CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO. 1
TO
ORDER NO. 97- 03

AN ADDENDUM TO ADD THE SOLANA BEACH HYDROLOGIC AREA
TO
WASTE DISCHARGE AND WATER RECYCLING REQUIREMENTS
FOR THE PRODUCTION AND PURVEYANCE
OF RECYCLED WATER

FOR THE
CITY OF SAN DIEGO
NORTH CITY WATER RECLAMATION PLANT
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (Regional Board) finds that:

1. On January 9, 1997, this Regional Board adopted Order No. 97-03, Waste Discharge and Water Recycling Requirements for the Production and Purveyance of Recycled Water for the City of San Diego North City Water Reclamation Plant (NCWRP), authorizing purveyance of recycled water to the following hydrologic areas (HA): Miramar Reservoir HA (906.1); the western portion of the Poway HA (906.2); Scripps HA (906.3); Miramar HA (906.4); Tecolote HA (906.5); and Mission San Diego HA (907.11).

2. By letter dated January 24, 2003, the City requested modification of Order No. 97-03 to allow purveyance of recycled water from the NCWRP to additional hydrologic areas to be serviced after completion of its Black Mountain Ranch Phase 1 Project. The City has applied to the State Water Resources Control Board's Water Recycling Construction Program for grant funds for the project. This addendum is a prerequisite to final disbursement of those funds. As part of the Black Mountain Ranch Phase 1 Project, the City plans to distribute recycled water produced at the NCWRP to an additional hydrologic area, Solana Beach HA (905.10).

3. The requirements contained in Order No. 97-03 as modified by this Addendum are consistent with the policies and the implementation programs described in the Water Quality Control Plan for the San Diego Basin (9) because the use of the tertiary treated wastewater from NCWRP in the Solana Beach HA will not cause or contribute to exceedances of the water quality objectives of the Solana Beach HA.

4. By letter dated November 21, 2002, the City submitted a copy of its Updated Water Reclamation Master Plan dated December 2000. The document provides an updated review of the City's existing recycled water program and plans for its expansion to meet the City's beneficial reuse goals. According to the City, an Environmental Impact Report was prepared and certified as compliant with the California Environmental Quality Act (CEQA) by the City Council in November 2002.

5. Olivenhain Municipal Water District (OMWD) has expressed interest in purchasing recycled water produced at the NCWRP for purveyance within the Solana Beach HA. OMWD is currently authorized to distribute recycled water produced at 4-S Ranch Water Pollution Control Facility to the Solana Beach HA. OMWD must obtain revised waste discharge and water recycling requirements from the Regional Board prior to the distribution and use of recycled water produced at the NCWRP to the Solana Beach HA.

6. The issuance of waste discharge requirements for this discharge is exempt from the requirement of preparation of environmental documents under the California Environmental Quality Act [Public Resources Code, Division 13, Chapter 3, Section 21000 *et seq.*] in accordance with Section 13389 of the California Water Code.

7. According to Section 13383(e) of the California Water Code, the Regional Board may, upon application by any affected person, or on its own motion, review and revise waste discharge requirements.

8. The Regional Board has notified all interested parties of its intent to modify Order No. 97-03.

9. The Regional Board in a public hearing on June 11, 2003 heard and considered all comments pertaining to the modification of Order No. 97-03.

IT IS HEREBY ORDERED THAT Order No. 97-03 be modified as follows:

1. The following beneficial uses of ground water in the the Solana Beach HA (905.10) are added to Finding No. 7 of Order No. 97-03:

BENEFICIAL USES IDENTIFIED IN THE BASIN PLAN								
HYDROLOGIC AREAS AND SUBAREAS		FOOTNOTES	MUN	AGR	IND	PROC	FRSH	GWR
5.10	Solana Beach HA	B	•	•	•			

HA = Hydrologic Area
• = Existing Beneficial Use

Footnotes:

B These beneficial uses do not apply westerly of the easterly boundary of the right-of-way of Interstate Highway 5 and this area is excepted from the sources of drinking water policy. The beneficial uses for the remainder of the hydrologic area are as shown.

2. The following ground water quality objectives for the Solana Beach HA (905.10) are added to Finding No. 8 of Order No. 97-03:

BASIN PLAN GROUNDWATER WATER QUALITY OBJECTIVES														
(Concentrations not to be exceeded more than 10% of the time during any one year period)														
(mg/L or as noted)														
HYDROLOGIC AREAS AND SUBAREAS		FOOTNOTE	TDS	CL	SO4	% Na	N03	Fe	Mn	MBAS	B	TURB NTU	COL-OR UNITS	F
5.00	San Dieguito Hydrologic Unit													
5.10	Solana Beach HA	A	1500 F	500 F	500 F	60	45 F	0.85 F	0.15 F	0.5	0.75 F	5	15	1.0

Footnotes:

A The water quality objectives do not apply westerly of the easterly boundary of Interstate Highway 5. The objectives for the remainder of the hydrologic area are as shown.

F Detailed salt balance studies are recommended for this area to determine limiting mineral concentration levels for discharge. On the basis of existing data, the tabulated objectives would probably be maintained in most areas. Upon completion of the salt balance studies, significant water quality objective revisions maybe be necessary. In the interim period of time, projects of ground water recharge with water quality inferior to the tabulated numerical values may be permitted following individual review and approval by the Regional Board if such projects do not degrade existing ground water quality to the aquifers affected by the recharge.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Addendum adopted by the California Regional Water Quality Control Board, San Diego Region on June 11, 2003.

JOHN H. ROBERTUS
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 97-03
WASTE DISCHARGE AND WATER RECYCLING REQUIREMENTS
FOR THE PRODUCTION AND PURVEYANCE
OF RECYCLED WATER

FOR

CITY OF SAN DIEGO
NORTH CITY WATER RECLAMATION PLANT
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. On June 3, 1996, the City of San Diego submitted a master recycled water permit application for the City's North City Water Reclamation Plant and Regional Reclaimed Water Distribution System. Additional information was submitted by the City on July 8, 1996 to complete the application.

2. The North City Water Reclamation Plant (NCWRP) is in the Miramar Hydrologic Subarea 906.40, located north of Miramar Road, west of Eastgate Mall, and east of Interstate 805. First phase treatment facilities, scheduled to go on line in December 1996, will be capable of handling peak inflows of 60 million gallons per day (mgd) and average daily inflows of 30 mgd. Treatment facilities include influent screening, grit removal, primary sedimentation, flow equalization, biological treatment with the air-activated sludge process and an anoxic selector zone (which provides partial denitrification), secondary clarification; and tertiary treatment consisting of coagulations, filtration and chlorination with sodium hypochlorite. Phase two of this project will increase the peak capacity of the treatment plant to 90 mgd, producing 45 mgd of recycled water at some point in the future.

3. The City plans to distribute recycled water produced at the NCWRP to the following hydrologic areas (HA): Miramar Reservoir HA (906.1); the western portion of the Poway HA (906.2); Scripps HA (906.3); Miramar HA (906.4); Tecolote HA (906.5); and Mission San Diego HA (907.11). The City plans to provide recycled water to qualified customers in these areas for a range of potential uses, including the following: landscape irrigation, agricultural irrigation, industrial process, construction, landscape impoundments or other uses.

4. The City of San Diego provided the following information regarding the estimated quality of recycled water produced at the NCWRP.

Projected Tertiary Recycled Water Quality Mineral Constituents (mg/l) North City Water Reclamation Plant	
Constituent	
Total Dissolved Solids	950 - 1350
Chloride	200 - 350
Sodium	200 - 250
Sulfate	200 - 250
Calcium	70 - 80
Magnesium	30 - 50
Boron	0.4 - 0.7
Percent Sodium	38% - 45%

5. The proposed City of San Diego NCWRP water reclamation program will make use of recycled waters that would otherwise be discharged to the Point Loma ocean outfall. The program also reduces the City's need for imported water.

6. The Board, acting in accord with Section 13244 of the California Water Code, adopted the Water Quality Control Plan for the San Diego Basin (9), (hereinafter Basin Plan) on September 8, 1994. The Basin Plan was subsequently approved by the State Water Resources Control Board (SWRCB) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Board and approved by the SWRCB. The Basin Plan contains beneficial uses and water quality objectives. The requirements of this Order are consistent with the Basin Plan.

7. The Basin Plan established the following beneficial uses of ground water in the Penasquitos Hydrologic Unit (HU) (906.00), the Miramar Reservoir Hydrologic Area (HA) (906.10), the Poway HA (906.20), the Scripps HA (906.30), the Miramar HA (906.40), the Tecolote HA (906.50); and the Mission San Diego HSA (907.11):

BENEFICIAL USES IDENTIFIED IN THE BASIN PLAN

HYDROLOGIC AREAS AND SUBAREAS		FOOT-NOTES	MUN	AGR	IND	PROC	FRSH	GWR
6.00	Penasquitos HU							
6.10	Miramar Reservoir HA	A,B	•	•	•			
6.20	Poway HA		•	•	o			
6.30	Scripps HA		+					
6.40	Miramar HA	C	+		o			
6.50	Tecolote HA		+					
7.11	Mission San Diego HSA	C	o	•	•	•		

HU = Hydrologic Unit
HA = Hydrologic Area
HSA = Hydrologic Subarea

Definitions:

• = Existing Beneficial Use
o = Potential Beneficial Use
+ = Excepted from Municipal supply as a Beneficial Use

Footnotes:

A These beneficial uses do not apply to all lands which drain to Los Penasquitos Canyon from 1.5 miles west of Interstate Highway 15 and this area is excepted from the sources of drinking water policy. The beneficial uses for the remainder of the hydrologic area are as shown.

B These beneficial uses do not apply westerly of the easterly boundary of the right-of-way of Interstate Highway 5 and this area is excepted from the sources of drinking water policy. The beneficial uses for the remainder of the hydrologic area are as shown.

C These beneficial uses do not apply west of Interstate Highway 15. The beneficial uses for the remainder of the hydrologic area are as shown.

8. The Basin Plan established the following ground water quality objectives for the Penasquitos Hydrologic Unit (HU) (906.00), the Miramar Reservoir Hydrologic Area (HA) (906.10), the Poway HA (906.20), the Scripps HA (906.30), the Miramar HA (906.40), the Tecolote HA (906.50); and the Mission San Diego HSA (907.11):

BASIN PLAN GROUNDWATER WATER QUALITY OBJECTIVES

(Concentrations not to be exceeded more than 10% of the time during any one year period)

(mg/L or as noted)

HYDROLOGIC AREAS AND SUBAREAS		FOO-TNO-TE	TDS	CL	SO_4	% Na	NO_3	Fe	Mn	MBAS	B	TURB NTU	COL-OR UNITS	F
6.00	Penasquitos Hydrologic Unit													
6.10	Miramar Reservoir	A,B,E	1200	500	500	60	10	0.3	0.05	0.5	0.75	5	15	1.0
6.20	Eastern Portion of Poway HA	E,D	750	300	300	60	10	0.3	0.05	0.5	0.75	5	15	1.0
6.20	Western Portion of Poway HA	D,E	1000	300	300	60	10	0.3	0.05	0.5	0.75	5	15	1.0
6.30	Scripps HA	Water Quality objectives do not apply												
6.40	Miramar HA	C,E	750	300	300	60	10	0.3	0.05	0.5	0.75	5	15	1.0
6.50	Tecolote HA	Water Quality objectives do not apply												
7.11	Mission San Diego HSA	A,E	3000 F	800 F	600 F	60	45 F	0.3 F	0.05 F	0.5	2.0 F	5	15	1.0

HU = Hydrologic Unit
HA = Hydrologic Area
HSA = Hydrologic Subarea

Footnotes:

A The water quality objectives do not apply westerly of the easterly boundary of Interstate Highway 5. The objectives for the remainder of the hydrologic area (subarea) are as shown.

B The water quality objectives do not apply to all lands which drain to Los Penasquitos Canyon from 1.5 miles west of Interstate Highway 15. The objectives for the remainder of the hydrologic area are as shown.

C The water quality objectives do not apply west of Interstate Highway 15. The objectives for the remainder of the hydrologic area are as shown.

D The eastern portion of the Poway HA is that area east of the San Diego County Water Authority (SDCWA) First Aqueduct, the western portion is that area of the Poway HA that lies west of the SDCWA First Aquedcut.

E Ground waters shall not contain odors in concentrations in excess of the numerical objectives described above.

F Detailed salt balance studies are recommended for this area to determine limiting mineral concentration levels for discharge. On the basis of existing data, the tabulated objectives would probably be maintained in most areas. Upon completion of the salt balance studies, significant water quality objective revisions maybe be necessary. In the interim period of time, projects of ground water recharge with water quality inferior to the tabulated numerical values may be permitted following individual review and approval by the Regional Board if such projects do not degrade existing ground water quality to the aquifers affected by the recharge.

9. The Basin Plan established the following water quality objectives for waters designated for use as domestic or municipal supply.

CHEMICAL	MAXIMUM CONTAMINANT LEVEL, MG/L
Aluminum	1.
Antimony	0.006
Arsenic	0.05
Asbestos	7 MFL*
Barium	1.
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.2
Mercury	0.002
Nickel	0.1
Nitrate (as NO_3)	45.
Nitrate + Nitrite (sum as nitrogen)	10.
Nitrite (as nitrogen)	1.
Selenium	0.05
Thallium	0.002
* MFL = million fibers per liter, MCL for fibers exceeding 10 micro-meters in length	

10. The North City Water Reclamation Plant service area is within the area covered by the City's pretreatment program regulated under Order No. 95-106, *Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the City of San Diego E.W. Blom Point Loma Metropolitan Wastewater Treatment Plant.*

11. Biosolids from the North City Water Reclamation Plant (NCWRP) primary and secondary treatment facilities will be directed back into the Rose Canyon Trunk Sewer for removal at the Point Loma Sewage Treatment Plant and dewatering at Fiesta Island, for the first several months of operation. By mid 1997, the City of San Diego plans to direct NCWRP biosolids to the Metro Biosolids Center (MBC) located north of Highway 52 and east of Interstate 805 in San Diego County. When MBC biosolids dewatering operations commence, biosolids removal operations at Point Loma and dewatering operations at Fiesta Island will terminate.

12. The City of San Diego may sell recycled water to the City of Poway for purveyance within the City of Poway's jurisdiction. Prior to purveyance of recycled water within the City of Poway, the City of Poway must obtain water recycling requirements from this Regional Board.

13. The City of San Diego proposes to comply with the recycled water limits set forth in this Order by serving recycled water only within those zones where the recycled water quality meets the Basin Plan water quality objectives. The City may choose to implement one of the following strategies for reducing recycled water TDS concentrations making the recycled water suitable to use in all of the proposed hydrological subareas.

    a. Blending demineralize repurified water with undemineralized reclaimed water.

    b. Diurnally varying diversions from the Rose Canyon sewer to NCWRP, to take advantage of diurnal differences in North City wastewater TDS concentrations.

    c. Implementing partial demineralization of recycled waters.

14. The City of San Diego submitted recycled water rules and regulations as part of their report of waste discharge. Recycled water rules and regulations govern the design and construction of recycled water use facilities and the use of recycled water.

15. The City of San Diego submitted an Engineering Report as part of their report of waste discharge, describing how their proposed recycled water system will comply with the regulations set forth in Title 22, Chapter 3 *Reclamation Criteria*. Engineering reports also include contingency plans which described how a recycled water producer will assure that no untreated or inadequately treated wastewater is delivered to the use area.

16. The San Diego City Council adopted the findings of a final EIR and certified compliance with the California Environmental Quality Act for the Reclaimed Water Distribution Master Plan on November 20, 1995.

17. In establishing the requirements contained herein the Regional Board considered factors including, but not limited to, the following:

    a) Beneficial uses to be protected and the water quality objectives reasonably required for that purpose,
    b) Other waste discharges,
    c) The need to prevent nuisance,
    d) Past, present, and probable future beneficial uses of the hydrologic subunits under consideration,
    e) Environmental characteristics of the hydrologic subunits under consideration,
    f) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area,
    g) Economic considerations,
    h) The need for additional housing within the region,
    i) Need to develop and use recycled water.

18. The Regional Board has considered all water resource related environmental factors associated with the proposed discharge of waste from the North City Water Reclamation Plant.

19. The Regional Board has notified the City of San Diego and all known interested parties of the intent to prescribe waste discharge requirements for the proposed discharge.

20. The Regional Board in a public meeting heard and considered all comments pertaining to the proposed discharge of waste from the North City Water Reclamation Plant.

IT IS HEREBY ORDERED THAT, the City of San Diego (hereinafter Recycled Water Agency), in order to meet the provisions contained in Division 7 of the California Water Code and Regulations adopted thereunder, shall comply with the following requirements for the discharge and purveyance of recycled water from the North City Water Reclamation Plant.

A. DISCHARGE SPECIFICATIONS

1. Recycled water from the NCWRP shall not contain constituents in excess of the following limitations:

CONSTITUENT	30-day[1] Avg. (mg/l)	Daily[2] Maximum (mg/l)
Biochemical Oxygen Demand (BOD_5 @ 20°C)	30	45
Total Suspended Solids	30	45
pH (within limits shown at all times)	6.0 - 9.0	

1 The 30-day average effluent limitation shall apply to the arithmetic mean of the results of all samples collected during any 30 consecutive calendar day period.

2 The daily maximum effluent limitation shall apply to the results of a single composite or grab sample.

2. Recycled water from the NCWRP shall not contain constituents in excess of the following limitations:

CONSTITUENT	12-Month[1] Avg.(mg/l) until June 1999	12-Month[1] Avg (mg/l) after June 1999
Total Dissolved Solids	1400	1200
Sulfate	350	300
Chloride	350	300
Boron	0.70	0.70
Manganese	0.2	0.05
Adjusted Sodium Adsorption Ratio	6.0	6.0
Iron	1.0	0.3
Aluminum	2.0	1.0
Arsenic	0.2	0.05
Antimony	0.02	0.006
Barium	1.0	1.0
Beryllium	0.01	0.004
Cadmium	0.01	0.005
Chromium	0.05	0.05
Cyanide	0.2	0.2
Mercury	0.002	0.002
Nickel	0.1	0.1
Selenium	0.19	0.05
Thallium	0.007	0.002

1 The 12-month average effluent limitation shall apply to the arithmetic mean of the results of all samples collected during any 12 consecutive calendar month period.

2. Recycled water from the NCWRP shall not contain constituents in excess of the following limitations:

CONSTITUENT	12-Month[1] Avg.(mg/l)	12-Month[1,2] Avg (mg/l)
Total Dissolved Solids	1400	1200
Chloride	350	300
Sulfate	350	300
Boron	0.70	0.70
Fluoride	1.0	1.0
Manganese	0.2	0.05
Adjusted Sodium Adsorption Ratio	6.0	6.0
Iron	1.0	0.3
Aluminum	2.0	1.0
Arsenic	0.2	0.05
Antimony	0.02	0.006
Barium	1.0	1.0
Beryllium	0.01	0.004
Cadmium	0.01	0.005
Chromium	0.05	0.05
Cyanide	0.2	0.2
Mercury	0.002	0.002
Nickel	0.1	0.1
Selenium	0.19	0.05
Thallium	0.007	0.002

1 The 12-month average effluent limitation shall apply to the arithmetic mean of the results of all samples collected during any 12 consecutive calendar month period.

2 This limit shall apply until such time that the Recycled Water Agency collects at least eitght samples. Samples are to be collected on a quarterly basis in accordance with Monitoring and Reporting Program No. 97-03.

3. Total coliform concentration of the recycled water produced at the North City Water Reclamation Plant shall not exceed a MPN (most probable number) of 2.2 per 100 ml, utilizing the bacteriological results of the last seven days for which analyses have been completed; and shall not exceed a MPN of 23 per 100 ml in more than one sample in any 30-day period.

4. Turbidity concentration of the recycled water produced at the North City Water Reclamation Plant shall not exceed a daily average value of 2 NTU (Nephelometric turbidity unit), shall not exceed 5 NTU more than 5% of the time during a 24-hour period and shall not exceed 10 NTU at any one time.

5. Disinfection of recycled water shall be accomplished by a chlorine disinfection process that provides a CT (chlorine concentration times modal contact time) value of not less than 450 mg-min/liter at all times with a modal chlorine contact time of at least 90 minutes based on peak daily design flow.

6. Discharges to a landscape impoundment must be terminated whenever an overflow of the impoundment is imminent.

7. A 30-day average dry weather flow from the North City Water Reclamation Plant shall not exceed 30.0 million gallons unless the Recycled Water Agency obtains revised waste discharge requirements for the proposed increased flow.

B. RECYCLED WATER PURVEYANCE REQUIREMENTS

1. Prior to the initiation of the purveyance of recycled water project, the Recycled Water Agency must complete all of the following:

   a. Develop and submit for approval *Rules and Regulations for Recycled Water Users* governing the design and construction of recycled water use facilities and the use of recycled water to the Regional Board, the State Department of Health Services (DHS) and the County of San Diego Department of Environmental Health (DEH). Rules and regulations shall, at a minimum, include the requirements which are contained in Attachment No. 1 of this Order.

   b. Develop and submit for approval a program to conduct compliance inspections of recycled water reuse sites to the Regional Board, DHS and DEH. Inspections shall determine the status of compliance with the Recycled Water Agency's approved rules and regulations for recycled water users.

   c. Submit a report to the State Department of Health Services and the County of San Diego Department of Environmental Health containing the information listed below. The Recycled Water Agency may submit a Master Plan report that covers more than one reuse site. The report shall include a detailed description of each reuse site identifying all of the information below:

      1) The number, location, and type of facilities within the use area proposing to use domestic and recycled water. "Facility" means any type of building or structure, or defined area of specific public use that utilizes or proposes to utilize a dual plumbed system.

      2) The average number of persons estimated to be served at each use area on a daily basis.

      3) The specific boundaries of the proposed use site area including a map showing the location of each facility, drinking water fountain and impoundment to be served.

      4) The person or persons responsible for operation of the recycled water system at each use area.

5) The specific use to be made of the recycled water at each use area.

6) The methods to be used by the Recycled Water Agency to assure that the installation and operation of the recycled system will not result in cross connections between the recycled water piping system and the potable water piping system. This shall include a description of pressure, dye or other test methods to be used to test the system.

7) Plans and specifications shall include the following and shall be submitted to the State and County Department of Health for approval:

a. Proposed piping system to be used,

b. Pipe locations of both the recycled and potable systems,

c. Type and location of the outlets and plumbing fixtures that will be accessible to the public,

d. The methods and devices to be used to prevent backflow of recycled water into the public water system,

c. Plan notes relating to recycled water specific installation and use requirements.

2. Subsequent to initiation of the purveyance of recycled water and prior to providing recycled water to a new use site, the Recycled Water Agency shall do the following:

a) Submit for review and approval a report that either certifies that the project conforms with what is described in the master plan or information to supplement what is described in the master plan to the State and County Health Departments. A certification report shall document that all criteria described in *Recycled Water Purveyance Requirements B.1c* has been submitted to and approved by the appropriate regulatory agency. Information submitted as a supplement to the master plan shall document compliance with any criteria, as described by *Recycled Water Purveyance Requirements B.1c,* not met through submittal of the master plan.

b) Submit for review and approval documentation confirming the information submitted as part of Monitoring and Reporting Program No. 97-03, Recycled Water Users Summary Report B.2a to the Regional Board.

3. The Recycled Water Agency shall do the following for all reuse sites:

   a) Enforce recycled water rules and regulations,

   b) Conduct recycled water reuse site compliance inspections in accordance with the program submitted in compliance with *Recycled Water Purveyance Requirements B.1b* of this Order,

   c) Notify the State Department of Health Services and the County of San Diego Department of Environmental Health of any incidence of recycled water backflow into the potable water system as soon as possible, but in no case later than 24 hours of finding the incident,

   d) Maintain a current list of all on-site recycled water supervisors.

C. FACILITY DESIGN AND OPERATION SPECIFICATIONS

1. ENFORCEMENT

The Regional Board may initiate enforcement action against the recycled water agency, which may result in the termination of the recycled water supply, if any person uses, transports, or stores such water in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code Section 13050.

2. PROPER OPERATION

The Recycled Water Agency shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Recycled Water Agency to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.

3. CERTIFICATION REPORT

The Recycled Water Agency shall submit a report which documents that the North City Water Reclamation Plant facilities have been constructed as proposed in the City's report of waste discharge. Recycled water shall not be purveyed to a user until all of the following have occurred:

a. The certification report is received and approved by the Regional Board Executive Officer,
b. The Title 22 report and the rules and regulations for recycled water reuse report is approved by the State and County Health Departments,
c. The Regional Board Executive Officer has been notified of the completion of facilities by the Recycled Water Agency,
d. An inspection of the facilities has been made by staff of the Regional Board,
e. The Regional Board Executive Officer notifies the Recycled Water Agency by letter that recycled water purveyance can be initiated.

4. PRETREATMENT PROGRAM

The City of San Diego shall comply with the pretreatment requirements established in Order No. 95-106, *Waste Discharge Requirements for the City of San Diego E.W.Blom Point Loma Metropolitan Wastewater Treatment Plant Discharge to the Pacific Ocean Through the Point Loma Ocean Outfall, San Diego County* for the area serviced by the North City Water Reclamation Plant.

5. OPERATION MANUAL

A copy of the facility operations manual shall be maintained at the Recycled Water Agency's facility and shall be available to operation personnel and Regional Board staff at all times. The following portions of the operations manual shall be posted at the treatment plant as a quick reference for treatment plant operators:

a) Alarm set points for secondary turbidity, tertiary turbidity and chlorine residual,

b) Levels at which flow will be diverted for secondary turbidity, tertiary turbidity and chlorine residual.

c) When to divert flow for high daily and weekly median total coliform;

d) When the authorities (DHS, DEH, Regional Board) will be notified of a diversion,

e) Names and numbers of those authorities to be notified in case of a diversion,

f) Frequency of calibration for turbidimeters and chlorine residual analyzers.

6. OPERATORS' CERTIFICATION

The Recycled Water Agency's wastewater treatment facilities shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23 of the California Code of Regulations.

7. FLOOD PROTECTION

All waste treatment, storage and purveyance facilities shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.

8. RUNOFF PROTECTION

All wastewater and recycled water storage facilities shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24 hour frequency storm.

9. MONITORING AND REPORTING

The Recycled Water Agency shall comply with attached Monitoring and Reporting Program No. 97-03, and future revisions thereto as specified by the Executive Officer. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 97-03.

10. SEWAGE SLUDGE

Disposal of sludge, grit, and screenings shall be in accordance with the method described in the Findings of this Order. Any modification to the location or method of sludge disposal must be approved by the Regional Board Executive Officer.

D. STANDARD PROVISIONS

1. DUTY TO COMPLY

The Recycled Water Agency must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a report of waste discharge in application for new or revised waste discharge requirements.

2. ENTRY AND INSPECTION

The Recycled Water Agency shall allow the Regional Board, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to do the following:

(a) Enter upon the Recycled Water Agency's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this Order,

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order,

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this Order,

(d) Sample or monitor, at reasonable times for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

3. CIVIL MONETARY REMEDIES

The California Water Code provides that any person who intentionally or negligently violates any waste discharge requirements issued, reissued, or amended by this Regional Board is subject to a civil monetary remedy of up to 20 dollars per gallon of waste discharged or, if a cleanup and abatement order is issued, up to 15,000 dollars per day of violation or some combination thereof.

4. PENALTIES FOR INVESTIGATION, MONITORING OR INSPECTION VIOLATIONS

The California Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor and is subject to a civil liability of up to 5,000 dollars for each day in which the violation occurs.

5. ENDANGERMENT OF HEALTH AND ENVIRONMENT

The Recycled Water Agency shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the Recycled Water Agency becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the Recycled Water Agency becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Officer within 24 hours:

(a) Any bypass from any portion of the treatment facility. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility to other than a sewer system.

(b) Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.

(c) Any treatment plant upset which causes the effluent limitations of this Order to be exceeded.

6. PRIOR NOTICE OF BYPASS

If a need for a discharge bypass is known in advance, the Recycled Water Agency shall submit prior notice and, if at all possible, such notice shall be submitted at least 10 days prior to the date of the bypass. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility to other than a sewer system.

7. CORRECTIVE ACTION

The Recycled Water Agency shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

8. TREATMENT FAILURE

In an enforcement action, it shall not be a defense for the Recycled Water Agency that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the Recycled Water Agency shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies for example, when the primary source of power of the treatment facility is failed, reduced, or lost.

9. HAZARDOUS RELEASES

Except for a discharge which is compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Director of Environmental Health Services, County of San Diego in accordance with California Health and Safety Code Section 5411.5 and the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the Recycled Water Agency is in violation of a prohibition in the applicable Water Quality Control Plan.

10. PETROLEUM RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan.

11. PERMIT REPOSITORY

A copy of this Order shall be maintained at the Recycled Water Agency's facility and shall be available to operating personnel at all times.

12. RETENTION OF RECORDS

The Recycled Water Agency shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

13. GENERAL REPORTING REQUIREMENT

The Recycled Water Agency shall furnish to the Executive Officer of this Regional Board, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Recycled Water Agency shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.

14. CAPACITY NOTIFICATION

When the City of San Diego determine that the North City Water Reclamation Plant will reach capacity within four years, the City shall submit a technical report to the Regional Board. The technical report shall demonstrate that adequate steps are being taken to provide for future treatment plant capacity demands.

15. PERMIT REVISION

This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a) Violation of any terms or conditions of this Order,
b) Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts or
c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Recycled Water Agency for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

16. CHANGE IN DISCHARGE

The Recycled Water Agency shall file a new Report of Waste Discharge at least 120 days prior to the following:

a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the wastes.
b) Significant change in the treatment or disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste.)
c) Change in the disposal area from that described in the findings of this Order.
d) Increase in flow beyond that specified in this Order.
e) Other circumstances which result in a material change in character, amount, or location of the waste discharge.
f) Any planned change in the regulated facility or activity which may result in noncompliance with this Order.

17. CHANGE IN OWNERSHIP

This Order is not transferrable to any person except after notice to the Executive Officer. The Recycled Water Agency shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Recycled Water Agency containing a specific date for the transfer of this Order's responsibility and coverage between the current Recycled Water Agency and the new Recycled Water Agency. This agreement shall include an acknowledgement that the existing Recycled Water Agency is liable for violations up to the transfer date and that the new Recycled Water Agency is liable from the transfer date on. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the Recycled Water Agency and incorporate such other requirements as may be necessary under the California Water Code.

18. INCOMPLETE REPORTS

Where the Recycled Water Agency becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information.

19. REPORT DECLARATION

All applications, reports, or information submitted to the Executive Officer shall be signed and certified as follows:

a) The Report of Waste Discharge shall be signed as follows:

1) For a corporation - by a principal executive officer of at least the level of vice-president.

2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.

3) For a municipality, state, federal or other public agency - by either a principal executive officer or ranking elected official.

b) All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if all of the following are true:

1) The authorization is made in writing by a person described in paragraph (a) of this provision,

2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity and

3) The written authorization is submitted to the Executive Officer.

c) Any person signing a document under this Section shall make the following certification,

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

20. REGIONAL BOARD ADDRESS

The Recycled Water Agency shall submit reports required under this Order or other information required by the Executive Officer to the following address:

Groundwater Unit
California Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd, Suite A
San Diego, California 92124-1331

E. NOTIFICATIONS

1. VESTED 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 persons or property, nor protect the Recycled Water Agency from liability under federal, state or local laws, nor create a vested right for the Recycled Water Agency to continue the waste discharge.

2. U.S. EPA REVIEW

These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Section 402 of the Clean Water Act.

3. SEVERABILITY

The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

I, John H. Robertus, 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 Diego Region, on January 9, 1997.

JOHN H. ROBERTUS
Executive Officer

ATTACHMENT NO.1
TO
ORDER NO.97-03

RULES AND REGULATIONS FOR RECYCLED WATER USE PROJECTS

Pursuant to California Water Code (CWC) Section 13523.1(b)(3), this Order requires the 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 with the following criteria:

a) Title 22, Division 4, Chapter 3, *Wastewater Reclamation Criteria;*

b) Title 17, Division 1, Chapter 5, Group 4, Article 1 & 2, of the California Code of Regulations;

c) The State Department of Health Services (DOHS) *Guidelines For Use of Recycled Water, Guidelines for Use of Recycled Water for Construction Purposes, and the County of San Diego Department of Environmental Health Recycled Water Plan Check and Inspection Manual*;

d) 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 DOHS.

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

1. The use of recycled water shall not cause a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.

2. The Recycled Water Agency, the Regional Board, the State and Local Health Department, 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 is complying with the Recycled Water Agency's rules and regulations.

3. The recycled water user 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 user shall submit plans and specifications for recycled water distribution facilities to the Recycled Water Agency.

5. The recycled water user shall designate a recycled water supervisor who is responsible for the recycled water system at each use area under the user's 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 and County Health Departments.

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 owned and/or operated by recycled water users shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24 hour frequency storm unless the Regional Board Executive Officer approves relaxed storm protection measures for the facility.

8. All recycled water storage facilities owned and/or operated by recycled water users shall be protected against 100 - year frequency peak stream flows as defined by the San Diego County flood control agency unless the Regional Board Executive Officer approves relaxed storm protection measures for the facility.

9. The Regional Board may initiate enforcement action against any recycled water user who discharges recycled water in violation of any applicable discharge requirement prescribed by the Regional Board or in a manner which creates or threatens to create conditions of pollution, contamination or nuisance, as defined in Water Code Section 13050.

10. 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.

11. 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 and the ground 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.

12. Impoundment of disinfected tertiary recycled water shall not occur within 100 feet of any domestic water supply well.

13. Irrigation with, or impoundment of, disinfected secondary-2.2 or disinfected secondary -23 recycled water shall not take place within 100 feet of any domestic water supply well.

14. Irrigation with, or impoundment of, undisinfected secondary recycled water shall not take place within 150 feet of any domestic water supply well.

15. Reclaimed water facilities shall be operated in accordance with best management practices (BMP's) to prevent direct human consumption of reclaimed water and to minimize misting, ponding, and runoff. BMP's shall be implemented that will minimize both public contact and discharge onto areas not under customer control.

16. Irrigation with reclaimed water shall be during periods of minimal human use of the service area. Consideration shall be given to allow a maximum 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 is a size no less than 4 inches high by 8 inches wide: "RECYCLED WATER - DO NOT DRINK". The sign(s) shall be of a size easily readable by the public.

21. No physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water.

22. The recycled water piping system shall not include any hose bibs. Quick couplers that are different from that used on the potable water system may be used.

23. The public water supply shall not be used as a 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 the provisions of the Department of Health Services 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.

24. No person other than the Recycled Water Agency shall deliver recycled water to a facility. Connection to the irrigation system by an individual residence is prohibited.

25. 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.

26. Reuse site shut down tests and inspections shall be monitored by the County of San Diego Department of Environmental Health or the State Department of Health Services.

27. Customer complaints concerning recycled water use that may involve public illness shall be reported to the County of San Diego Department of Environmental Health and the State Department of Health Services, and to the Recycled Water Agency who shall maintain a log of all customer complaints regarding recycled water.

28. Any backflow prevention device installed to protect the public water system shall be inspected and maintained in accordance with Section 7605 of Title 17.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. 97-03
FOR
THE PRODUCTION AND PURVEYANCE
OF RECYCLED WATER
FOR

CITY OF SAN DIEGO
NORTH CITY WATER RECLAMATION PLANT
SAN DIEGO COUNTY

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer.

2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than +5 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

   (a) "A Guide to Methods and Standards for the Measurement of Water Flow," U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)

   (b) "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 127,19/2:W29/2, Stock No. S/N 24003-0027.)

(c) "Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Service (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273-535/5ST.)

(d) "NPDES Compliance Sampling Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, Denver, CO 80225.)

3. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified in this Order.

4. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Executive Officer.

5. Monitoring results must be reported on discharge monitoring report forms approved by the Executive Officer.

6. If the discharger monitors any pollutants more frequently than required by this Order, using test procedures approved under 40 CFR, Part 136, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.

7. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

8. Records of monitoring information shall include the following:

   a) The date, exact place, and time of sampling or measurements,
   b) The individual(s) who performed the sampling or measurements,
   c) The date(s) analyses were performed,
   d) The individual(s) who performed the analyses,
   e) The analytical techniques or method used and
   f) The results of such analyses.

9. All monitoring instruments and devices which are used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

10. The discharger shall report all instances of noncompliance not reported under Provision D.5 of this Order at the time monitoring reports are submitted. The reports shall contain the information described in Provision D.5.

11. The monitoring reports shall be signed by an authorized person as required by Provision D.19.

12. A composite sample is defined as a combination of at least eight sample aliquot of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquot must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquot may be collected manually or automatically.

13. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

14. Sampling and analysis shall, at a minimum, shall be conducted in accordance with Article 6 of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria).

B. EFFLUENT MONITORING

1. Representative samples of the effluent discharged from the North City Water Reclamation Plant shall be collected in accordance with the following criteria:

CONSTITUENT	UNIT	TYPE OF SAMPLE	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW RATE	MGD	Continuous	Continuous	Monthly
Biochemical Oxygen Demand (BOD_5 @ 20°C)	mg/l	Composite	Daily	Monthly
Total Suspended Solids	mg/l	Composite	Daily	Monthly
Volatile Suspended Solids	mg/l	Composite	Daily	Monthly
pH	Unit	Grab	Daily	Monthly
Total Dissolved Solids	mg/l	Composite	Monthly[1]	Monthly
Chloride	mg/l	Composite	Monthly[1]	Monthly
Sulfate	mg/l	Composite	Monthly[1]	Monthly
Fluoride	mg/l	Composite	Monthly[1]	Monthly
Boron	mg/l	Composite	Monthly[1]	Monthly
Percent Sodium	%	Composite	Monthly[1]	Monthly
Iron	mg/l	Composite	Monthly[1,4]	Monthly
Manganese	mg/l	Composite	Monthly[1,4]	Monthly
Methylene Blue Active Substances	mg/l	Composite	Monthly[1]	Monthly
Adjusted Sodium Adsorption Ratio[2]	—	Composite	Monthly[1]	Monthly
Total Organic Carbon	mg/l	Composite	Monthly[1]	Monthly
Aluminum	mg/l	Composite	Annually[4]	Annually[4]
Arsenic	mg/l	Composite	Annually[4]	Annually[4]
Antimony	mg/l	Composite	Annually[4]	Annually[4]
Barium	mg/l	Composite	Annually[4]	Annually[4]
Beryllium	mg/l	Composite	Annually[4]	Annually[4]
Cadmium	mg/l	Composite	Annually[4]	Annually[4]
Chromium	mg/l	Composite	Annually[4]	Annually[4]
Copper	mg/l	Composite	Annually[4]	Annually[4]
Cyanide	mg/l	Composite	Annually[4]	Annually[4]
Mercury	mg/l	Composite	Annually[4]	Annually[4]
Nickel	mg/l	Composite	Annually[4]	Annually[4]
Selenium	mg/l	Composite	Annually[4]	Annually[4]
Thallium	mg/l	Composite	Annually[4]	Annually[4]

Turbidity[3]	NTU	Continuous	*	Monthly
Chlorine Residual[3]	mg/l	Continuous	**	Monthly
Total Coliform[3]	MPN/100ml	Grab	***	Monthly

Notes: MPN/100 ml = Most Probable Number per 100 milliliters
ml/l = milliliters per liter
mg/l = milligrams per liter
NTU = Nephelometric Turbidity Units

1 The discharger shall increase the sampling frequency from monthly to 2 times per month for any noted constituent that exceeds the limit specified by Discharger Specification A.1 and A.2 of this Order. Twice per month monitoring shall continue until the discharger achieves compliance with the limitations for two consecutive months. After compliance is achieved, the discharger shall resume sampling at the monthly frequency.

2 The adjusted sodium adsorption ratio is calculated as follows:

Adjusted Sodium Adsorption Ratio (Adj. SAR): $\frac{Na}{(Ca_x + Mg)/2}$, where Na and Mg are in milliequivalent per liter (me/l)

Ca_x is a modified Ca value calculated using Table 3-2 contained in *Irrigation with Reclaimed Municipal Wastewater, A Guidance Manual.*

3 The discharger is required to test for these constituents when there is a direct use of reclaimed water.

4 Monitoring and Reporting of these constituents shall be conducted quarterly until at least eight samples have been collected.

* Turbidity analysis shall be performed by a continuous recording turbidimeter. From the continuous recording turbidimeter, the discharger shall report on a daily log whether the estimated average value is above or below 2 NTU's each day, if the turbidity value exceeds 5 NTU's more than 5% of the time during a 24-hour period and shall not exceed 10 NTU at any time.

** Chlorine concentrations shall be recorded by a continuous recording meter. Calculated CT (chlorine concentration (x) modal contact time) values shall be calculated and recorded continuously. The modal contact time must be at least 90 minutes based on peak daily design flow.

*** Samples for total coliform bacteria shall be collected at least daily and at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures.

C. SEWAGE SOLIDS

A record of the type, quantity, and manner of disposal and/or reuse of solids removed in the course of sewage treatment shall be maintained at the NCWRP and be made available to Regional Board staff upon request.

D. RECYCLED WATER USERS SUMMARY REPORT

1. The Recycled Water Agency shall submit a quarterly recycled water users summary report containing the following information:

   a) Total volume of recycled water supplied to all recycled water users for each month of the reporting period,
   b) Total number of recycled water use sites,
   c) Address of the recycled water use sit and
   d) Basin Plan name and number of hydrologic subarea underlying the recycled water use site.

2. The Recycled Water Agency shall submit an annual recycled water users compliance report containing the following information:

   a) Recycled water use site summary report

      1) Name of the reclaimed water reuse site
      2) Owner of the reclaimed water use facility
      3) Address of the reuse site
      4) Name of the reclaimed water user supervisor
      5) Phone number of the on-site water user supervisor
      6) Mailing address of the recycled water use supervisor, if different from site address
      7) Volume of reclaimed water delivered to the reuse site on a monthly basis

   b) Recycled water user site inspections

      Number of reclaimed water reuse site inspections conducted by discharger/producer staff and identification of sites inspected for the reporting period.

   c) Recycled water user violations of the Recycled Water Agency's rules and regulations.

      The Recycled Water Agency shall identify all recycled water users known to be in violation of the Recycled Water Agency's rules and regulations for recycled water users. The report shall include a description of the noncompliance and its cause, including the period of noncompliance, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

E. REPORT SCHEDULE

Monitoring reports shall be submitted to the Executive Officer in accordance with the following schedule:

Reporting Frequency	Report Period	Report Due
Monthly	January, February, March, April, May, June, July, August, September, October, November, December	By the 30th day of the following month
Quarterly	January - March April - June July - September October - December	April 30th July 30th, October 30th January 30th
Annually	January-December	January 31st

Monitoring reports shall be submitted to:

ATTN: Ground Water Unit
California Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd., Suite A
San Diego, CA 92124-1331

Ordered by

JOHN H. ROBERTUS
Executive Officer