San Joaquin Basin, specifically the Millerton Lake Hydrologic Area (No. 540.12), as depicted on interagency hydrologic maps prepared by the California Department of Water Resources (DWR) in 1986. The Basin Plan designates the beneficial uses of groundwater as municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
16. Surface water drainage is to Millerton Lake, and White Fox Creek, which enters Little Dry Creek, a tributary of the San Joaquin River, below Friant Dam. The Basin Plan designates the beneficial uses as: potential municipal and domestic supply, agricultural supply, water contact recreation, non-contact water recreation, warm freshwater habitat, potential cold freshwater habitat, and wildlife habitat.
17. The Basin Plan includes a water quality objective for chemical constituents that, at a minimum, requires waters designated as domestic or municipal supply to meet the MCLs specified in Title 22, California Code of Regulations. The Basin Plan's incorporation of these provisions by reference is prospective, and includes future changes to the incorporated provisions as the changes take effect. The Basin Plan recognizes that the Regional Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

18. Land use in the vicinity is primarily residential, recreational, or rangeland. The rockiness of the soil, the low to moderate water holding capacity, and limited water available for irrigation makes this area unsuitable for cultivation. Because of the low potential for growing salt sensitive crops, an EC limit in groundwater of 900 $\mu\text{mhos/cm}$, based on Title 22 Table 64449 B, which establishes recommended, upper, and short term ranges for EC of 900 and 1,600 $\mu\text{mhos/cm}$ for drinking water is appropriate to protect the beneficial uses of underlying groundwater.

Water Recycling Criteria

19. Domestic wastewater contains pathogens harmful to humans that are typically measured by means of total or fecal coliform, as indicator organisms. California Department of Public Health (DPH) (formerly Department of Health Services), which has primary statewide responsibility for protecting public health, has established statewide criteria in Title 22, California Code of Regulations, Section 60301 et seq., (hereafter Title 22) for the use of recycled water and has developed guidelines for specific uses. Revisions of the water recycling criteria in Title 22 became effective on 2 December 2000. The revised Title 22 expands the range of allowable uses of recycled water, establishes criteria for these uses, and clarifies some of the ambiguity contained in the previous regulations.
20. A 1988 Memorandum of Agreement (MOA) between DPH and the State Water Resources Control Board (State Water Board) on the use of recycled water establishes basic principles relative to the agencies and the regional water boards. In addition, the MOA allocates primary areas of responsibility and authority between these agencies, and provides for methods and mechanisms necessary to assure ongoing, continuous future coordination of activities relative to the use of recycled water in California.
21. State Water Board Resolution No. 77-1, Policy with Respect to Water Recycling in California, encourages recycling projects that replace or supplement the use of fresh water, and the Water Recycling Law (California Water Code (CWC) Section 13500-13529.4) declares that utilization of recycled water is of primary interest to the people of the State in meeting future water needs. This discharge is consistent with State Water Board Resolution No. 77-1.
22. Section 13523 of the CWC provides that a regional water board, after consultation with and in accordance with recommendations from DPH as necessary to protect public health, safety, or welfare, shall prescribe water recycling requirements for wastewater used or proposed to be used as recycled water.
23. The Discharger intends to recycle effluent on a golf course and other landscaped areas. Crops in the proposed Use Area will include turf grass and ornamental landscaping. Title 22 requires recyclers of treated municipal wastewater to submit an engineering report detailing the use of recycled water, contingency plans, and safeguards. Section 60313 of Title 22 states that no person other than a recycled water agency shall deliver recycled water to a dual-plumbed facility.

24. The Discharger submitted a Title 22 Engineering Report to the Regional Water Board and DPH pursuant to Title 22 for on-site water recycling of disinfected tertiary recycled water (as defined by Title 22, section 60301.230). In August 2007, the Discharger submitted an updated Title 22 Engineering Report for use of recycled water for irrigation of residential landscaping and fire protection within the Marina Estates subdivision. Comments from DPH require the Discharger to submit additional information on the distribution system and control procedures for the recycling operations along with detailed drawings of the recycled water distribution system as plans are finalized for evaluation prior to distribution of recycled water.

Antidegradation Analysis

25. State Water Resources Control Board Resolution No. 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereafter Resolution 68-16) prohibits degradation of groundwater unless it has been shown that:
- a. The degradation is consistent with the maximum benefit to the people of the State;
 - b. The degradation will not unreasonably affect present and anticipated future beneficial uses;
 - c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives; and
 - d. The discharger employs best practicable treatment or control (BPTC) to minimize degradation.
26. Degradation of groundwater by some of the typical waste constituents released with discharge from a municipal wastewater utility after effective source control, treatment, and control is consistent with maximum benefit to the people of the State. The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from a community otherwise reliant on numerous concentrated individual wastewater systems, and the impact on water quality will be substantially less. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and therefore sufficient reason to accommodate growth and groundwater degradation provided terms of the Basin Plan are met.
27. Constituents of concern that have the potential to degrade groundwater include salts and nutrients. This Order establishes terms and conditions of discharge to ensure that the discharge does not unreasonably affect present and anticipated uses of groundwater and includes groundwater limitations that apply water quality objectives established in the Basin Plan to protect beneficial uses. The discharge will likely not impair the beneficial uses of groundwater because:

- a. Effluent will be applied at agronomic rates reflecting the seasonal hydraulic and nutrient requirements of the Use Area. With storage in lined ponds and application at agronomic rates, no degradation of groundwater for nitrates is expected to occur.
- b. The EC of the effluent will be less than 550 umhos/cm, which is consistent with the Tulare Lake Basin Plan's limit of 500 umhos/cm plus source in accordance with the 2007 Salinity Guidance, which reasoned that the numerical limits in the Tulare Lake Basin Plan, for municipal discharges are applicable as BPTC, even if the discharge is not conducted in the Tulare Lake Basin.

Other Regulatory Considerations

28. As the discharge consists of treated municipal sewage and incidental discharges from treatment and storage facilities associated with a municipal wastewater treatment plant, and as these discharges are regulated by waste discharge requirements consistent with applicable water quality objectives, the Facility and its discharge is exempt from containment pursuant to Title 27, Section 20090(a).

CEQA

29. On 18 December 1984, Fresno County, in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et, seq.) and the State CEQA guidelines (Title 14, Division 6, California Code of Regulations, as amended), certified an Environmental Impact Report (EIR) and approved the Millerton Specific Plan. The EIR was amended in 1999, 2000, and 2004 to include additional areas within the Millerton Specific Plan area. The EIR determined that potential impacts to water quality relative to the WWTF and the use of recycled water would be reduced to less than significant given the mitigation measures adopted as part of the Millerton Specific Plan on 20 April 1999.
30. The Regional Water Board as responsible agency pursuant to CEQA reviewed and considered the EIR prepared by the Discharger. Specific mitigation measures related to the discharge from the WWTF are discussed in [WDRs Order No. R5-2008-0127](#). Mitigation measures identified by the lead agency intended to mitigate or avoid environmental effects on water quality associated with the use of recycled water are listed below, followed by the applicable requirements in brackets:

Mitigation Measures

1. To the greatest extent possible, reclaimed water shall be reused for irrigation of golf courses and other landscaped areas. [[County Responsibility, and WDR Order No. R5-2008-0127 Discharge Specification C.3 and Provision F.14](#)]

Mitigation Measures

2. Reliability and design requirements for the treatment process and distribution must adhere to established engineering standards for Department of Public Health criteria. [[County Responsibility, Recycled Water Specifications B.1, and Provision D.1 \(Standard Provisions\)](#)]
 3. Areas for use of reclaimed water shall be constructed to allow for landscaping, golf course use, and protection of wetlands. [[County Responsibility, and WDR Order No. R5-2008-0127 Provision F.14](#)]
 4. Appropriate measures shall be taken to ensure protection of public health. Typical measures include: setbacks, irrigation at night, positive controls to avoid irrigation run-off, and appropriate cross-control requirements with respect to potable water. [[Recycled Water Specifications B.1 through B.14](#)]
 5. Effluent shall not be applied to any permanent wetland areas that would result in a surface water drainage, which would require a NPDES permit. [[Prohibition A.1, and Recycled Water Specifications B.2](#)]
 6. Compliance with an effluent monitoring program established by the Regional Water Board consistent with waste discharge requirements and State Health Wastewater Reclamation Criteria. [[Provision D.2](#)]
31. This Order contains additional requirements that will mitigate or avoid environmental effects on water quality, specifically:
- 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.

General Findings

32. Pursuant to CWC Section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.
33. The Regional Water Board will review this Order periodically and will revise requirements when necessary.

34. California Water Code Section 13267(b) states that: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."
35. The technical reports required by this Order and the attached Monitoring and Reporting Program No. [R5-2008-0128](#) are necessary to assure compliance with these waste discharge requirements. The Discharger operates the Facility that discharges the waste subject to this Order.

Public Notice

36. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.
37. The Discharger and interested agencies and persons have been notified of the intent to prescribe recycling requirements for this discharge, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
38. All comments pertaining to the discharge were heard and considered in a public meeting.

IT IS HEREBY ORDERED that, pursuant to Sections 13263, 13267, and 13523.1 of the CWC, the County of Fresno and its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. Discharge of recycled water to wetlands, surface waters, or surface water drainage courses is prohibited. However, the incidental discharge of recycled water to waters of the State is not a violation of this Order if the incidental discharge does not unreasonably affect the beneficial uses of the receiving water, and does not result in exceeding an applicable water quality objective in the receiving water.

2. Excessive irrigation with recycled water that results in runoff, or continued irrigation of recycled water during periods of rain is prohibited. Overspray or runoff associated with normal sprinkler use shall be minimized.

B. Recycled Water Specifications

1. The recycled water discharge shall, at a minimum, be disinfected tertiary recycled water as defined in the most current Title 22 CCR, and be used in compliance with Title 22, Division 4, Chapter 3, Article 3, *Uses of Recycled Water*.
2. Application of recycled water shall be confined to the designated land application areas as defined in this Order and specified in the Discharger's Master Reclamation Plan that is subject to Regional Water Board and DPH approval.
3. Application of waste constituents to the landscape and recreational areas shall be at reasonable agronomic rates to preclude creation of a nuisance or degradation of groundwater, considering soil, climate, and nutrient demand. The annual nutritive loading of the landscape and recreational areas including the nutritive value of organic and chemical fertilizers and of the recycled water, shall not exceed the demand.
4. Public contact with recycled water shall be controlled using signs and/or other appropriate means. Signs of a size no less than four inches high by eight inches wide with proper wording (shown below) shall be placed at all areas of public access and around the perimeter of all areas used for effluent disposal or conveyance to alert the public of the use of recycled water. All signs shall display an international symbol similar to that shown in [Attachment C](#), a part of this Order, and present the following wording:

“RECYCLED WATER – DO NOT DRINK”

“AGUA DE DESPERDICIO RECLAMADA – POR FAVOR NO TOME”

5. 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 wrapped with purple tape.
6. Recycled water controllers, valves, and similar appurtenances shall be affixed with recycled water warning signs, and shall be equipped with removable handles or locking mechanisms to prevent public access or tampering. Quick couplers, if used, shall be of a type, or secured in a manner, that permits operation only by authorized personnel. Hose bibs shall not be used.
7. No physical connection shall exist between recycled water piping and any domestic water supply or domestic well, or between recycled water piping and any irrigation well that does not have an approved air gap or reduce pressure principle device.

8. Sprinkler heads shall be of the type approved for recycled water and shall create a minimum amount of mist. Drainage through sprinkler heads is prohibited.
9. Effluent pipelines and irrigation hardware must be appropriately labeled, and backflow prevention devices shall be used where a potential cross-connection could occur. There shall be at least a ten-foot horizontal and a one-foot vertical separation between all pipelines transporting recycled water and those transporting domestic supply, with the domestic supply above the recycled water pipeline.
10. The Discharger will maintain the following setback distances from areas irrigated with recycled water:

<u>Setback Distance (feet)</u>	<u>To</u>
50	Edge of application area to domestic well
100	Wastewater/recycled water storage reservoir to domestic well
50	Application area to edge of surface water or drainage course ¹

¹ Excluding land application areas separated by levees or other physical barriers from surface waters or drainage courses

11. Land application areas that are spray irrigated and allow public access shall be irrigated during periods of minimal use (typically between 9 p.m. and 6 a.m.). Consideration shall be given to allow maximum drying time prior to subsequent public use.
12. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.
13. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.
14. Areas irrigated with recycled water shall be managed to prevent nuisance conditions or breeding of mosquitoes. More specifically:
 - a. All applied irrigation water must infiltrate completely within a 48-hour period;
 - b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation; and
 - c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store recycled water.

C. Groundwater Limitations

1. Release of waste constituents from any treatment, storage, or recycling component associated with the WWTF shall not cause or contribute to groundwater containing:
 - a. Containing constituent concentrations in excess of the concentrations specified below or natural background quality, whichever is greater:
 - (i) Nitrate as nitrogen of 10 mg/L.
 - (ii) Electrical Conductivity of 900 µmhos/cm.
 - (iii) Total Coliform Organisms of 2.2 MPN/100 mL.
 - (iv) For constituents identified in Title 22, the MCLs quantified therein.
 - b. Containing taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

D. Provisions

1. The producer, distributor, and users of recycled water shall comply with the Standard Provisions and Reporting Requirements for Waste Discharge Requirements, dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as Standard Provisions.
2. Fresno County CSA # 34 as the responsible agency under the Master Reclamation Permit shall comply with Monitoring and Reporting Program (MRP) No. [R5-2008-0128](#), which is part of this Order, and any revisions thereto as adopted by the Regional Water Board or approved by the Executive Officer.
3. The Discharger and individuals responsible for the distribution and use of recycled water shall keep a copy of this Order, including its MRP, Information Sheet, attachments, and Standard Provisions, for reference by operating personnel. Key operating personnel shall be familiar with its contents.
4. The Discharger must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger or User to achieve compliance with the conditions of this Order. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This Provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger only when the operation is necessary to achieve compliance with the conditions of the Order.

5. 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 sections 6735, 7835, and 7835.1. 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.
6. The Discharger and Users of recycled water must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Regional Water Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Regional Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
7. The Discharger shall maintain and operate all ponds sufficient to protect the integrity of containment levees and prevent overtopping or overflows. Unless a California civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is adequate, the operating freeboard in any pond shall never be less than two feet (measured vertically). As a means of management and to discern compliance with this Provision, the Discharger shall install and maintain in each pond permanent markers with calibration that indicates the water level at design capacity and enables determination of available operational freeboard.
8. The use of recycled water shall comply with the provisions of Title 22 CCR. Further, the Discharger and/or User must obtain written approval from the Executive Officer prior to use of recycled water for uses other than those specified in this Order.
9. The Discharger shall be responsible for ensuring that recycled water meets the quality standards required by Title 22 and for the operation and maintenance of transport facilities and associated appurtenances. The Discharger shall hold the Users responsible for the application and use of recycled water on the designated Use Areas and associated operations and maintenance in accordance with all applicable Title 22 requirements and this Order.

10. Prior to commencing irrigation with recycled water the Discharger shall submit an updated Title 22 Engineering Report (approved by DPH) and an Operations and Maintenance (O&M) plan to the Regional Water Board for review. At a minimum the submittal shall contain a detailed operations plan for the recycled Use Areas including methods and procedures for implementation of regulations regarding recycled water use and maintenance of equipment and emergency backup systems to maintain compliance with the conditions of this Order and DPH requirements. The submittal shall also include established Rules and Regulations ([see Finding 7](#)) for recycled water Users within the Millerton New Town development.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 31 July 2008.

Original signature on file

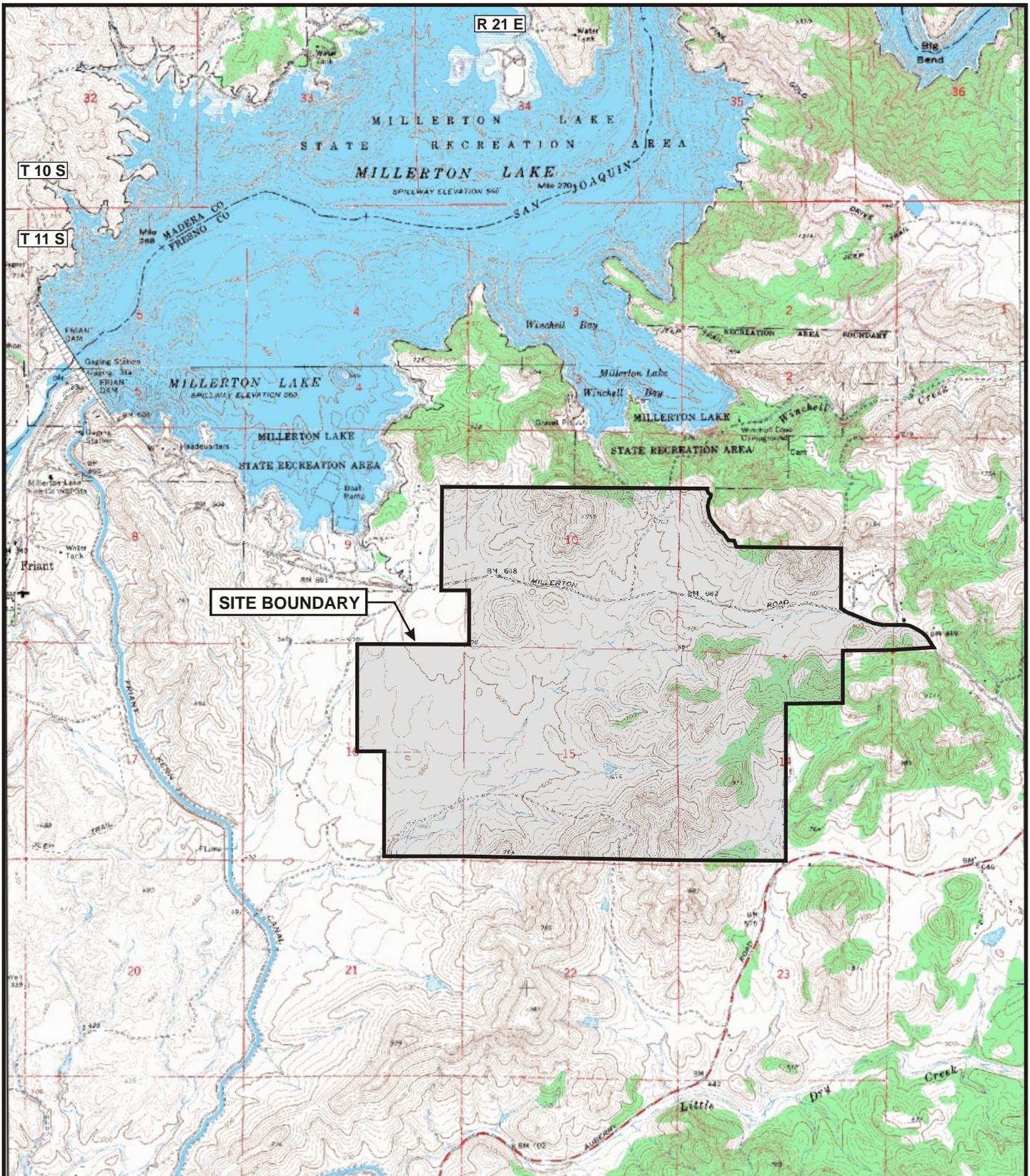
PAMELA C. CREEDON, Executive Officer

Order Attachments:

- A. Vicinity Map
- B. Rules and Regulations for Recycled Water Use Projects
- C. Nonpotable International Water Symbol

Monitoring and Reporting Program No. R5-2008-0128
Information Sheet
Standard Provisions (1 March 1991) (separate attachment to Discharger only)

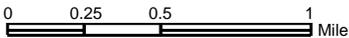
kc/DKP: 6/30/08



Map Source:
 FRIANT 7.5 Minute USGS Quadrangle
 T11S, R21E, MDB&M



SCALE



SITE MAP
 ORDER NO. R5-2008-0128
 WASTE DISCHARGE REQUIREMENTS
 AND
 MASTER RECLAMATION PERMIT
 FOR
 FRESNO COUNTY SERVICE AREA #34
 MILLERTON NEW TOWN
 FRESNO COUNTY

ATTACHMENT A

ATTACHMENT B

RULES AND REGULATIONS FOR RECYCLED WATER USE PROJECTS

Pursuant to California Water Code (CWC) section 13523.1 (b)(3), this Order requires a recycled water agency to establish and to enforce rules and regulations governing the design, construction and use of recycled water distribution and disposal systems by its customers. The rules and regulations shall be consistent with the following criteria:

- Title 22, Division 4, Chapter 3, Wastewater Reclamation Criteria;
- Title 17, Division 1, Chapter 5, Group 4, Article 1& 2, of the California Code of Regulations;
- The State Department of Public Health (DPH) (formerly Department of Health Services) Guidelines for Use of Recycled Water, and Guidelines for Use of Recycled Water for Construction Purposes;
- Any measures that are deemed necessary for protection of public health, such as the American Water Works Association (AWWA) California/ Nevada section, Guidelines for the Distribution of Non-Potable Water and Guidelines for Retrofitting to Recycled Water or alternate measures that are acceptable to the State DHS.

At a minimum, the rules and regulations shall notify the users that:

1. The use of recycled water shall not cause pollution, contamination, or nuisance, as defined by section 13050 of the California Water Code.
2. The Recycled Water Agency, the Regional Water Board, the State DPH, or an authorized representative of these parties, upon presentation of proper credentials, shall have the right to enter upon the recycled water use site during reasonable hours, to verify that the user of recycled water is complying with the Recycled Water Agency's rules and regulations.
3. The recycled water user or a responsible management entity (RME) assigned by the recycled water agency shall provide written notification, in a timely manner, to the Recycled Water Agency of any material change or proposed change in the character of the use of recycled water.
4. Prior to the initiation of recycled water service, the recycled water agency, user, or RME shall submit plans and specifications for recycled water distribution facilities to the Regional Water Board, and the State DPH for approval.
5. The recycled water agency shall designate a recycled water supervisor who is responsible for the recycled water system at each use area under their control. Specific responsibilities of the recycled water supervisor include the proper installation, operation, and maintenance of the irrigation system; compliance of the project with the Recycled Water Agency's rules and regulations, prevention of potential hazards and preservation of the recycled water distribution system plans in "as built" form. Designated recycled water supervisors shall obtain instruction in the use of recycled water from an institution approved by the State DPH.

ATTACHMENT B

6. The Recycled Water Agency may terminate service to a recycled water user who uses, transports, or stores such water in violation of the Recycled Water Agency's rules and regulations.
7. All recycled water storage facilities shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24-hour frequency storm to the extent practicable unless the Regional Water Board Executive Officer approves relaxed storm protection measures for the facility.
8. The Regional Water Board may initiate enforcement action against any recycled water user, including but not limited to the termination of the recycled water supply, who:
 - a. Discharges recycled water in violation of any applicable discharge requirement prescribed by the Regional Water Board or in a manner which creates or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code section 13050.
 - b. Uses, transports, or stores such water in violation of the rules and regulations governing the design, construction and use of recycled water distribution and disposal systems issued by the recycled water distribution and disposal systems issued by the recycled water agency in accordance with this attachment; or in a manner which creates or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code section 13050.
9. A copy of the recycled water rules and regulations, irrigation system layout map, and a recycled water system operations manual shall be maintained at the use area. These documents shall be available to operating personnel at all times.
10. Irrigation with disinfected tertiary recycled water shall not take place within 50 feet of any domestic water supply well unless all of the following conditions have been met.
 - a. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from the ground and the surface.
 - b. The well contains an annular seal that extends from the surface into the aquitard.
 - c. The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.
 - d. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well.
 - e. The owner of the well approves of the elimination of the buffer zone requirement.
11. Impoundment of disinfected tertiary recycled water shall not occur within 100 feet of any domestic water supply well.
12. Irrigation with or impoundment of disinfected secondary- 2.2 or disinfected secondary 2.3 recycled water shall not take place within 100 feet of any domestic water supply well.
13. Irrigation with, or impoundment of, undisinfected secondary recycled water shall not take place within 150 feet of any domestic water supply well.

ATTACHMENT B

14. Recycled water facilities shall be operated in accordance with best management practices (BMP's) to minimize public contact with, and to prevent direct human consumption of recycled water.
15. All windblown spray and surface runoff of recycled water applied for irrigation onto property not owned or controlled by the discharger or recycled water user shall be prevented by implementation of BMP's.
16. Irrigation with recycled water shall be given during periods of minimal human use of the service area. Consideration shall be given to allow an adequate dry-out time before the irrigated area will be used by the public.
17. All drinking fountains located within the approved use area shall be protected by location and/or structure from contact with recycled water spray, mist, or runoff. Protection shall be by design, construction practice, or system operation.
18. Facilities that may be used by the public, including but not limited to eating surfaces and playground equipment and located within the approved use areas, shall be protected to the maximum extent possible by siting and/or structure from contact by irrigation with recycled water spray, mist or runoff. Protection shall be by design, construction practice or system operation.
19. Spray irrigation with recycled water, other than disinfected tertiary recycled water, shall not take place within 100 feet of the property line of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.
20. All use areas where recycled water is used and that are accessible to the public shall be posted with conspicuous signs, in a size no less than 4 inches by 8 inches, that include the following wording and picture: "**RECYCLED WATER-DO NOT DRINK**". See [Attachment C](#) for the acceptable symbol. The sign(s) shall be of a size easily readable by the public. The prescribed wording should also be translated into Spanish and other languages included in the required signs.
21. No physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water or auxiliary water source system.
22. The recycled water piping system shall not include any hose bibs. Quick couplers that are different from that used in potable water system or auxiliary water source system may be used.
23. The public water supply shall not be used as backup or supplemental source of water for a recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of sections 7602(a) and 7603(a) of title 17 and the approval of the public water system has been obtained. If a "Swivel-ell" type connection is used it must be used in accordance with provisions of the Department of Public Health Policy Memo 95-004. Approved backflow prevention devices shall be provided, installed, tested, and maintained by the recycled water user in accordance with the applicable provisions of Title 17, Division 1, Chapter 5, Group 4, Article 2.

ATTACHMENT B

24. No person other than the Recycled Water Agency shall deliver recycled water to a facility.
25. All facilities shall be identified and labeled according to the type of water in each system.
26. All recycled water piping and appurtenances in new installations and appurtenances in retrofit installations shall be colored purple or distinctively wrapped with purple tape in accordance with chapter 7.9, section 4049.54 of the California Health and Safety Code.
27. Reuse site shut down tests and inspections shall be monitored by the State DPH.
28. Customer complaints concerning recycled water use that may involve public illness shall be reported to the County of Environmental Health Department, DPH, and to the Recycled Water Agency who shall maintain a log of all customer complaints regarding recycled water.
29. Any backflow prevention device installed to protect the public water system shall be inspected and maintained in accordance with section 7605 of Title 17.
30. The amount of nitrogen from commercial fertilizers applied to irrigation use sites shall be managed to take into account the nitrogen content of the recycled water in order to ensure sufficient nitrogen uptake by the vegetation and prevent leaching of excess nitrates and nitrogen compounds into the soil beyond the root zone.



RECYCLED WATER SIGN SYMBOL
Order No. R5-2008-0128
WASTE DISCHARGE REQUIREMENTS
AND
MASTER RECLAMATION PERMIT
FOR
FRESNO COUNTY SERVICE AREA #34
MILLERTON NEW TOWN
FRESNO COUNTY

ATTACHMENT C

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2008-0128
FOR
MASTER RECLAMATION PERMIT
FRESNO COUNTY SERVICE AREA NO. 34
MILLERTON NEW TOWN RECYCLING SYSTEM
FRESNO COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code section 13267. The Discharger or User shall not implement any changes to this MRP unless and until the Regional Water Board or Executive Officer issues a revised MRP. Changes to sample location shall be established with concurrence of Regional Water Board staff, and a description of the revised stations shall be submitted for approval by the Executive Officer. All samples should be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each sample shall be recorded on the sample chain of custody form.

All analyses shall be performed in accordance with the latest edition of *Guidelines Establishing Test Procedures for Analysis of Pollutants*, promulgated by USEPA (40 CFR 136) or other procedures approved by the applicable regional water board. In reporting monitoring data, the User shall indicate whether any analysis was performed using a method not in conformance with USEPA's Guidelines.

RECYCLING USE AREA MONITORING

Recycling use area monitoring shall be conducted daily and the results reported in quarterly monitoring reports. Effluent monitoring results shall be used in calculations to ascertain loading rates. Recycle use areas shall be identified and monitored to include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	gallons	Continuous	Daily
Rainfall	inches	Observation	Daily
Acreage applied ¹	acres	Calculated	Daily
Water application rate ²	gal/acre/day	Calculated	Daily
Total Nitrogen loading rate ²	lbs/acre/month	Calculated	Monthly
Salt loading rate ^{2,3}	lbs/acre/month	Calculated	Monthly

¹ Land application areas will be identified.

² For each land application area.

³ Salt loading rate shall be calculated using the applied volume of wastewater, actual application area, and the most recent results for effluent TDS.

At least once per month, the entire irrigated area shall be inspected on the morning following an irrigation event to identify any equipment malfunction or other circumstances that might allow irrigation runoff to leave the recycle use area and/or create ponding conditions that violate waste discharge requirements. A log of these inspections shall be included in the quarterly monitoring reports. The log should include the following information:

1. Date of inspection;
2. A description of any violations noted;
3. Records of operational problems (if any);
4. Corrective or preventative measures taken to comply with WDRs; and
5. A description of enforcement actions taken (if any), including any schedule for achieving compliance.

EMPLOYEE TRAINING

Each employee working with the recycled water project should meet the requirements of Section 60325, Title 22, California Code of Regulations, and should be documented in the quarterly reports (operator name, class, and phone number).

REPORTING

The Discharger shall report monitoring data and information as required in this MRP quarterly in accordance with the following schedule:

<u>Monitoring Period</u>	<u>Reports Due</u>
January - March	1 May
April - June	1 August
July - September	1 November
October - December	1 February

Monitoring data and/or discussions submitted concerning WWTF performance must also be signed and certified by the chief plant operator. When reports contain laboratory analyses performed by the Discharger and the chief plant operator is not in the direct line of supervision of the laboratory, reports must also be signed and certified by the chief of the laboratory.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner that illustrates clearly, whether the Discharger complies with waste discharge requirements. If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the discharge monitoring report.

Annual Report

Beginning on the 1st February of each year, the Discharger shall submit an annual report containing the following items (can be submitted concurrently with the 4th quarter monitoring report);

1. Names, certificates grades, and general responsibilities of all persons involved in the water recycling operation;
2. Names and telephone numbers of persons to contact regarding the use of recycled water during emergency and routine situations;
3. Statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibrations
4. Tabular summary all recycled water operations for the previous year including annual nutrient and hydraulic loading to individual land application areas; and
5. A summary and discussion of the compliance record for the reporting period. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with this Order.

All reports submitted in response to this Order shall comply with the signatory requirements in Standard Provision B.3.

A transmittal letter shall accompany each self-monitoring report. The letter shall discuss any violations during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

Original signature on file

PAMELA C. CREEDON, Executive Officer

31 July 2008

(Date)

INFORMATION SHEET

MASTER RECLAMATION PERMIT NO. R5-2008-0128
FRESNO COUNTY SERVICE AREA NO. 34
MILLERTON NEW TOWN RECYCLING SYSTEM
FRESNO COUNTY

Background

Millerton New Town a planned development on Millerton Road east of Friant proposes to use disinfected tertiary recycled water from the community's wastewater treatment facility (WWTF) to irrigate the Brighton Crest Golf Course, and adjacent open space and landscaped areas including common areas, parks, and a school yard within the Millerton New Town development. In addition, the development proposes to use recycled water for landscape irrigation of some residential lots within the development, and to provide for fire protection within the proposed Marina Estates subdivision.

Fresno County Service Area No. 34 (hereafter Discharger or Fresno CSA # 34) was formed in 1986 to operate and maintain public utilities for the planned Millerton New Town development. In August 2007, the Discharger submitted a Report of Waste Discharge (RWD) and applied for a Master Reclamation Permit to allow for distribution and use of recycled water within its service area.

The new tertiary WWTF consists of headworks, a new secondary treatment process, coagulation/flocculation, filtration, disinfection, sludge handling facility, an emergency storage basin, lined effluent storage ponds (permeability less than 10^{-7} cm/sec), and a recycled water irrigation system. The tertiary WWTF will be expanded in phases to a final capacity of 1.07 million gallons per day (mgd).

The tertiary WWTF is designed to provide tertiary treatment and is regulated under Waste Discharge Requirements (WDRs) Order No. [R5-2008-0127](#). Order No. [R5-2008-0127](#) contains requirements to ensure protection of public health and compliance with Title 22 requirements. The tertiary recycled water shall, at a minimum, be adequately oxidized, coagulated, filtered, and disinfected. The monthly average biochemical oxygen demand (BOD) and total suspended solids shall not exceed 10 mg/L or a daily maximum of 20 mg/L. The median concentration of total coliform bacteria measured in the disinfected effluent shall not exceed 2.2 MPN/100 milliliters utilizing the bacteriological results of the last seven days for which the analyses have been completed, the number of total coliform bacteria shall not exceed 23 MPN/100 milliliters in more than one sample in any 30-day period, and no sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

Disinfection of tertiary treated effluent will be accomplished using a duplex feed system to pump a 12.5% solution of liquid sodium hypochlorite into the filtered effluent prior to discharge to the chlorine contact chamber, with sufficient detention time to ensure a modal contact time of 90 minutes as required by Title 22.

Water Recycling Requirements

The Department of Public Health (DPH) (formerly Department of Health Services) has established statewide recycling water criteria in Title 22, California Code of Regulations, Section 60301 et seq., (hereafter Title 22) for the use of recycled water and has developed guidelines for specific uses. Revisions of the water recycling criteria in Title 22 became

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effective on 2 December 2000. The revised Title 22 expands the range of allowable uses of recycled water, establishes criteria for these uses, and clarifies some of the ambiguity contained in the previous regulations.

Fresno CSA #34 will treat the wastewater to the standards required in Title 22 for unrestricted irrigation of golf course and other public use areas. As the responsible party named in the Master Reclamation permit, Fresno CSA #34 is responsible to maintain the minimum land application acreage and recycled storage pond capacity to comply with the terms and conditions of this Order. The Order, as proposed, includes requirements for Fresno CSA #34 to establish and enforce rules and regulations for recycled water users in accordance with statewide recycling criteria, and to conduct periodic inspections of the recycled water use sites.

Recycled water Users will include the owners of Brighton Crest Golf Course (The Clarksfield Company), the Clovis Unified School District, Fresno County, and individual homeowners or homeowner associations within the Millerton New Town Development. Fresno CSA #34 will be responsible for obtaining User Agreements and informing individual owners regarding the use and application of recycled water as well as obtain recorded covenants for land dedicated for effluent disposal to ensure unrestricted availability of land for disposal of effluent.

This Order as proposed would require Fresno CSA #34 as the Producer of recycled water to implement and enforce specific measures relating to the use of recycled water. These include: (a) posting of appropriate warning signs around Use Areas, (b) maintaining setback distances, (c) ensuring distribution and delivery systems are well maintained and operational, and (d) requiring that recycled water be applied at agronomic rates.

The proposed Order would require the Discharger to monitor the quality of the recycled water in accordance with Waste Discharge Requirements Order No. [R5-2008-0127](#) and require the User or responsible management entity (REM) assigned by Fresno CSA #34 to monitor its application in accordance with the proposed Monitoring and Reporting Program. Specifically, the proposed Order would require the User or REM to report the amounts of recycled water applied to the Use Areas, calculate nitrogen and salt loading to individual Use Areas, inspect the Use Areas on at least a monthly basis to ensure that water recycling is in compliance with the proposed Order; and submit required quarterly and annual monitoring reports to the Regional Water Board.

The State Legislature established the California Recycled Water Task Force (Task Force) in 2001 to evaluate the current framework of State and local rules, regulations, ordinances and permits to identify opportunities for and obstacles to the same use of recycled water in California. In June 2003, the Task Force completed its review and issued its final report, titled "Water Recycling 2030, Recommendations of California's Recycled Water Task Force." Recommendation 4.2.1 of the report states that the State Board should convene a committee

to review the legal requirements of Federal and State statutes and regulations that relate to the regulation of incidental runoff of recycled water to determine the regulatory and enforcement options that are available to the regional boards. Following a stakeholder process and internal review, on 24 February 2004 the Executive Director issued a memorandum providing guidance on regulation of recycled runoff and discharges of recycled water from ponds. The proposed Order is consistent with that memorandum.

The golf course and other application areas may contain numerous hills and sloped areas that would promote runoff unless closely managed during irrigation. In addition, the golf course may use ponds to store the recycled water that, during wet weather, may overflow and enter surface waters. Such runoff cannot occur except under an NPDES permit, and the Discharger is required to provide all runoff controls necessary to keep wastewater irrigation runoff out of drainage channels or surface waters. However, minor amounts of incidental runoff or over-spray cannot be completely prevented. The proposed Order requires that incidental runoff or over-spray be minimized to the extent practicable through operational strategies. Consistent with the 24 February 2004 State Water Board memorandum, such incidental runoff will not require an individual NPDES permit.

Site and Groundwater Conditions

Topography in the area consists of moderately steep to gently sloping hills. Soils in the area range from sandy loam to clay underlain by decomposed granite and are generally of moderate permeability. Soil units are generally thin to moderately thick. The contact between soil and the decomposed granite is often abrupt. Predominant soils in the project area include Sesame and Fallbrook. These soils have moderate to slow drainage. Regional groundwater is contained in fractured bedrock and to a lesser extent in alluvial/weathered bedrock deposits. Groundwater typically flows northeast to southwest. Depth to water is variable, with shallow groundwater encountered at depths less than 10 feet below grade on portions of the Use Area. Two monitoring wells were installed in the vicinity of the existing effluent storage ponds. Based on existing data, groundwater in the area is generally of good quality, except for nitrates, with average EC, chloride, and nitrate as nitrogen concentrations were 300 $\mu\text{mhos/cm}$, 15 mg/L and 12 mg/L, respectively. The average nitrate concentration at 12 mg/L exceeds the primary maximum contaminant level (MCL) for nitrate, expressed as nitrogen of 10 mg/L.

Due to the low volume of the initial stage of the WWTF and the fact the effluent storage ponds were lined the WWTF would not appear to be the source of the nitrate in groundwater. With replacement of the existing pond liner with a new high-density polyethylene liner with a permeability less than 10^{-7} cm/sec and application of recycled water at agronomic rates, further degradation of groundwater is not expected.

Basin Plan, Beneficial Uses, and Regulatory Considerations

Millerton New Town and the WWTF are in the San Joaquin Basin. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board.

Land use in the vicinity is primarily residential, recreational, or rangeland. The rockiness of the soil, the low to moderate water holding capacity, and limited water available for irrigation makes this area unsuitable for cultivation. Because of the low potential for growing salt sensitive crops, an EC limit in groundwater of 900 $\mu\text{mhos/cm}$, based on Title 22 Table 64449 B, which establishes recommended, upper, and short term ranges for EC of 900 and 1,600 $\mu\text{mhos/cm}$ for drinking water is appropriate to protect the beneficial uses of underlying groundwater.

Antidegradation

The antidegradation directives of State Water Board Resolution No. 68-16, "Statement of Policy With Respect to Maintaining High Quality Waters in California," or "Antidegradation Policy" require that waters of the State that are better in quality than established water quality objectives be maintained "consistent with the maximum benefit to the people of the State." Waters can be of high quality for some constituents or beneficial uses and not others. Policy and procedures for complying with this directive are set forth in the Basin Plan.

The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from a community otherwise reliant on numerous concentrated individual wastewater systems. Degradation of groundwater by some of the typical waste constituents released with discharge from a municipal wastewater utility after effective source control, treatment, and control is consistent with maximum benefit to the people of the State, provided the terms of the Basin Plan are met. Constituents of concern that have the potential to degrade groundwater include, in part, nutrients and salts. However, the discharge will likely not degrade the beneficial uses of groundwater because:

- a. For nitrogen, this Order sets a narrative nitrogen limit requiring that the effluent be applied at agronomic rates reflecting the seasonal hydraulic and nutrient requirements of the Use Area. With storage in lined ponds and application at agronomic rates, no degradation of groundwater for nitrates is expected to occur.
- b. For salinity, this Order sets an effluent limitation for EC of 550 $\mu\text{mhos/cm}$, which is consistent with the Tulare Lake Basin Plan's limit of 500 $\mu\text{mhos/cm}$ plus source in accordance with the 2007 Salinity Guidance, which reasoned that the numerical limits in the Tulare Lake Basin Plan, for municipal discharges are applicable as best practicable

treatment or control (BPTC), even if the discharge is not conducted in the Tulare Lake Basin.

Title 27

Title 27, CCR, section 20005 et seq. (Title 27) contains regulations to address certain discharges to land. Title 27 establishes a waste classification system, specifies siting and construction standards for full containment of classified waste, requires extensive monitoring of groundwater and the unsaturated zone for any indication of failure of containment, and specifies closure and post-closure maintenance requirements. Generally, no degradation of groundwater quality by any waste constituent in a classified waste is acceptable under Title 27 regulations.

Discharges of domestic sewage and treated effluent can be treated and controlled to a degree that will not result in unreasonable degradation of groundwater. For this reason, they have been conditionally exempted from Title 27.

CEQA

On 18 December 1984, Fresno County, in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et, seq.) and the State CEQA guidelines (Title 14, Division 6, California Code of Regulations, as amended), certified an Environmental Impact Report (EIR) and approved the Millerton Specific Plan. The EIR was amended in 1999, 2000, and 2004 to include additional areas within the within the Millerton Specific Plan area. The EIR determined that potential impacts to water quality relative to the WWTF and the use of recycled water would be reduced to less than significant given the mitigation measures adopted as part of the Millerton Specific Plan on 20 April 1999.

Mitigation Measures related to water quality include:

- a.) All developments that occur within the Specific Plan area must utilize a community sewer system with effluent treated to tertiary level;
- b.) Reliability and design requirements for the treatment process must adhere to established engineering standards for Department of Public Health (DPH) (formerly Department of Health Services) criteria;
- c.) To the greatest extent possible, reclaimed water shall be reused for irrigation of golf courses and other landscaped areas at agronomic rates; and
- d.) Areas for use of reclaimed water shall be constructed to allow for landscaping and golf course use and protection of wetlands.

The Regional Water Board reviewed and considered the EIR prepared by the Discharger. This Order contains requirements that will mitigate or avoid environmental effects on water quality regarding the distribution and use of recycled water. Requirements regarding the

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treatment and storage of wastewater prior to application are discussed in the accompanying WDRs Order No. [R5-2008-0127](#).

Reopener

The conditions of discharge in the proposed Order were developed based on currently available technical information and applicable water quality laws, regulations, policies, and plans, and are intended to assure conformance with them. It may be appropriate to reopen the Order if applicable laws and regulations change. The California Water Code requires that water recycling requirements implement all applicable requirements.

kc/DKP: 6/30/08