CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER 96–011

GENERAL WATER REUSE REQUIREMENTS FOR:

MUNICIPAL WASTEWATER AND WATER AGENCIES

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

PURPOSE and APPLICABILITY

1. This Order serves as a *General Water Reuse Order* authorizing municipal wastewater reuse by producers, distributors and users of non-potable recycled wastewater throughout the region. The intent of this Order is to streamline the permitting process and delegate the responsiblity of administrating water reuse programs to local agencies to the fullest extent possible.

2. This Order is intended to serve as a region-wide general permit for publicly owned wastewater and water agencies that recycle treated municipal wastewater. It is intended to replace individual reuse Orders and applies to the following suppliers of recycled water:

   a. Producers of secondary and tertiary recycled water that meets CCR Title 22 water reuse criteria and is reused for a direct beneficial use or a controlled use that would not otherwise occur.

   b. A Distributor of recycled water – who receives wastewater from a municipal wastewater facility, may or may not give it additional treatment to meet CCR Title 22 water reuse criteria for its intended use(s) and distributes it to users. In some cases, a written agreemen (e.g., Joint Powers Agreement or equivalent contractual agreement) between a Producer and a Distributor may be preferable to issuing this Order to the Distributor.

   c. Although the statewide criteria specified in Title 22 apply only to use of recycled water and not to the *disposal* of wastewater to land (e.g., to meet NPDES restrictions for receiving water discharge) those discharges to land may pose an identical degree of public exposure and risk.

      Therefore, wastewater agencies that apply wastewater to land through irrigation for the primary pupose of disposal, but operate in accordance with these requirements, may also apply to be regulated under this Order.

   d. It should be noted that a project that is very complex in nature (long-term, multi-phased projects, e.g., Zone 7/Livermore water reuse program) may best be served by an individual order.

3. A separate NPDES permit must be obtained from the Regional Board for projects involving the use of ephemeral or year-round streams or other waters of the State for recycled water conveyance or direct or indirect groundwater recharge.

4. Water reuse is an essential part of an overall program to manage local and regional water resources. Many local governing bodies have adopted resolutions establishing

their intent to proceed with the planning, permitting, and implementation of water reuse projects. These projects would provide important multiple water quality, water supply, and wastewater disposal benefits for communities including:

- augmentation and improved reliability of local water supplies.
- reduction of the mass of pollutants discharged to State waters
- reduction in size or deferral of the need for additional wastewater export facilities.

REUSE FACILITIES AND THEIR RESPONSIBILITIES

5. Most of the publicly owned wastewater treatment plants (POTWs) in the Region, hereinafter referred to as the Producers, produce treated wastewater of sufficient quality to allow its reuse for certain applications as prescribed in this Order. Water service agencies also have authority under the provisions set forth in this Order to distribute recycled water within their respective jurisdictions.

6. POTWs provide at least secondary treatment to Distributors or Users under written agreements with the participating Producers/Distributors respectively. The recycled water meets the quality criteria established by California Department of Health Services (DHS) and this Order. Additional treatment by the Producer, Distributor or User may be necessary to meet the intended use. The Producer or Distributor is responsible for insuring that water reuse is adequately monitored through an approved program.

7. Decisions regarding new treatment and distribution facility construction, operation, funding, cost-sharing and related aspects are the responsibility of the Producer, Distributor and affected Users.

STATE RECLAMATION POLICIES AND REGULATIONS

8. In July 1992 Section 13523.1 was added to the California Water Code, authorizing regional boards to issue master reclamation permits to a producer and/or distributor of recycled water in lieu of prescribing individual water reuse requirements for a user of recycled water. Section 13523.1 also removes the requirement, except upon written request of a regional board, that Users file a report with a regional board to use recycled water from a producer/distributor for whom a master reuse Order has been issued. Similarly, it exempts any such user of recycled water from the requirement to file a report with a regional board related to any material change in the character of the recycled water or its use.

   For further discussion of State Policies and Regulations see Attachment G.

State Health Regulations

9. Section 13523 of the California Water Code provides that a Regional Board, after consultation with and upon receipt of recommendations from DHS, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reuse requirements for water which is used or proposed to be used as recycled water.

10. This Order's requirements conform with and implement the Department of Health Services's water reuse criteria as set forth in Title 22, Division 4, Sections 60301 through 60355 of the California Code of Regulations (herein referred to as the DHS reuse criteria). Revisions to Title 22 shall become part of this Order automatically upon final adoption of those revisions by DHS.

REGIONAL BOARD BASIN PLAN

11. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986 prescribing water quality objectives for ground and surface waters throughout the region. The Board amended its Basin Plan on June 21, 1995, and the State Water Resources Control Board (State Board) approved it on July 20, 1995, with approval from the State Office of Administrative Law on November 13, 1995. The Basin Plan supports water reclamation and further states that the disposal of wastewater to inland, estuarine, or coastal waters is not considered a permanent wastewater disposal solution where the potential exists for conservation and reclamation. The water quality goals to be used in regulating water quality factors as set forth in the Basin Plan include maximum feasible reuse of municipal, industrial, and agricultural wastewaters.

    Beneficial Uses

    The Basin Plan identifies existing and potential beneficial uses of the region's underlying groundwaters as:

    - Industrial service and Process supply
    - Municipal and domestic supply
    - Agricultural supply

    The Basin Plan identifies beneficial uses of all surface waters of San Francisco Bay Region, including San Francisco Bay system and its tributaries, Tomales Bay and its tributaries, coastal waters and tributaries and all inland waters. The Basin Plan identifies beneficial uses of specified surface waters as:

    - Municipal and Domestic Water Supply
    - Water Contact Recreation
    - Non-Contact Water Recreation
    - Warm Fresh Water Habitat
    - Cold Fresh Water Habitat
    - Wildlife Habitat
    - Fish Migration
    - Fish Spawning

REGIONAL BOARD's LIMITED RECYCLING ORDER

12. Board Order No. 91-042 provides "blanket" authorization for tanker-truck distribution of recycled water and the expansion of existing fixed irrigation system projects already subject to water reuse requirements. Order 91-042 will be superseded by this Order for those agencies being regulated by this Order.

CEQA AND PUBLIC NOTICE

13. The proposed uses of reclaimed water will maintain and enhance natural resources, and thus this Order is categorically exempt from the provisions of the California Environmental Quality Act in accordance with Title 14, California Administrative Code, Chapter 3, Section 15307.

14. The Board has notified the Producers, Distributors and interested agencies and persons of its intent to prescribe water reuse requirements and has provided them the opportunity for a public hearing and to submit their written views and recommendations.

15. The Board, in a public meeting, heard and considered all comments pertaining to this matter.

IT IS HEREBY ORDERED, that all agencies that file a **Notice of Intent (NOI)** indicating their intention to be regulated under the provisions of this general order and receive program authorization from this Board shall comply with the following:

A. PROHIBITIONS

1. The treatment, storage, distribution, or reuse of recycled water shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. No recycled water shall be applied to irrigation areas during periods when soils are saturated.

3. Recycled water shall not be allowed to escape from the designated use area(s) as surface flow that would either pond and/or enter waters of the state.

   Recycled secondary treated water as described under Section B shall not be allowed to escape from the designated use area(s) as an airborne spray that would visibly wet vegetation or any other surface.

4. Spray or runoff shall not enter a dwelling or food handling facility, and shall not contact any drinking water fountain, unless specifically protected with a shielding device. If the recycled water is of restricted quality as described under Section B, then spray or runoff shall not enter any place where the public may be present during irrigation.

5. Secondary recycled water shall not be applied so as to cause runoff or degradation of any water body or wetland.

6. Recycled water shall not be applied in groundwater recharge and wellhead protection areas (so designated by local agencies).

7. The use of recycled water shall not cause rising groundwater discharging to surface waters to impair surface water quality objectives or beneficial uses.

8. The incidental discharge of recycled water to waters of the State shall not unreasonably affect present and anticipated beneficial uses of water, and not result in water quality less than that prescribed in water quality control plans or policies.

9. No recycled water shall be discharged from treatment facilities, irrigation holding tanks, storage ponds, or other containment, other than for permitted reuse in accordance with this Order, other Board issued Waste Discharge Requirements or NPDES permits, contingency plan in an approved Water Reuse Program (NOI report), or for discharge to a municipal sewage treatment system.

10. Recycled water shall not be used as a domestic or animal water supply.

11. There shall be no cross-connection between potable water supply and piping containing recycled water. All users of recycled water shall provide for appropriate backflow protection for potable water supplies as specified in Title 17, Section 7604 of the California Code of Regulations or as specified by DHS.

B. REUSE WATER QUALITY REQUIREMENTS AND LIMITATIONS:

1. Reuse Water Quality Requirements and Limitations of this Order shall meet the most current CCR Title 22 regulations.

2. The Producer/Distributor shall discontinue delivery of recycled water for intended reuse projects during any period in which it has reason to believe that the limits for that use as specified below or the requirements of the DHS reuse criteria insofar as they relate to the quality of the recycled water, are not being met. The delivery of recycled water intended uses shall not be resumed until all conditions which caused the violations have been corrected.

3. **Minimum Recycled Water Quality**

   Water to be recycled for reuse shall at a minimum be adequately oxidized and disinfected water that receives at least secondary level treatment and meets, at a minimum, the following limits:

   a. Dissolved Oxygen — 1.0 mg/l minimum

   b. Dissolved Sulfide — 0.1 mg/l maximum

   c. Total Coliform

      All water recycled for reuse authorized under this permit must meet the total coliform limits specified below (at either the Producer's wastewater treatment plant or, if necessary, after additional treatment at a Distributor's plant.

4. **Secondary - 23 Recycled Water (Restricted Use)**

   Secondary-23 recycled water shall meet the following total coliform limit prior to delivery for reuse purposes:

   a. **Total coliform**

      After adequate contact with disinfectant the number of total coliform organisms shall not exceed: (a) a median value of 23 MPN/100ml as determined from the bacteriological results of the last seven days for which sample analyses have been completed, and (b) a maximum value of 240 MPN/100ml in more than one sample in any 30 day period.

   b. **Reuse Applications:**

      Secondary recycled water may be used where the public has restricted access or exposure. See Attachment A for a list of reuse applications.

5. **Secondary–2.2 Recycled Water**

   Secondary–2.2 recycled water shall meet the following total coliform limit prior to delivery for reuse purposes:

   a. **Total coliform**

      After adequate contact with disinfectant the number of total coliform organisms shall not exceed (a) a median value of 2.2 MPN/100ml as

determined from the bacteriological results of the last seven days for which sample analyses have been completed, and (b) a maximum value of 23 MPN/100ml in more than one sample in any 30 day period.

b. **Reuse Applications:**

See Attachment A for reuse applications.

6. **Tertiary Recycled Water**

Tertiary recycled water shall be coagulated (except as identified in Part C below), and filtered, and meet the following total coliform, disinfection process and turbidity limits prior to delivery for reuse purposes:

a. **Total coliform**

After adequate contact with disinfectant the number of total coliform organisms shall not exceed: (1) a median value of 2.2 MPN/100ml as determined from the bacteriological results of the last seven days for which sample analyses have been completed, and (2) a maximum value of 23 MPN/100ml in more than one sample in any 30 day period. No sample shall exceed a total colform value of 240 MPN/100 ml.

b. **Disinfection Process**

1) A chlorine disinfection process that provides a CT (chlorine concentration times modal contact time) value of not less than 300 milligram-minutes per liter at all times with a *modal contact time* of at least 90 minutes, based on peak daily design flow (or an equivalent combination of chlorine concentration and contact time subject to Executive Officer approval); or

2) A disinfection process that, when combined with the filtration process, has been demonstrated to reduce the concentration of plaque-forming units of F-specific bacteriophage MS-2, or polio virus, per unit volume of water in the wastewater to one hundred thousandths (1/100,000) of the initial concentration in the filter influent throughout the range of qualities of wastewater that will occur during the recycled water treatment process. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration. The above demonstration must be approved by the DHS and the Executive Officer.

c. **Turbidity**

The turbidity of filtered recycled water shall not exceed any of the following:

1) 2 NTU daily average, 5 NTU more than 5 percent of the time, or 10 NTU at any time.

Coagulation need not be used as part of the treatment process provided the turbidity of the influent to the filters does not exceed 5 NTU more than 5 percent of the time.

d. **Reuse Applications:**

See Attachment A for reuse applications.

7. **Recycled Water Storage Limitations**

a. Any storage facility containing recycled water for reuse applications shall be managed in a manner to control odor or nuisance conditions. Should such problems develop, a management plan shall be devised and implemented to monitor, correct, and control future occurrences.

b. All wastewater storage ponds shall be adequately protected from erosion, washout and flooding from a 24-hour rainfall event having a predicted frequency of once in 100 years.

C. REUSE PROGRAM PROVISIONS

Producer Responsibilities

1. Producers wishing to be covered under this General Water Reuse Order shall submit a **Notice of Intent (NOI)** in accordance with Attachment B. Producers who are currently covered by an individual order, and do not submit an NOI, will continue to be covered by their individual orders and Order 91-042.

   Producer responsibilities in this section may be required of or undertaken by the Distributor as appropriate. In such cases the Distributor shall submit the NOI or the Producer shall show evidence of an agreement with the Distributor to undertake the responsibilities. In any cases respective responsibilities shall be spelled out in the joint agreement.

2. This Order becomes effective upon written approval of the **NOI** report by the Executive Officer and supersedes any current Water Reuse Requirements. The Regional Board will coordinate with DHS to obtain their concurrence of NOI reports prior to approval by the Executive Officer.

3. Under this Order a Producer may authorize specific reuse projects on a case-by-case basis in accordance with a Producer designed permit-based program for Users of recycled water. The Producer shall develop administrative procedures specifying how the permit based system for regulating users will be implemented and how compliance with the DHS reuse criteria will be assured. Upon Board approval of the Producer's program, **which shall accompany the NOI**, the Producer may authorize specific reuse projects on a case-by-case basis once the administrative elements of the water reuse program are in place.

4. The Producer shall establish and enforce rules and regulations for recycled water uses governing the design and construction of reclaimed water use facilities and the use of recycled water in accordance with DHS reuse criteria.

5. The Producer or Distributor (as appropriate) shall submit to DHS for review and approval documentation of the proper installation of Title 22 mandated backflow prevention devices and the absence of cross connections prior to commencing use of recycled water at sites meeting any of the following criteria:

a. Where the proposed use is a new use that is not covered in the DHS reuse criteria.

b. Dual plumbed systems (per Title 22 definition – within building plumbing and residential irrigation).

c. Large, high volume usage, or otherwise complex sites as defined in the Producer's Water Reuse Program (pursuant to Provision C.3.).

6. The Producer will be responsible for ensuring that recycled water meets the quality standards of this Order and for the operation and maintenance of major transport facilities and associated appurtenances. The Producer shall hold the Users responsible for the application and use of recycled water on their designated use areas and associated operations and maintence in accordance with all applicable DHS reuse criteria requirements.

7. The Producer shall conduct periodic inspections of the User's facilities and operations to monitor and assure compliance with conditions of the Producer's permit and this Order. The Producer shall take whatever actions are necessary, including the termination of delivery of recycled water to the User, to correct any User violations.

8. The Producer shall comply with all applicable items of the attached Standard Provisions and Reporting Requirements, or any amendments thereafter.

9. When additional site specific requirements and/or Provisions are applied to a reuse project as a condition of adoption of this Order, they shall be identified in the NOI and appended to this Order as Attachment E.

Joint Responsibilities

10. Each User shall demonstrate to the Producer the means by which all applicable use area requirements, as specified in DHS reuse criteria, will be complied with.

11. If someone other than the User (User's Agent) is responsible for applying the recycled water, e.g. a truck hauler, then the User shall inform them of these requirements in a written permit or other suitable manner. A User's Agent shall

    fill out a Recycled Water Release Form or equivalent traking documentation when receiving recycled water from the Producer.

12. A copy of the Water Use Permit must be provided to the Users by the Producer. The Users must have these available at all times for inspection by Regional Board staff, the Producer, or State/County Health Officers.

13. The Producer shall comply with the self–monitoring program as adopted by the Board and as may be amended by the Executive Officer. The Producer is responsible for collecting reports from Users. Users are responsible for submitting on–site observation reports and use data to the Producer, who will compile and file an annual report with the Regional Board. The Producer, at its discretion, may assume the User's responsibility for on–site observation reports and use data.

14. The Producer shall assure that cross-connections between potable water and nonpotable water systems have not been created and that backflow prevention devices are in proper working order by conducting or requiring User testing, in

accordance with DHS reuse criteria and CCR Title 22 Section 7605. Reports of testing and maintence shall be maintained by the Producer.

15. The Producer and Users shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the Producer or Users, respectively, to achieve compliance with the water reuse requirements.

16. The Producer, Distributor and Users should receive appropriate employee training to assure proper operation of recycling facilities, worker protection, and compliance with this Order. In accordance with CCR Title 17, Section 7586, each Producer, Distributor and User shall designate a Recycled Water Supervisor responsible for compliance with a Producer's permit conditions.

17. The Producer and Users shall assure that all above ground equipment, including pumps, piping, storage reservoir, and valves, etc. which may at any time contain recycled water shall be adequately and clearly identified with appropriate warning signs. The Producer and Users shall make all necessary provisions to inform the public that the liquid being distributed is recycled water and is unfit for human consumption.

D. GENERAL PROVISIONS

1. The Producer will document compliance with all conditions of this Order and of water reuse criteria in Title 17 and Title 22 of the California Code of Regulations.

2. Current Water Reclamation Reuse Requirements that are superseded by this Order pursuant to Provisions C. 1 and 2, will be rescinded under a separate Order(s).

3. This Order provides authorization for tanker-truck distribution of recycled water, and supercedes Order No. 91-042 for those Producers pursuant to C.2. Order 91-042 stays in effect for those not under the General Order.

4. Each Producer should strive to investigate, as resources permit, all possible potential reuse strategies such as groundwater recharge, surface water augmentation, and dual water supply for new construction, in order to move towards achieving a goal of reusing the maximum possible amount of recycled water.

5. When directed by the Regional Board, in groundwater basins that are a significant source of drinking water where there is a likely potential for groundwater degradation from salt buildup from extensive water recycling irrigation, a Producer shall prepare and submit a Salt Management Program, acceptable to the Executive Officer, to insure that the overall impact of permitted water recycling projects does not degrade groundwater resources.

6. If any condition or criteria set forth in this Order conflicts or is inconsistent with any requirement set forth in any State regulation, the more stringent condition or criterion shall apply.

7. Regional Board staff will conduct an annual inspection/audit of each Producer's water reuse program and conduct periodic spot field inspections on reuse projects.

8. The Producer, User/Distributor shall permit the Board or its authorized representatives, in accordance with Section 13267(c) of the California Water Code:

a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;

b. Access to and copy of, at reasonable times, any records that must be kept under the conditions of this Order;

c. Inspection, at reasonable times, of any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

d. To sample or monitor, at reasonable times, for the purpose of assuring compliance with this Order.

9. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

a. Violation of any term or condition contained in this Order;

b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized reuse;

d. Endangerment to public health or environment that can only be regulated to acceptable levels by Order modification or termination.

10. The Executive Officer may add additional Producers at any time, pursuant to conditions specified in Provisions C. 1 and C. 2.

11. The Executive Officer upon a finding of non-compliance with this Order, may revoke a Producer's authority to issue Water Reuse Permits.

12. The Board will review this Order periodically and may revise the requirements as deemed necessary.

I, Loretta K. Barsamian, 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, San Francisco Bay Region on January 17, 1996.

Loretta K. Barsamian

Loretta K. Barsamian
Executive Office

Attachments:
A. Summary Chart of Recycled Water Use
B. Notice of Intent (NOI) – General Instructions
C. Self-Monitoring Program
D. Standard Provisions & Reporting Requirements for Water Reuse Orders
E. Additional Site Specific Requirements
F. Definition of Terms
G. Summary State Water Reuse Policies & Regs
H. Regulatory Agency Contacts

[Originator/RJC] [Reviewers BDA/RHW/TCW]
File No.: 2107.00

ATTACHMENT A

SUMMARY CHART OF RECYCLED WATER USE

Suitable Uses* of Recycled Water

Use of Recycled Water	Treatment Level		
	Tertiary Recycled Water	Secondary-2.2 Recycled Water	Secondary-23 Recycled Water
Irrigation of:			
Food crops–contact with edible portion of crop	Allowed	Not Allowed	Not Allowed
Parks and playgrounds	Allowed	Not Allowed	Not Allowed
School yards	Allowed	Not Allowed	Not Allowed
Residential landscaping	Allowed	Not Allowed	Not Allowed
Unrestricted access golf courses	Allowed	Not Allowed	Not Allowed
Any other irrigation uses not prohib. by other prov. of CCR	Allowed	Not Allowed	Not Allowed
Food crops–edible portion above gd/not in contact w/ recl. Water	Allowed	Allowed	Not Allowed
Cemetaries	Allowed	Allowed	Allowed
Freeway landscaping	Allowed	Allowed	Allowed
Restricted access golf courses	Allowed	Allowed	Allowed
Ornamental nursery stock and sod farms	Allowed	Allowed	Allowed
Pasture for milk animals	Allowed	Allowed	Allowed
Any nonedible vegetation with access control to prevent use as if it were a park, playground or school yard.	Allowed	Allowed	Allowed
Orchards w/ no contact between edible portion and recl. water.	Allowed	Allowed	Allowed
Vineyards w/ no contact between edible portion and recl. water	Allowed	Allowed	Allowed
Non food-bearing trees not irrigated <14 days of harvest	Allowed	Allowed	Allowed
Fodder crops (e.g. alfalfa) and fiber crops (e.g. cotton)	Allowed	Allowed	Allowed
Seed crops not eaten by humans	Allowed	Allowed	Allowed
Food crops that undergo commercial pathogen-destroying processing before human consumption (e.g. sugar beets)	Allowed	Allowed	Allowed
Supply for impoundments:			
Nonrestricted rec. impound., w/ suppl. monit. for path. org.	Allowed**	Not Allowed	Not Allowed
Restricted rec. impound. and fish hatcheries	Allowed	Allowed	Not Allowed
Landscape impound. w/o decorative fountains	Allowed	Allowed	Allowed
Supply for cooling or air cond.:			
Ind. or comm. cooling or air cond. with cooling tower, evaporative condenser, or spraying that creates a mist	Allowed***	Not Allowed	Not Allowed
Ind. or comm. cooling or air cond. w/o cooling tower, evaporative condenser, or spraying that creates a mist	Allowed	Allowed	Allowed
Other uses:			
Flushing toilets and urinals	Allowed	Not Allowed	Not Allowed
Priming drain traps	Allowed	Not Allowed	Not Allowed
Industrial process water that may contact workers	Allowed	Not Allowed	Not Allowed
Structural fire fighting	Allowed	Not Allowed	Not Allowed
Decorative fountains	Allowed	Not Allowed	Not Allowed
Commercial laundries	Allowed	Not Allowed	Not Allowed
Consol. of backfill material around potable water pipelines	Allowed	Not Allowed	Not Allowed
Artificial snow making for commercial outdoor uses	Allowed	Not Allowed	Not Allowed
Industrial boiler feed	Allowed	Allowed	Allowed
Nonstructural fire fighting	Allowed	Allowed	Allowed
Backfill consol. around nonpotable piping	Allowed	Allowed	Allowed
Soil compaction	Allowed	Allowed	Allowed
Mixing concrete	Allowed	Allowed	Allowed
Dust control on roads and streets	Allowed	Allowed	Allowed
Cleaning roads, sidewalks and outdoor work areas	Allowed	Allowed	Allowed
Flushing sanitary sewers	Allowed	Allowed	Allowed

* Refer to the full text of the latest version of Title-22

** With "conventional tertiary treatment" additional monitoring may be necessary

*** Drift eliminators and/or biocides are required if public or employees can be exposed to mist

ATTACHMENT B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCICO BAY REGION

WATER REUSE

NOTICE OF INTENT (NOI) -- GENERAL INSTRUCTIONS

Who May Apply

This Order is intended to serve as a regional-wide general permit for publicly owned wastewater agencies that recycle wastewater. It is intended to replace individual reuse Orders and applies to the following:

a. Producers of secondary and tertiary recycled water that meets Title 22 criteria and is reused for a direct beneficial use or a controlled use that would not otherwise occur.

b. A major Distributor of recycled water: one who receives wastewater from a municipal facility, further treats it to meet Title 22 criteria for its intended use(s) and distributes it to users. In some cases, a written agreement (i.e. Joint Powers Agreement) between a Producer and a Distributor may be used in lieu of issuing this Order to the Distributor.

c. Wastewater agencies that do not fall into categories a. and b. above but apply wastewater to land through irrigation for the primary pupose of disposal – to meet NPDES restrictions for receiving water discharge – but operate in accordance with these requirements, may also apply to be regulated under this Order.

Producers that havereceived an individual Order and previously submitted information equivalent to that required in the Water Reuse Program Report below, may submit a letter as a Notice of Intent without duplicating the material.

Where to Apply

The NOI should be mailed to the Regional Water Quality Control Board at the following address:

Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Ste 500
Oakland, CA 94612
Attn: Watershed Protection Division

A copy of the NOI shall also be mailed to the California Department of Health at the following address:

California Department of Health Services
Drinking Water Field Operations Branch
North Coastal Region
2151 Berkeley Way
Berkeley, CA 94704

When to Apply

An applicant should file the NOI within 120 days of the adoption of this Order for existing projects and/or NEW projects to start within 180 days. For subsequent projects, a supplemental or initial NOI (if not filed before) should be filed 60 days prior to project start.

What to File

The NOI shall include a **Water Reuse Progam** technical report, containing the following as a minimum:

SECTION I – FACILITY /WASTE TREATMENT INFORMATION

Description of existing and/or proposed treatment, storage and transmission facilities for water reuse (much of this may be from current Orders/reports, but should be updated). This should include the type and level of wastewater treatment for reuse applications and estimated seasonal flows of recycled water.

SECTION II – REUSE APPLICATIONS

Describe the types of applications recycled water will be used for. This should include:

a) Agency owned/controlled uses (e.g. irrigation type/acreage/locations)

b) Contracted User applications

   1) List of Users receiving or proposing to receive recycled water (including a list of uses of recycled water for each user)

   2) The estimated amount of recycled water flows to each User.

   3) Descriptions/maps of designated use areas.

SECTION III – DESCRIPTION OF WATER REUSE PERMIT PROGRAM

The Agency's water reuse program should be fully described as follows:

a) Copy of agency's authority and proposed rules and/or regulations
b) Design and implementation of program
c) Cross connection testing responsibilities and procedures
d) Self-monitoring program
e) User Inspection Program
f) O&M program
g) Compliance program
h) Employee (user) Training
i) Emergency procedures & notification

SECTION IV – ADDITIONAL SITE SPECIFIC CONDITIONS

If existing Orders have additional site specific conditions and/or restrictions not covered in the General Order, they should be described here.

SECTION V – REUSE PROGRAM ADMINISTRATION

Describe organization and responsibilities of pertinent personnel involved in the water reuse program. Provide the name(s), title(s) and phone number(s) of contact person(s) who are charged with operation/oversight of the water reuse program.

ATTACHMENT C

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

Order No. 96–011

A. GENERAL

Reporting responsibilities of water recycling agencies are specified in Sections 13255(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by water recyclers, also referred to as the self-monitoring program, are:

1) To document compliance with water quality requirements and prohibitions established by this Regional Board; and

2) To facilitate self-policing by the water recyclers.

B. RECYCLED WATER MONITORING

A Producer shall develop and implement a water reuse monitoring program. When the User(s) is other than the Producer, delegation of responsibilities must be clearly spelled out and included in the Producer's Water Use Permits.

Recycled Water Effluent Quality – Producer Program

The Producer's self-monitoring program is applicable during periods when recycled water is in use. The SMP program shall include the observations, sampling, measurements, and analyses prescribed in Table 1.

Description of Sampling and Observation Stations

a. Recycled Water

Station	Description
E-001	Location at the wastewater treatment plant where a representative sample of treated effluent being diverted for reuse can be obtained and total diverted flow can be measured.

Monitoring of Recycled Water Users - Producer/User Program

Self-Monitoring Program

The Producer will set individual user monitoring requirements based on the size, volume used, complexity, etc. of each use area. Producer conducted monitoring, or user self-monitoring if approved by the Producer, shall be conducted at least annually.

All recycled use areas, while recycled water is being used, shall beinspected at a frequency, specified by the Producer's Water Reuse Permit , for the following deficiencies or violations of use:

1. Standard Observations

   a. Evidence of runoff of recycled water from the site (show affected area on a sketch, estimate volume).

   b. Odor of wastewater origin from irrigation site. If present, indicate apparent source, characterization,and direction of travel.

c. Evidence of ponding of recycled water, and evidence of mosquitoes breeding within the irrigation area due to ponded water.

d. Warning signs properly posted to inform public that irrigation or water use is recycled water which is not safe for drinking.

e. Evidence of leaks or breaks in the irrigation system pipelines or tubing.

f. Evidence of broken, or otherwise faulty drip irrigation system emitters or spray irrigation sprinklers.

g. Evidence of overflows, leaks, erosion of dikes, etc. of storage pond(s) or impoundment(s).

All violations shall be followed by a discussion of when and how deficiences were corrected.

2. Description of Sampling and Observation Stations

a. Land Observation Stations

Station	Description
L-1 to L-n	Locations at a sufficient number of points at reuse areas in order to ensure compliance with water reuse requirements.

b. Impoundment Stations

Station	Description
P-1 to P-n	Locations at points along the periphery of each storage, ornamental, golf course, or other pond or impoundment.

Inspection Program

A Producer shall also conduct periodic random inspections of Users to ensure compliance with DHS reuse criteria and the Water Reuse Permit. Inspections shall be performed when recycled water is being used. Any significant repairs or modifications made to the system involving compliance with this Order shall be described in the Annual Report.

C. REPORTING REQUIREMENTS

1. Significant Violation Reporting

Violations of the DHS reuse criteria that impact or threaten to impact public health or water quality shall be reported to the Board by phone within 24 hours, followed by a written report within 15 days describing corrective actions taken.

2. Annual Report to the Regional Board

An annual report for each calender year shall be submitted to the Board by the Producer by March 15 of each year. The report shall contain a statement by the reporting official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

The report shall include:

a. Tabulation of SMP recycled water analyses (see Table 1).

b. A tabular summary of recycled water use by billing period by each User.

c. A list of new authorized recycled water Users, including the name of customers, application, source and projected annual flow to be delivered.

d. A summary of the total daily recycled water delivered by the Producer.

e. Tabulation of User site inspections conducted by the Producer.

f. A summary of effluent violations related to recycled water use, violations found during inspection of reuse sites, corrective actions taken and any changes to, or revoking of User authorizations by the Producer.

In addition there shall be a comprehensive discussion of the progress and results of the water recycling program. The discussion shall also include:

g. An update regarding current and future development of the water recycling program, including planning, design and construction of facilities, preparation of required reports and technical documents and progress toward regulatory approvals.

h. Progress and evaluation of any special studies or projects being undertaken related to the program.

I, Loretta Barsamian, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program is effective on the date shown below and may be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Producers. Revisions to the SMP will be authorized in writing by the Executive Officer.

Loretta K. Barsamian
Loretta K. Barsamian
Executive Officer

Attachment:
Table 1 – Producer Schedule for Sampling, Measurements, and Analyses

File No. 2107.00

January 17, 1996

Table 1: Producer's Schedule Sampling & Analyses

	E-001		All L	All P
TYPE OF SAMPLE	Grab	Cont.	Obs.	Obs.
Flow Rate (gallons/day)		D	D*	D*
Total Coliform (MPN/100ml)	D**/#			
Turbidity (NTU)		D**/#		
Dissolved Oxygen (mg/l)	3/W**			
Dis. Sulfides (mg/l) (if DO <1mg/l)	3/W**			
Appl. Stand. Observations			A***	A***

LEGEND FOR TABLE 1

Type of Sample

Grab = Instantaneous grab sample
Cont. = Continuous monitoring (recorder)
Obs. = Observation

Sampling Frequency

D = Daily
3/W = Three times per week
A = Annually

* Records of recycled water use at each site may be compiled from billing period readings (divided by number of days to obtain daily flow) and submitted with the annual report.

** Equivalent routine effluent (NPDES/WDR) monitoring data collected on days and during times (grab samples) recycled water is being produced can be submitted in fulfillment of these requirements.

*** User sites to be inspected a minimum of annually for "Applicable Standard Observations" based on the size and complexity of each site in accordance with the Producer's Water Reuse Program.

\# Unless current NPDES or WDR sampling frequency is less. Turbidity would apply to tertiary water only and is based on a 24-hour composite sample.

ATTACHMENT D

STANDARD PROVISIONS
&
REPORTING REQUIREMENTS

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

January 1996

STANDARD PROVISIONS AND REPORTING REQUIREMENTS

for

WATER REUSE ORDERS

A. GENERAL PROVISIONS

1. Duty to Comply

   a. A water recycler must comply with all of the conditions of this Order. Any Order noncompliance constitutes a violation of the Porter-Cologne Water Quality Control Act and/or Basin Plan and is subject to enforcement action.

   b. The filing of a request by the Producer for an Order modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition.

2. Duty to Mitigate

   The Producer shall take all reasonable steps to minimize or prevent any discharge in violation of this Order which has a reasonable likelihood of adversely affecting public health or the environment, including such accelerated or additional monitoring as requested by the Board or Executive Officer to determine the nature and impact of the violation.

3. Property Rights

   This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under federal, state or local laws.

4. Duty to Provide Information

   The Producer shall furnish, within a reasonable time, any information the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Order. The Producer shall also furnish to the Board, upon request, copies of records required to be kept by its Order.

5. Availability

   A copy of this Order shall be maintained at Producer and distributor facilities and be available at all times to operating personnel.

B. TREATMENT RELIABILITY

1. The Producer shall, at all times, properly operate and maintain all facilities and systems of treatment disposal and control (and related appurtenances) which are installed or used by the Producer to achieve compliance with this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. All of these procedures shall be described in an Operation and Maintenance Manual. The Producer shall keep in a state of readiness all systems necessary to achieve compliance with the conditions of this Order. All systems, both those in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the tests and made available to the Board.

2. Recycled water treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Division 4, Chapter 14, Title 23 of the California Code of Regulations. (See Definition E. 4)

C. GENERAL REPORTING REQUIREMENTS

1. Signatory Requirements

a. All reports required by the order and Order and other information requested by the Board shall be signed by a principal owner or operator, or by a duly authorized representative of that person.

Duly authorized representative is one whose:

1) Authorization specifies either an individual or a position having responsibililty for the overall operation of the regulated facility or activity, such as general manager in a partnership, manager, operator of a well or a well field, superintendent, positon of equivalent responsibility, or an individual or positon having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named positon.); and

2) Written authorization is submitted to the Board. If an authorization becomes no longer accurate because a different individual or positon has responsibililty for the overall operation of the facility, a new authorization satisfying the requirements above must be submitted to the Board prior to or together with any reports, information, or applications to be signed by an authorized representative.

b. Certification

All reports signed by a duly authorized representative under Provision C.1.a. shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

2. Should the responsible reporting party discover that it failed to submit any relevant facts or that it submitted incorrect information in any report, it shall promptly submit the missing or correct information.

3. False Reporting

   Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall be subject to enforcement procedures as identified in Section D of these Provisions.

D. ENFORCEMENT

1. The provision contained in this enforcement section shall not act as a limitation on the statutory or regulatory authority of the Board.

2. Any violation of the Order constitutes violation of the California Water Code and regulations adopted thereunder and is the basis for enforcement action, Order termination, Order revocation and reissuance, denial of an application for Order reissuance; or a combination thereof.

3. The Board may impose administrative civil liability, may refer a discharger to the State Attorney General to seek civil monetary penalties, may seek injunctive relief or take other appropriate enforcement action as provided in the California Water Code for violation of Board orders.

ATTACHMENT E

Additional Site Specific Requirements

ATTACHMENT F

DEFINITION OF TERMS

Coagulated Wastewater: Oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated upstream from a filter by the addition of suitable floc-forming chemicals.

Conventional Tertiary Treatment: A treatment chain that utilizes a sedimentation unit process between the coagulation and filtration processes and produces an effluent that meets the definition for disinfected tertiary recycled water.

Disinfected Secondary-23: Adequately disinfected, oxidized wastewater in which the median number of coliform organisms in the effluent does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last seven days for which analyses have been completed, and the number of coliform organisms does not exceed 240 per 100 milliliters in more than one sample in any 30 day period.

Disinfected Secondary-2.3: Adequately disinfected, oxidized wastewater in which the median number of coliform organisms in the effluent does not exceed 2.3 per 100 milliliters, as determined from the bacteriological results of the last seven days for which analyses have been completed, and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample in any 30 day period.

Disinfected Tertiary Adequately disinfected, oxidized, coagulated, clarified, filtered wastewater in which meets the following criteria:

(a) A filtered wastewater which has been disinfected by either:

(1) A chlorine disinfection process that provides a CT (chorine concentration times modal contact time) value of not less than 300 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak daily design flow (or an equivalent combination of chlorine residual concentration and contact time subject to Executive Officer approval); or

2) A disinfection process that, when combined with the filtration process, has been demonstrated to reduce the concentration of plaque-forming units of F-specific bacteriophage MS-2, or polio virus, per unit volume of water in the wastewater to one hundred thousandths (1/100,000) of the initial concentration in the filter influent throughout the range of qualities of wastewater that will occur during the reuse process. A virus that is at least a resistant to disinfection as polio virus may be used fopurposes of the demonstration.

(b) The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed maximum an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

(c) The turbidity of filtered recycled water shall not exceed any of the following:

1) 2 NTU daily average, 5 NTU more than 5 percent of the time, or 10 NTU at any time.

Coagulation need not be used as part of the treatment process provided the turbidity of the influent to the filters does not exceed 5 NTU more than 5 percent of the time.

Disinfected Wastewater: Wastewater in which the pathogenic organisms have been destroyed by chemical, physical or biological means.

Distributor: A municipal or water service agency which receives recycled water from a Producer for the purpose of distribution to users. The Distributor may provide additional treatment to the water, depending upon the intended use.

Dual Plumbed System: A system that utilizes separate piping systems for recycled water and potable water within a facility and where the reclaimed water is used for either of the following purposes:

a) To serve multiple plumbed outlets used by the public within a building.

b) Landscape irrigation at individual residences.

Filtered Wastewater: An oxidized and coagulated wastewater which has been passed through natural undisturbed soils or filter media so that the turbidity does not exceed any of the following:

(a) a daily average of 2 NTU
(b) 5 NTU more than 5 percent of the time
(c) 10 NTU at any time

F-specific bacteriophage MS-2: A strain of a specific type of virus that infects coliform bacteria that is traceable to the American Type Culture Collection (ATCC 15597B11) and is grown on lawns of E. Coli (ATCC 15597).

Landscape Impoundment: A body of water which is used for aesthetic enjoyment or landscape irrigation or which otherwise serves a similar function and is not intended to include public contact.

Modal Contact Time: The amount of time elapsed between the time a tracer, such as salt or dye, is injected into the effluent at the entrance to a chamber and the time that the highest concentration of the tracer is observed in the effluent from the chamber.

Nonrestricted Recreational Impoundment: An impoundment of recycled water, in which no limitations are imposed on body-contact water recreational activities.

NTU (Nephelometric turbidity unit): A measurement of turbidity as determined by the ratio of the intensity of light scattered by the sample to the intensity of incident light using approved laboratory methods.

Oxidized Wastewater: Wastewater in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen.

Producer: The entity which treats domestic wastewater to obtain reclaimed water.

Reclaimed (Recycled) Water: Water which. as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur.

Recycled Water Supervisor: A person designated, by the Producer of recycled water, to discharge the responsibility of the Producer for: (a) acting as the supplier's coordinator and direct contact between the supplier and the owner or manager of the property upon which recycled water will be used; (b) proper operation of the system for transporting/distributing recycled water; (c) providing orientation to personnel involved in transporting/distributing recycled water; (d) implementing and complying with conditions of all Water Reuse Orders/Permits and associated documents relevant to use of recycled water; and (e) monitoring operations at the recycled water use area(s) for prevention of potential hazards.

Restricted access golf course: A golf course where public access is controlled so that areas irrigated with recycled water cannot be used as if they were part of a park, playground, or school yard and where irrigation is conducted only in areas and during periods when the golf course is not being used by golfers.

Restricted Recreational Impoundment: An impoundment of recycled water in which recreation is limited to fishing, boating, and other non-body-contact water recreational activities.

Spray Irrigation: The application of recycled water to crops to maintain vegetation or support growth of vegetation by applying it from sprinklers or orifices in piping. Spray irrigation does not include drip irrigation.

Surface Irrigation: Application of recycled water by means other than spraying such that contact between the edible portion of any food crop and recycled water is prevented (i.e., drip or flood irrigation).

Use Site Area: An area of recycled water use with defined boundries. A **use site area** may contain one or more facilities.

User Supervisor: A person designated, by the owner or manager of the property upon which recycled water will be applied, to discharge the responsibility of the owner or manager of the property for: (a) installation, operation and maintenance of a system that enables recycled water to be used; (b) for prevention of potential hazards; (c) implementing and complying with conditions of all Water Reuse Orders/Permits and associated documents; and
(d) coordination with the cross-connection control program of the supplier of drinking water and the local health/environmental health agency. (A Recycled Water Supervisor and User Supervisor may be one in the same in some instances).

ATTACHMENT G

STATE WATER REUSE POLICIES/REGULATIONS

California Water Code Summaries

California Water Code Section 13512 declares it is the intention of the Legislature that the State undertake all possible steps to encourage development of water reuse facilities so that reclaimed water may be made available to help meet the growing water demands of the State.

Section 13510 states that the people of the state have a primary interest in the development of facilities to reuse water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the State.

Section 13511 states that a substantial portion of the future water requirements of this state may be economically met by beneficial use of reclaimed water. Use of recycled water constitutes the development of "new basic water supplies".

Section 13550 states that the use of potable domestic water for non potable uses, including, but not limited to, cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses, is a waste or an unreasonable use of the water, if reclaimed water of adequate quality is available at reasonable cost.

Section 13551 states that a person or public agency shall not use water from any source of quality suitable for potable domestic use for non potable uses, including cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses, if suitable reclaimed water is available as provided in Section 13550.

Section 13241 states that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. Factors that the Board must consider when establishing or amending water quality objectives include, but are not limited to:

(a) Past, present, and probable future beneficial uses of water.
(b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
(c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
(d) Economic considerations.
(e) The need for developing housing within the region.
(f) The need to develop and use recycled water.

Regional Board Basin Plan – Reclamation Policy Summaries

Policy Statement

To date in this region, disposal of most municipal and industrial wastewater has primarily involved discharges into the Region's watersheds and the San Francisco estuary system. With growing awareness of the impacts of toxic discharges, the drought, future urbanization, and growth on the local aquatic habitat, there is an increasing need to look for other sources of water. Increasingly conservation and reclamation will be needed to deal with these long-term water issues. The Regional Board recognizes that the people of the San Francisco Bay Region are interested in developing the

capacity to conserve and reclaim water to supplement existing water supplies, meet future water requirements, and restore the region's watersheds and estuary system. Disposal of wastewater to inland, estuarine or coastal waters is not considered a permanent solution where the potential exists for conservation and reclamation.

California Water Code states that the State Water Resources Control Board shall take all appropriate proceedings or actions to prevent waste, unreasonable use, or unreasonable methods of use. ....Section 13225(i) mandates that the Regional Board encourage regional planning and action for water quality control.

Source Quality Control

The quality of influent to a reclamation plant affects the quality of effluent production, particularly in those communities that import high-quality surface water from the Sierra Nevada. Reclamation treatment and costs are directly dependent on the quality of influent into the plant. The quality of this influent depends on the quality of the water supply and the quality of the waste discharges to the reclamation plant. Reclamation requires that industrial pretreatment and pollution prevention programs be sufficient to remove toxic constituents. Reclamation also requires adequate monitoring and enforcement. Additionally, maximum recycling and separate treatment of waste by industries should be encouraged where feasible.

Government Coordination

Implementation of reclamation projects requires the involvement, approval, and support of a number of agencies, including state and local health departments, the Regional Board, local POTWs and water districts, and land use planning agencies. Interagency coordination must be a priority of all parties involved in reclamation. Failure to coordinate activities can result in the inability to carry out reclamation projects in a timely, consistent, and cost-effective manner. The Regional Board seeks cooperation and participation of professionals from the water reclamation industry and the water, health, and regulatory agencies to ensure the development of criteria that are both attainable and appropriate.

Regional Water Quality Control Board – Water Reuse Permits

If a Regional Water Quality Control Board (Regional Board) determines that it is necessary to protect public health, safety, or welfare, it may prescribe water reclamation *(reuse)* requirements where reclaimed water is used or proposed to be used (Water Code Section 13523). Where regulatory reclamation criteria has been adopted by the Department of Health Services, no person may either reclaim water or use reclaimed water until the Regional Board has either issued reclamationrequirements or waived the necessity for such requirements (Water Code Section 13524). In the process of issuing reclamation requirements, the Regional Board must consult with and consider recommendations of the Department (Water Code Section 13523). Any reclamation requirements which are issued by the Regional Board, whether applicable to the reclaimer or to the user of reclaimed water, must include or be in conformance with any regulatory reclamation criteria adopted by the Department.

Department of Health Services – Title 22 Wastewater Reclamation Criteria

To assure protection of public health where water use is involved, the California Department of Health Services (Department) has been statutorily directed to establish statewide reclamation criteria for the various uses of reclaimed water (Water Code Section 13521). The Department has promulgated regulatory criteria, which are currently set forth in the California Code of Regulations, Title 22, Division 4, Section 60301 et seq. The Department's regulatory criteria include numerical limitations and requirements, treatment method requirements, and provisions and requirements related to sampling and analysis, engineering reports, design, operation, maintenance and reliability of facilities. The Department's regulations also permit the granting of exceptions to reclaimed water quality requirements in some cases, call for a case-by-case review of groundwater recharge projects, and allow use of alternative methods of treatment so long as the alternative methods used are determined by the Department to assure equivalent treatment and reliability. Many of the regulatory requirements related to sampling, analysis, engineering reports, personnel, operation and design are narrative in nature and leave room for discretionary decisions based on the individual situation in each case.

ATTACHMENT H

REGULATORY CONTACTS

REGIONAL WATER QUALITY CONTROL BOARD

Surface Water Protection Division
2101 Webster Street, Ste 500
Oakland, CA 94612
Fax (510) 286–1380 or (510) 286–1495

General Water Reuse Order Coordinator

Questions/suggestions regarding this Order:

Richard J. Condit
Senior Environmental Specialist
Watershed Division
(510) 286–0456

General information/policy for waste discharge requirement:

Division Chief:
Surface Water Management Division
Dr. Teng-chung Wu
(510) 286–0899

Water Reuse Facility Contacts – Site Specific Contacts

Refer to staff Permit/ County Area Engineer responsible for your NPDES/WDR facility

Section Managers (Supervise permit engineers)

North Bay Section (Marin, Sonoma,Napa, Solano & Contra Costa)
Section Leader:
Greg Walker
(510) 286-4213

South Bay Section (Alameda, Santa Clara, San Mateo, San Francisco)
Section Leader
John Wolfenden
(510) 286-0689

CALIFORNIA DEPARTMENT OF HEALTH SERVICES (Title 22/Title 17)

Drinking Water Field Operations Branch
North Coast Region
2151 Berkeley Way
Berkeley, CA 94704
(510) 540-2158