# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

#### ADDENDUM NO. 1 TO ORDER NO. 95-32

# VALLEY CENTER MUNICIPAL WATER DISTRICT LOWER MOOSA CANYON WATER RECLAMATION FACILITY SAN DIEGO COUNTY

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

- 1. On February 9, 1995, this Regional Board Adopted Order No. 95-32, "Waste Discharge Requirements for Valley Center Municipal Water District, Lower Moosa Canyon Reclamation Facility, San Diego County". Order No. 95-32 establishes requirements for the disposal of up to 1.0 million gallons per day (MGD) of secondary treated effluent.
- 2. Facility Design and Operation Specification C.3 requires the District, prior to initiation of discharge in excess of 0.3 MGD to the percolation ponds to submit a report that provides a program for monitoring, management, and forecasting of any future potential problems associated with balancing discharges to and extractions from the Bonsall Basin.
- 3. The District submitted a complete Report of Waste Discharge on April 17, 1995, requesting an increase in the allowable discharge to the Districts percolation ponds located near Lower Moosa Canyon Creek in the Bonsall basin from 0.3 MGD to 0.44 MGD. Included in the Districts RWD was a Ground Water Management Plan Report prepared by Barrett Consulting Group.
- 4. The report of waste discharge provides sufficient technical information to support an increase in discharge from 0.3 MGD to 0.44 MGD of secondary treated wastewater to the Districts percolation ponds located near the Lower Moosa Canyon Creek in the Bonsall Basin. The report indicated that the Bonsall basin has the capacity to accept discharges of up to 0.44 MGD without requiring some type of ground water extraction plan. Furthermore, the report concludes that the increase in flow is not anticipated to impact the water quality of existing downgradient domestic wells.
- 5. The Ground Water Management Plan Report recommends the District to conduct an enhanced ground water monitoring program for at least one year. The one year monitoring program is needed to validate the results of the basin computer modeling program and to provide the District with the database needed to reliably predict the response of the ground water basin as effluent discharge rates increase.
- 6. The Regional Board has notified all known interested parties of its intent to modify Order No. 95-32 to reflect an increase in discharge to the percolation ponds and implementation of additional ground water monitoring and sampling.

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- 7. The Regional Board in a public hearing heard and considered all comments pertaining to the modification of Order No. 95-32.
- 8. This facility is an existing facility and as such is exempt from the provisions of the California Environmental Quality Act, in accordance with Title 14, California Code of Regulations, Article 19, Section 15301.

#### IT IS HEREBY ORDERED THAT ORDER NO. 95-32 IS MODIFIED AS FOLLOWS:

1. Facility Design and Operation Specification C.3 has been changed to read the following.

Prior to initiation of discharge in excess of 0.44 MGD to the percolation ponds located in the Bonsall Basin, the discharger shall either submit a technical report that demonstrates the basin has capacity for discharges greater than 0.44 MGD; or implement an approved basin management plan designed to balance the discharges to and extraction from the basin.

2. Add the following as Reporting and Record Keeping Requirement F.10:

The discharger shall submit a report to this office by December 1, 1996, that provides sufficient documentation to validate the findings made in the Districts technical report submitted as part of their April 17, 1995, report of waste discharge as described in Finding No. 3 of Addendum No. 1 of this Order.

I, Arthur L. Coe, 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, on August 10, 1995.

ARTHUR L. COE Executive Officer

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# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

#### ORDER NO. 95-32

# WASTE DISCHARGE REQUIREMENTS FOR VALLEY CENTER MUNICIPAL WATER DISTRICT LOWER MOOSA CANYON RECLAMATION FACILITY SAN DIEGO COUNTY

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

- 1. On June 14, 1971, this Regional Board adopted Order No. 71-37, Waste Discharge Requirements for the Valley Center Municipal Water District Lower Moosa Canyon Facility. Order No. 71-37 established waste discharge requirements for the disposal of up to 0.50 million gallons per day (MGD) of treated effluent by spray irrigation on three golf courses and percolation into the Lower Moosa Canyon ground water basin.
- 2. On October 15, 1984, this Regional Board adopted Order No. 84-46, Waste Discharge Requirements for the Valley Center Municipal Waster District Lower Moosa Canyon Reclamation Facility. Order No. 84-46 superseded Order No. 71-37 and established waste discharge requirements for the disposal of up to 1.0 MGD of treated effluent into the Lower Moosa Canyon ground water basin.
- 3. The Lower Moosa Canyon Water Reclamation Facility (LMCWRF) is located in the NW ¼ of Section 1, T11S, R3W, SBB&M in the Moosa Hydrologic Subarea (HSA) (903.13) of the San Luis Rey Hydrologic Unit (903.00). The facility currently provides a secondary level of treatment and has a rated capacity of 0.5 MGD with current flow rates of approximately 0.25 MGD. The treatment facilities at LMCWRF include a barminutor, two activated sludge aeration tanks, two secondary clarifiers, chlorination facilities, an aerobic digester and four sludge drying beds. The effluent is discharged to three percolation ponds.
- 4. The District proposes to increase the LMCWRF plant capacity from 0.5 MGD to 1.0 MGD by providing a in-line aerated grit removal chamber, two additional activated sludge aeration tanks, an additional secondary clarifier, a new aerated sludge holding tank, and additional sludge drying beds.
- 5. Order No. 84-46 has been reviewed by the Regional Board staff in accordance with criteria established in the Administrative Procedures Manual adopted by the State Water Resources Control Board. This Order, which supersedes Order No. 84-46, consolidates and makes changes to the Findings, Requirements, and Monitoring and Reporting Program of Order No. 84-46.

- 6. The District submitted an Odor Control Plan on January 10, 1985. The plan included more frequent hauling of sludge, installation of mechanical sludge dewatering equipment, chlorination at the influent wet well and introduction of air under pressure into the pressure transmission line. On February 8, 1985, the District submitted a Revised Odor Control Plan that eliminated the option of installing mechanical sludge dewatering equipment and air scrubbers. The District has since installed covers over all influent channels, injects chlorine at the influent wet well and increased the frequency of sludge hauling.
- 7. The LMCWRF currently discharges to percolation ponds located adjacent to Lower Moosa Canyon Creek, in the N1/2 of Section 35, T10S, R3W, SBB&M in the Bonsall Hydrologic Subarea (HSA) (903.12) of the San Luis Rey Hydrologic Unit (903.00). The ponds are contained on an 11 acre site having a collective volume of approximately 60 acre-feet. Order No. 84-46 limits the discharge of 0.3 MGD to the percolation ponds to ensure that percolated effluent does not surface down gradient within the Bonsall HSA. The District is now investigating the basin's capacity to assimilate a volume of discharge greater than 0.3 MGD.
- 8. The District is currently considering three alternative disposal options for up to 1.0 MGD.
  - a. percolation of 100% of the plant effluent to the percolation ponds;
  - b. percolation of 100% of the plant effluent (treated to secondary level) and withdrawal of ground water from the Lower Moosa Basin for landscape irrigation;
  - c. full Title 22 treatment of the effluent at the LMCWRF and direct transport from the facility to reclaimed water markets. Percolation ponds would be used to accommodate flows in excess of reclamation demands.
- 9. According to Title 22, Division 4, Chapter 3 of the California Code of Regulations, a direct beneficial use is defined as the use of reclaimed water which has been transported from the point of production to the point of use without an intervening discharge to water of the state. Therefore, ground water extraction from the Bonsall basin for reuse within the Lower Moosa basin does not constitute a direct benficial use.
- 10. The Valley Center Municipal Water District has prepared a final environmental impact report dated June 1984 for the Central Valley Center Sewage Project in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000 et. seq.) and the State Guidelines.
- 11. The District identified the potential for surfacing of percolated effluent in the Lower Moosa Canyon basin as an adverse water resource related environmental impact of the project. In order to ensure that percolated effluent does not surface in the Lower Moosa Canyon basin, the District has proposed to implement a ground water basin management plan. The proposed ground water basin management plan, if implemented, would avoid the potential adverse water quality impacts of the project identified in the District's environmental impact report.

12. The Discharger reports that the reclaimed wastewater and Lower Moosa Canyon ground water supplied by the District to the Circle "R" and the Lawrence Welk Golf Courses will replace the current use of a poorer quality local ground water for irrigation at these golf courses. The data was obtained on March 1, 1984.

GROUND WATER QUALITY - LOWER MOOSA CANYON BASIN				
Constituent	Lawrence Welk's Well			
Total Dissolved Solids	mg/l	(Combined) 1387	1055	
Chloride	mg/l	341	245	
Sodium	mg/l	170	130	
Sulfate	mg/l	144	124	
Total Kjeldahl Nitrogen	mg/l	0.03	0.03	
Total Phosphorus	mg/l	0.01	0.01	
Nitrate/N	mg/l	0.05	0.05	
Boron	mg/l	0.17	0.23	
Fluoride	mg/l	0.34	0.22	

NOTE: mg/l = milligrams per liter

13. The Discharger reports that the estimated quality of the Lower Moosa Canyon Water Reclamation Facility (LMCWRF) effluent is as follows:

Constituent	Unit	LMCWRF Effluent 1994
Total Dissolved Solids	mg/l	877-1011
Chloride	mg/l	142-192.3
Percent Sodium	mg/l	48.5-55.6
Sulfate	mg/l	251-330
Biochemical Oxygen Demand	mg/l	2.0-3.0
Methylene Blue Active Substances	mg/l	0-0.14
Suspended Solids	mg/l	5.1-12.6
Turbidity	NTU	3.0-5.9
Boron	mg/l	0.33-0.40
Fluoride	mg/l	0.18-1.62

NOTE: mg/l = milligrams per liter

NTU = Nephelometric Turbidity Units

14. The "Comprehensive Water Quality Control Plan Report, San Diego Basin (9) (Basin Plan) was adopted by this Regional Board on March 17, 1975; and subsequently approved by the State Water Resources Control Board (State Board). Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board.

15. The Basin Plan establishes the following beneficial uses for the surface waters of the Lower Moosa Canyon Hydrologic Subarea (903.13):

	BENEFICIAL USES IDENTIFIED IN BASIN PLAN FOR LOWER MOOSA CANYON HYDROLOGIC SUBAREA					
	BENEFICIAL USES	INLAND SURFACE WATER	GROUND WATER '			
MUN	Municipal and Domestic Supply		X			
AGR	Agriculture Supply	X	X			
IND	Industrial Service Supply	X	X			
PROC	Industrial Process Supply					
GRW	Groundwater Recharge					
FRSH	Freshwater Replenishment					
POW	Hydropower Generation					
REC-1	Water Contact Recreation	X				
REC-2	Non-Contact Water Recreation	X				
WARM	Warm Fresh-Water Habitat	X				
COLD	Cold Fresh-Water Habitat					
WILD	Wildlife Habitat	X				
RARE	Preservation of Rare & Endangered Species	X				
SPWN	Fish Spawning					
SAL	Saline Water Habitat	AND THE PROPERTY OF THE PROPERTY OF	<u> 1985. (1985.) – Mark Mark (18</u>			
MAR	Marine Habitat					

Note:

<sup>1.</sup> These beneficial uses do not apply westerly of the easterly boundary of the right-of-way of Interstate Highway 5. The beneficial uses for the remainder of the hydrologic area are as shown.

16. The Basin Plan established the following water quality objectives for the Bonsall Hydrologic Subarea (903.12) and the Lower Moosa Canyon Hydrologic Subarea (903.13):

BASIN PLAN WATER QUALITY OBJECTIVES					
CONSTITUENT	Concentration not to be exceeded more than 10 % of the time during any one year period (mg/l or as noted)				
CONSTITUENT	BONSALL		LOWER MOOSA CANYON		
•	SURFACE WATER	GROUND WATER	SURFACE WATER	GROUND WATER	
Total Dissolved Solids	500	1500 1.2	500	800	
Chloride	250	250 500 <sub>1,2</sub> 250			
Percent Sodium	60 %	60 %	60 %	60 %	
Sulfate	250 500 <sub>1,2</sub>		250	400	
Nitrate (as NO <sub>3</sub> )	45 <sub>1,2</sub>		<del></del>	10	
Nitrogen and Phosphorus					
Iron	0.3	0.85 1,2	0.3	0.3	
Manganese	0.05	0.15 1,2	0.05	0.05	
Boron	0.5	0.5 1,2	0.5	0.5	
Odor	None	None	None	None	
Turbidity	20 NTU	5 NTU	20 NTU	5 NTU	
Fluoride	1.0	1.0 2	1.0	1.0	
Color	20 UNITS	15 UNITS 2	20 UNITS	15 UNITS	

Notes: mg/l = milligrams per liter

NTU = Nephelometric turbidity units

- 1. The recommended plan would allow for measurable degradation of ground water in this basin to permit continued agricultural land use. Point sources, however, would be controlled to achieve effluent quality corresponding to the tabulated numerical values. In future years demineralization may be used to treat ground water to the desired quality prior to use.
- 2. A portion of the Upper Mission Basin is being considered as an underground potable water storage reservoir for treated imported water. The area is located north of Highway 76 on the boundary of hydrologic subareas 3.11 and 3.12. If this program is adopted, local objectives approaching the quality of the imported water would be set and rigorously pursued.

- \* Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total Phosphorus (P) concentrations shall not exceed 0.05 mg/l in any stream at the point where it enters any standing body of water, nor 0.025 mg/l in any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/l total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined be surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.
- 17. The Basin Plan contains the following prohibitions applicable to the proposed discharge:

"Discharge of treated or untreated sewage or industrial wastes to a natural watercourse upstream of surface storage or diversion facilities used for municipal supply is prohibited."

"Discharge of treated or untreated sewage or industrial wastewater, exclusive of cooling water or other waters which are chemically unchanged, to a watercourse, is prohibited except in cases where the quality of said discharge complies with the receiving body's water quality objectives."

"Discharging of treated or untreated sewage or industrial wastes in such a manner or volume as to cause sustained surface flow or ponding on lands not owned or under the control of the discharger is prohibited except in cases defined in the previous paragraph and in cases in which the responsibility for all downstream adverse effects is accepted by the discharger."

"The dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste directly into inland waters or watercourses or adjacent to the watercourses in any manner which may permit its being washed into the watercourse is prohibited."

- 18. The discharge of reclaimed water to the areas authorized under this Order is in conformance with SWRCB Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. The existing wastewater reclamation project will:
  - a) Have maximum benefit to the people of the State, because in the absence of reclaimed wastewater, alternative water supply would be used for irrigation of the reclaimed water use area described in this Order;
  - b) Not unreasonably affect the beneficial uses of ground water in the Moosa HSA; and,
  - c) Not cause the ground water quality objectives in the Bonsall HSA to be exceeded.

- 19. Regional Board Resolution No. 90-61, A Resolution Amending Resolution No. 90-40, A Region-wide Groundwater Amendment to the Comprehensive Water Quality Control Plan for the San Diego Region, indicated that for areas down gradient of municipal supply reservoirs, effluent limitations for reclaimed water shall be at levels that are not less than constituent concentrations of water supply plus a typical incremental increase resulting from domestic water use, but not more than the "Comprehensive Water Quality Control Plan Report, San Diego Basin (9)" (Basin Plan) ground water quality objectives.
- 20. This Order establishes discharge limitations for the discharge of effluent to the percolation ponds located in the Bonsall Basin that are below the Basin Plan ground water objectives established for the Bonsall HSA (903.12).
- 21. As noted in Finding No. 8, the District proposes to discharge reclaimed water to the Lower Moosa Hydrologic Subarea (903.13). The LMCWRF's effluent concentration as described in Finding No. 12 for total dissolved solids exceeds the Basin Plan's ground water objective within the Lower Moosa HSA. This Order establishes an interim total dissolved solids limit above the Basin Plan's objective for 5 years to give the District time to do one of the following:
  - a. demonstrate that the Basin Plan objective for total dissolved solids should be relaxed;
  - b. to provide additional treatment at the LMCWRF that will produce an effluent total dissolved solids concentration below 800 mg/l; or
  - c. to demonstrate that the discharge will not cause a violation of the Basin Plan and Regional Board Resolution No. 90-61.
- 22. The discharger reports that the individual unit wastewater treatment processes will meet all Title 22 reliability standards of the State Department of Health Services.
- 23. As noted in Finding No. 12 and 45 of Order No. 84-46, the discharger has submitted a final environmental impact report dated June 1984 in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000 et. seq.) and the State Guidelines. This report described the all aspects of the expansion of the Lower Moosa Canyon Water Reclamation Facility to a treatment capacity of 1.0 MGD.

- 24. The Regional Board, in establishing the requirements contained herein, 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; and
  - (i) Need to develop and use recycled water.
- 25. The Regional Board has considered all water resource related environmental factors associated with the proposed discharge of waste from Valley Center Reclamation Facility.
- 26. The Regional Board has notified the Valley Center Municipal Water District and all known interested parties of the intent to prescribe waste discharge requirements for the proposed discharge.
- 27. The Regional Board in a public meeting heard and considered all comments pertaining to the proposed discharge of waste from the Valley Center Water Reclamation Facility.

IT IS HEREBY ORDERED THAT, Valley Center Municipal Water District, in order to meet the provisions contained in Division 7 of the California Water Code and Regulations adopted thereunder, shall comply with the following:

#### A. PROHIBITIONS

- 1. The discharge of a waste flow volume in excess of 1.0 million gallons per day is prohibited unless the discharger files a report of waste discharge for the proposed increased flow.
- 2. Neither the treatment, storage nor disposal of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.
- 3. Discharges of treated or untreated solid or liquid waste to a navigable water or tributary of a navigable water are prohibited unless authorized by an NPDES permit issued by this Regional Board.
- 4. All irrigation shall be done by the District or a contracted entity. Connections to the irrigation system by individual residences is prohibited.

#### B. DISCHARGE SPECIFICATIONS

1. The discharge of effluent from the Lower Moosa Canyon Water Reclamation Facility shall not contain pollutants in excess of the following effluent limitations:

CONSTITUENT	UNITS	30-DAY AVERAGE <sup>1</sup>	DAILY MAXIMUM <sup>2</sup>	12 MONTH AVERAGE <sup>3</sup>	
Biological Oxygen Demand (BOD @ 20° C)	mg/i	20	30		
Total Suspended Solids	mg/l	20	30		
Total Dissolved Solids	mg/l			1000⁴	
Chloride	mg/l			200	
Sulfate	mg/l			350	
Fluoride	mg/l			1.0	
Boron	mg/l			0.5	
Iron	mg/l			0.854	
Manganese	mg/l			0.154	
Nitrate (as NO, )	mg/l			45 <sup>5</sup>	
pН	pH Units	Within the limits od 6.0 to 9.0 at all times			

Notes: mg/l = milligrams per liter

<sup>&</sup>lt;sup>1</sup> The 30-day average effluent limitation shall apply to the arithmetic mean of the results all samples collected during any month.

<sup>&</sup>lt;sup>2</sup> The daily maximum effluent limitation shall apply to the results of a single composite sample collected over a period of 24 hours or a grab sample.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> The effluent limitation for these constituents are applicable for discharges to the Bonsall HSA (903.12) and for an interim period of five years to the Lower Moosa HSA (903.13). At the end of this interim five year period the discharge limitations for these constituents will return to the Lower Moosa HSA ground water objectives set forth in the Basin Plan.

<sup>&</sup>lt;sup>5</sup> This effluent limitation is applicable only for a discharge to the percolation ponds.

- 2. Any effluent used for direct beneficial use shall conform with all applicable provisions of California Code of Regulations, Title 22, Division 4, Chapter 3.
- 3. All storage and percolation ponds shall be so managed that a dissolved oxygen concentration of not less than 2.0 milligrams per liter is maintained at all times.
- 4. Collected screenings, sludge, other solids removed from liquid wastes, and filter backwash shall be disposed in a manner described in the Findings of this Order or as approved by the Executive Officer. Sewage sludge treatment and disposal shall comply with all pertinent paragraphs of Part 503, Subchapter O, Chapter I of Title 40 Code of Federal Regulations.

# C. FACILITY DESIGN AND OPERATION SPECIFICATIONS

# 1. <u>PROPER OPERATION</u>

The discharger 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 discharger 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.

# 2. <u>OPERATION MANUAL</u>

The discharger shall submit to the Executive Officer a facility operations manual within 90 days of the adoption of this Order. A copy of the facility operations manual shall be maintained at the dischargers facility and shall be available to personnel at all times.

# 3. GROUND WATER MANAGEMENT PLAN REPORT

Prior to initiation of discharge in excess of 0.3 MGD to the percolation ponds the discharger shall submit a report that provides a program for monitoring, management and forecasting of any future potential problems associated with balancing discharges to and extractions from the Bonsall HSA.

#### 4. CERTIFICATION REPORTS

Prior to initiation of discharge in excess of 0.5 MGD from the LMCWRF the discharger shall submit a certification report, that contains a requirement by requirement analysis based on acceptable engineering practices, of how the process and physical designs of new treatment facilities will ensure compliance with these waste discharge requirements. The design engineer shall affix his/her signature and engineering license number to the certification report.

#### 5. <u>ENGINEERING REPORT</u>

The discharger shall meet the design, operational, and reliability requirements of Articles 7, 8, 9 and 10 of the California Code of Regulations, Title 22, Division 4, Chapter 3. The discharger shall prepare an engineering report conforming to Section 60323, Article 7 of the California Code of Regulations, Title 22, Division 4, Chapter 3. The engineering report shall be submitted 120 days prior to initiation of a direct discharge to any reclaimed water use area, to the State Department of Health Services - Office of Drinking Water, County Department of Health Services, and the Regional Board Executive Officer for approval.

#### 7. OPERATORS' CERTIFICATION

The discharger'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.

#### 8. RECLAIMED WATER SUPERVISOR

All reclaimed water users shall designate a reclaimed water supervisor responsible for the reclaimed water system at each use area under the user's control. Reclaimed water supervisors should be responsible for the installation, operation, and maintenance of the irrigation system, enforcement of the discharger/producer's reclaimed water user rules and regulation, prevention of potential hazards, and maintenance of the reclaimed water distribution system plans in "as built" form.

#### 9. FLOOD PROTECTION

All waste treatment, containment and disposal facilities with the exception of landscape irrigation areas, shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency, unless the discharger obtains revised waste discharge requirements for less stringent flood protection requirements for landscape irrigation ponds.

# 10. <u>RUNOFF PROTECTION</u>

Effluent storage facilities shall be designed, constructed, operated, and maintained so as to prevent surfacing of wastes on property not owned or controlled by the discharger. All waste treatment, containment and disposal facilities with the exception of landscape irrigation areas, shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency 24-hour storm.

# 11. OFFSITE DISCHARGES

The discharger shall design, construct, operate, and maintain storage facilities and irrigation areas to prevent surfacing or runoff of wastewater on property not owned or controlled by the discharger.

### 12. <u>CROSS-CONNECTIONS</u>

The potable water supply shall not be used to supplement the reclaimed water supply except through an approved air gap. In other areas where the potable water supply is piped to premises where sewage is pumped, treated or reclaimed (e.g., sewage treatment plants or pumping stations, golf course, etc.) the potable water supply shall be protected at the property line in accordance with the State Department of Health Services' Regulations Relating to Cross-Connections.

# 13. <u>CAPACITY NOTIFICATION</u>

Whenever a publicly owned wastewater treatment plant will reach capacity within four years the discharger shall notify the Regional Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The discharger must demonstrate that adequate steps are being taken to address the capacity problem. The discharger shall submit a technical report to the Regional Board showing flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Board, or within 120 days after receipt of notification from the Regional Board, of a finding that the treatment plant will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Board itself.

# 14. MONITORING AND REPORTING

The discharger shall comply with attached Monitoring and Reporting Program No. 95-32, 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. 95-32.

#### D. RECLAIMED WATER USE PROVISIONS

1. The Valley Center Municipal Water District (discharger/producer) shall have Rule and Regulations for Reclaimed Water Users governing the design and construction of reclaimed water use facilities and the use of reclaimed water. The Rules and Regulations shall be reviewed and updated if necessary by the discharger when a new Order or Addendum is adopted by the Regional Board, and shall, at a minimum, include the Standard Provisions for Rules and Regulations which are contained in Attachment No. 1 to this Order.

The revised rules and regulations shall be subject to the approval of the Regional Board Executive Officer; the State Department of Health Services and the San Diego County Department of Health Services, Environmental Health Services. The revised rules and regulations or a letter certifying that the discharger/producer rules and regulations contain the updated provisions in the Order, shall be submitted to the Regional Board 90 days prior to any use of reclaimed water.

- 2. The Valley Center Municipal Water District (discharger/producer) shall implement and enforce the approved rules and regulations for reclaimed water users. Use of reclaimed water by the discharger/producer shall be consistent with item D.1 above. In addition, the discharger/producer shall submit an annual report certifying that the users have implemented the rules and regulations established by the discharger.
- 3. The Valley Center Municipal Water District (discharger/producer) shall, within 90 days of any use of reclaimed water, develop and submit to the Regional Board a program of Best Management Practices (BMP) for the reclaimed water users governing the irrigation practices, management and maintenance to avoid runoff, ponding and overspray. The discharger/producer shall oversee that the reclaimed water users have implemented the BMP upon approval of the BMP program by the Regional Board Executive Officer.
- 4. The Valley Center Municipal Water District (discharger/producer) shall, within 90 days of any use of reclaimed water, develop and submit to the Regional Board a program to conduct compliance inspections of reclaimed water reuse sites to determine the status of compliance with the approved rules and regulations for reclaimed water users. The discharger/producer shall implement the inspection program upon its approval by the Regional Board Executive Officer.
- 5. Reclaimed water shall not be supplied to parties who use, transport, or store such water in a manner which causes a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.

6. Prior to delivering reclaimed water to any new user within the Valley Center Municipal Water District service area, the discharger shall submit a report to this Regional Board and the County of San Diego Department of Health Services discussing the delivering system, the use and the hydrologic Subareas where reclaimed water will be delivered.

### E. STANDARD PROVISIONS

#### 1. <u>DUTY TO COMPLY</u>

The discharger 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. <u>ENTRY AND INSPECTION</u>

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

- (a) Enter upon the discharger'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; and
- (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. <u>CIVIL MONETARY REMEDIES</u>

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. <u>PENALTIES FOR INVESTIGATION, MONITORING OR INSPECTION</u> <u>VIOLATIONS</u>

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 discharger 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 discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the discharger 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.
- (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 discharger 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.

#### 7. <u>CORRECTIVE ACTION</u>

The discharger 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. <u>TREATMENT FAILURE</u>

In an enforcement action, it shall not be a defense for the discharger 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 discharger 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. <u>HAZARDOUS RELE</u>ASES

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 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 discharger 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.

# F. REPORTING AND RECORD KEEPING REQUIREMENTS

#### 1. PERMIT REPOSITORY

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

# 2. GENERAL REPORTING REQUIREMENT

The discharger 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 discharger shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.

## 3. <u>RETENTION OF RECORDS</u>

The discharger 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.

## 4. <u>PERMIT REVISION</u>

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 discharger 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.

# 5. <u>CHANGE IN DISCHARGE</u>

The discharger 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.

# 6. CHANGE IN OWNERSHIP

This Order is not transferrable to any person except after notice to the Executive Officer. The discharger 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 discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger 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 discharger and incorporate such other requirements as may be necessary under the California Water Code.

# 7. <u>INCOMPLETE REPORTS</u>

Where the discharger 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.

### 8. 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:
  - (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."

# 9. <u>REGIONAL BOARD ADDRESS</u>

The discharger shall submit reports required under this Order, or other information required by the Executive Officer, to:

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

# G. NOTIFICATIONS

# 1. <u>VESTED RIGHTS</u>

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 discharger from liability under federal, state or local laws, nor create a vested right for the discharger to continue the waste discharge.

# 2. <u>U.S. EPA REVIEW</u>

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. <u>SEVERABILITY</u>

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.

# 4. <u>ORDER NO. 84-46</u>

This Order supersedes Order No. 84-46, "Waste Discharge Requirements for the Valley Center Municipal Water District, Lower Moosa Canyon Reclamation Facility, San Diego County". This Order becomes effective on the date of adoption by the Regional Board.

I, Arthur L. Coe, 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 February 9, 1995

Arthur L. Coe Executive Officer

## STANDARD PROVISIONS FOR RULES AND REGULATIONS

(Attachment No. 1 to Order No. 95-32)

- a. Provisions implementing Title 22, Division 4, Chapter 3, Wastewater Reclamation Criteria, and Title 17, Division 1, Chapter 5, Group 4, Article 1 & 2, of the California Code of Regulations;
- b. Provisions implementing the State Department of Health Services (DOHS) Guidelines For Use of Reclaimed Water and Guidelines for Use of Reclaimed Water for Construction Purposes and 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 or alternate measures, acceptable to DOHS, providing equivalent protection of public health;
- c. Provisions authorizing the Regional Board, the discharger/producer, or an authorized representative of these parties, upon presentation of proper credentials, to inspect the facilities of any reclaimed water user to ascertain whether the user is complying with the discharger/producer's rules and regulations;
- d. Provision for written notification, in a timely manner, to the discharger/producer by the reclaimed water user of any material change or proposed change in the character of the use of reclaimed water;
- e. Provision for submission of a preconstruction report to the discharger/producer by the reclaimed water user in order to enable the discharger/producer to determine whether the user will be in compliance with the discharger/producer's rules and regulations;
- f. Provision requiring reclaimed water users to designate a reclaimed water supervisor responsible for the reclaimed water system at each use area under the user's control. Reclaimed water supervisors should be responsible for the installation, operation, and maintenance of the irrigation system, enforcement of the discharger/producer's reclaimed water user rules and regulations, prevention of potential hazards, and maintenance of the reclaimed water distribution system plans in "as built" form;
- g. Provision authorizing the discharger/producer to cease supplying reclaimed water to any person who uses, transports, or stores such water in violation of the discharger/producer's rules and regulations;

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

#### **ORDER NO. 95-32**

# WASTE DISCHARGE REQUIREMENTS FOR VALLEY CENTER MUNICIPAL WATER DISTRICT LOWER MOOSA CANYON RECLAMATION FACILITY SAN DIEGO COUNTY

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

- 1. On June 14, 1971, this Regional Board adopted Order No. 71-37, Waste Discharge Requirements for the Valley Center Municipal Water District Lower Moosa Canyon Facility. Order No. 71-37 established waste discharge requirements for the disposal of up to 0.50 million gallons per day (MGD) of treated effluent by spray irrigation on three golf courses and percolation into the Lower Moosa Canyon ground water basin.
- 2. On October 15, 1984, this Regional Board adopted Order No. 84-46, Waste Discharge Requirements for the Valley Center Municipal Waster District Lower Moosa Canyon Reclamation Facility. Order No. 84-46 superseded Order No. 71-37 and established waste discharge requirements for the disposal of up to 1.0 MGD of treated effluent into the Lower Moosa Canyon ground water basin.
- 3. The Lower Moosa Canyon Water Reclamation Facility (LMCWRF) is located in the NW ¼ of Section 1, T11S, R3W, SBB&M in the Moosa Hydrologic Subarea (HSA) (903.13) of the San Luis Rey Hydrologic Unit (903.00). The facility currently provides a secondary level of treatment and has a rated capacity of 0.5 MGD with current flow rates of approximately 0.25 MGD. The treatment facilities at LMCWRF include a barminutor, two activated sludge aeration tanks, two secondary clarifiers, chlorination facilities, an aerobic digester and four sludge drying beds. The effluent is discharged to three percolation ponds.
- 4. The District proposes to increase the LMCWRF plant capacity from 0.5 MGD to 1.0 MGD by providing a in-line aerated grit removal chamber, two additional activated sludge aeration tanks, an additional secondary clarifier, a new aerated sludge holding tank, and additional sludge drying beds.
- 5. Order No. 84-46 has been reviewed by the Regional Board staff in accordance with criteria established in the Administrative Procedures Manual adopted by the State Water Resources Control Board. This Order, which supersedes Order No. 84-46, consolidates and makes changes to the Findings, Requirements, and Monitoring and Reporting Program of Order No. 84-46.

- 6. The District submitted an Odor Control Plan on January 10, 1985. The plan included more frequent hauling of sludge, installation of mechanical sludge dewatering equipment, chlorination at the influent wet well and introduction of air under pressure into the pressure transmission line. On February 8, 1985, the District submitted a Revised Odor Control Plan that eliminated the option of installing mechanical sludge dewatering equipment and air scrubbers. The District has since installed covers over all influent channels, injects chlorine at the influent wet well and increased the frequency of sludge hauling.
- 7. The LMCWRF currently discharges to percolation ponds located adjacent to Lower Moosa Canyon Creek, in the N1/2 of Section 35, T10S, R3W, SBB&M in the Bonsall Hydrologic Subarea (HSA) (903.12) of the San Luis Rey Hydrologic Unit (903.00). The ponds are contained on an 11 acre site having a collective volume of approximately 60 acre-feet. Order No. 84-46 limits the discharge of 0.3 MGD to the percolation ponds to ensure that percolated effluent does not surface down gradient within the Bonsall HSA. The District is now investigating the basin's capacity to assimilate a volume of discharge greater than 0.3 MGD.
- 8. The District is currently considering three alternative disposal options for up to 1.0 MGD.
  - a. percolation of 100% of the plant effluent to the percolation ponds;
  - b. percolation of 100% of the plant effluent (treated to secondary level) and withdrawal of ground water from the Lower Moosa Basin for landscape irrigation;
  - c. full Title 22 treatment of the effluent at the LMCWRF and direct transport from the facility to reclaimed water markets. Percolation ponds would be used to accommodate flows in excess of reclamation demands.
- 9. According to Title 22, Division 4, Chapter 3 of the California Code of Regulations, a direct beneficial use is defined as the use of reclaimed water which has been transported from the point of production to the point of use without an intervening discharge to water of the state. Therefore, ground water extraction from the Bonsall basin for reuse within the Lower Moosa basin does not constitute a direct benficial use.
- 10. The Valley Center Municipal Water District has prepared a final environmental impact report dated June 1984 for the Central Valley Center Sewage Project in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000 et. seq.) and the State Guidelines.
- 11. The District identified the potential for surfacing of percolated effluent in the Lower Moosa Canyon basin as an adverse water resource related environmental impact of the project. In order to ensure that percolated effluent does not surface in the Lower Moosa Canyon basin, the District has proposed to implement a ground water basin management plan. The proposed ground water basin management plan, if implemented, would avoid the potential adverse water quality impacts of the project identified in the District's environmental impact report.

12. The Discharger reports that the reclaimed wastewater and Lower Moosa Canyon ground water supplied by the District to the Circle "R" and the Lawrence Welk Golf Courses will replace the current use of a poorer quality local ground water for irrigation at these golf courses. The data was obtained on March 1, 1984.

GROUND WATER QUALITY - LOWER MOOSA CANYON BASIN				
Constituent	Unit	Circle "R" Wells (Combined)	Lawrence Welk's Well	
Total Dissolved Solids	mg/l	1387	1055	
Chloride	mg/l	341	245	
Sodium	mg/l	170	130	
Sulfate	mg/l	144	124	
Total Kjeldahl Nitrogen	mg/l	0.03	0.03	
Total Phosphorus	mg/l	0.01	0.01	
Nitrate/N	mg/l	0.05	0.05	
Boron	mg/l	0.17	0.23	
Fluoride	mg/l	0.34	0.22	

NOTE: mg/l = milligrams per liter

13. The Discharger reports that the estimated quality of the Lower Moosa Canyon Water Reclamation Facility (LMCWRF) effluent is as follows:

Constituent	Unit	LMCWRF Effluent 1994
Total Dissolved Solids	mg/l	877-1011
Chloride	mg/l	142-192.3
Percent Sodium	mg/l	48.5-55.6
Sulfate	mg/l	251-330
Biochemical Oxygen Demand	mg/l	2.0-3.0
Methylene Blue Active Substances	mg/l	0-0.14
Suspended Solids	mg/l	5.1-12.6
Turbidity	NTU	3.0-5.9
Boron	mg/l	0.33-0.40
Fluoride	mg/l	0.18-1.62

NOTE: mg/l = milligrams per liter

NTU = Nephelometric Turbidity Units

14. The "Comprehensive Water Quality Control Plan Report, San Diego Basin (9) (Basin Plan) was adopted by this Regional Board on March 17, 1975; and subsequently approved by the State Water Resources Control Board (State Board). Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board.

15. The Basin Plan establishes the following beneficial uses for the surface waters of the Lower Moosa Canyon Hydrologic Subarea (903.13):

	BENEFICIAL USES IDENTIFIED IN BASIN PLAN FOR LOWER MOOSA CANYON HYDROLOGIC SUBAREA				
	BENEFICIAL USES	INLAND SURFACE WATER	GROUND WATER 1		
MUN	Municipal and Domestic Supply		х		
AGR	Agriculture Supply	X	X		
IND	Industrial Service Supply	X	X		
PROC	Industrial Process Supply				
GRW	Groundwater Recharge				
FRSH	Freshwater Replenishment				
POW	Hydropower Generation				
REC-1	Water Contact Recreation	X			
REC-2	Non-Contact Water Recreation	X			
WARM	Warm Fresh-Water Habitat	X			
COLD	Cold Fresh-Water Habitat				
WILD	Wildlife Habitat	x			
RARE	Preservation of Rare & Endangered Species	X			
SPWN	Fish Spawning				
SAL	Saline Water Habitat				
MAR	Marine Habitat				

Note:

<sup>1.</sup> These beneficial uses do not apply westerly of the easterly boundary of the right-of-way of Interstate Highway 5. The beneficial uses for the remainder of the hydrologic area are as shown.

16. The Basin Plan established the following water quality objectives for the Bonsall Hydrologic Subarea (903.12) and the Lower Moosa Canyon Hydrologic Subarea (903.13):

BASIN PLAN WATER QUALITY OBJECTIVES				
CONSTITUENT	Concentration not to be exceeded more than 10 % of the time during any one year period (mg/l or as noted)			
	BONSALL		LOWER MOO	OSA CANYON
	SURFACE WATER	GROUND WATER	SURFACE WATER	GROUND WATER
Total Dissolved Solids	500	1500 1.2	500	800
Chloride	250	500 <sub>1,2</sub>	250	300
Percent Sodium	60 %	60 %	60 %	60 %
Sulfate	250	500 <sub>1,2</sub>	250	400
Nitrate (as NO <sub>3</sub> )		45 <sub>1,2</sub>		10
Nitrogen and Phosphorus	*		*	
Iron	0.3	0.85 1,2	0.3	0.3
Manganese	0.05	0.15 1,2	0.05	0.05
Boron	0.5	0.5 1,2	0.5	0.5
Odor	None	None	None	None
Turbidity	20 NTU	5 NTU	20 NTU	5 NTU
Fluoride	1.0	1.0 2	1.0	1.0
Color	20 UNITS	15 UNITS 2	20 UNITS	15 UNITS

Notes: mg/l = milligrams per liter

NTU = Nephelometric turbidity units

- 1. The recommended plan would allow for measurable degradation of ground water in this basin to permit continued agricultural land use. Point sources, however, would be controlled to achieve effluent quality corresponding to the tabulated numerical values. In future years demineralization may be used to treat ground water to the desired quality prior to use.
- 2. A portion of the Upper Mission Basin is being considered as an underground potable water storage reservoir for treated imported water. The area is located north of Highway 76 on the boundary of hydrologic subareas 3.11 and 3.12. If this program is adopted, local objectives approaching the quality of the imported water would be set and rigorously pursued.

- Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total Phosphorus (P) concentrations shall not exceed 0.05 mg/l in any stream at the point where it enters any standing body of water, nor 0.025 mg/l in any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/l total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined be surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.
- 17. The Basin Plan contains the following prohibitions applicable to the proposed discharge:

"Discharge of treated or untreated sewage or industrial wastes to a natural watercourse upstream of surface storage or diversion facilities used for municipal supply is prohibited."

"Discharge of treated or untreated sewage or industrial wastewater, exclusive of cooling water or other waters which are chemically unchanged, to a watercourse, is prohibited except in cases where the quality of said discharge complies with the receiving body's water quality objectives."

"Discharging of treated or untreated sewage or industrial wastes in such a manner or volume as to cause sustained surface flow or ponding on lands not owned or under the control of the discharger is prohibited except in cases defined in the previous paragraph and in cases in which the responsibility for all downstream adverse effects is accepted by the discharger."

"The dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste directly into inland waters or watercourses or adjacent to the watercourses in any manner which may permit its being washed into the watercourse is prohibited."

- 18. The discharge of reclaimed water to the areas authorized under this Order is in conformance with SWRCB Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. The existing wastewater reclamation project will:
  - a) Have maximum benefit to the people of the State, because in the absence of reclaimed wastewater, alternative water supply would be used for irrigation of the reclaimed water use area described in this Order;
  - b) Not unreasonably affect the beneficial uses of ground water in the Moosa HSA; and,
  - c) Not cause the ground water quality objectives in the Bonsall HSA to be exceeded.

- 19. Regional Board Resolution No. 90-61, A Resolution Amending Resolution No. 90-40, A Region-wide Groundwater Amendment to the Comprehensive Water Quality Control Plan for the San Diego Region, indicated that for areas down gradient of municipal supply reservoirs, effluent limitations for reclaimed water shall be at levels that are not less than constituent concentrations of water supply plus a typical incremental increase resulting from domestic water use, but not more than the "Comprehensive Water Quality Control Plan Report, San Diego Basin (9)" (Basin Plan) ground water quality objectives.
- 20. This Order establishes discharge limitations for the discharge of effluent to the percolation ponds located in the Bonsall Basin that are below the Basin Plan ground water objectives established for the Bonsall HSA (903.12).
- 21. As noted in Finding No. 8, the District proposes to discharge reclaimed water to the Lower Moosa Hydrologic Subarea (903.13). The LMCWRF's effluent concentration as described in Finding No. 12 for total dissolved solids exceeds the Basin Plan's ground water objective within the Lower Moosa HSA. This Order establishes an interim total dissolved solids limit above the Basin Plan's objective for 5 years to give the District time to do one of the following:
  - a. demonstrate that the Basin Plan objective for total dissolved solids should be relaxed;
  - b. to provide additional treatment at the LMCWRF that will produce an effluent total dissolved solids concentration below 800 mg/l; or
  - c. to demonstrate that the discharge will not cause a violation of the Basin Plan and Regional Board Resolution No. 90-61.
- 22. The discharger reports that the individual unit wastewater treatment processes will meet all Title 22 reliability standards of the State Department of Health Services.
- 23. As noted in Finding No. 12 and 45 of Order No. 84-46, the discharger has submitted a final environmental impact report dated June 1984 in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000 et. seq.) and the State Guidelines. This report described the all aspects of the expansion of the Lower Moosa Canyon Water Reclamation Facility to a treatment capacity of 1.0 MGD.

- 24. The Regional Board, in establishing the requirements contained herein, 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; and
  - (i) Need to develop and use recycled water.
- 25. The Regional Board has considered all water resource related environmental factors associated with the proposed discharge of waste from Valley Center Reclamation Facility.
- 26. The Regional Board has notified the Valley Center Municipal Water District and all known interested parties of the intent to prescribe waste discharge requirements for the proposed discharge.
- 27. The Regional Board in a public meeting heard and considered all comments pertaining to the proposed discharge of waste from the Valley Center Water Reclamation Facility.

IT IS HEREBY ORDERED THAT, Valley Center Municipal Water District, in order to meet the provisions contained in Division 7 of the California Water Code and Regulations adopted thereunder, shall comply with the following:

#### A. PROHIBITIONS

- 1. The discharge of a waste flow volume in excess of 1.0 million gallons per day is prohibited unless the discharger files a report of waste discharge for the proposed increased flow.
- 2. Neither the treatment, storage nor disposal of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.
- 3. Discharges of treated or untreated solid or liquid waste to a navigable water or tributary of a navigable water are prohibited unless authorized by an NPDES permit issued by this Regional Board.
- 4. All irrigation shall be done by the District or a contracted entity. Connections to the irrigation system by individual residences is prohibited.

## B. DISCHARGE SPECIFICATIONS

1. The discharge of effluent from the Lower Moosa Canyon Water Reclamation Facility shall not contain pollutants in excess of the following effluent limitations:

CONSTITUENT	UNITS	30-DAY AVERAGE <sup>1</sup>	DAILY MAXIMUM <sup>2</sup>	12 MONTH AVERAGE <sup>3</sup>	
Biological Oxygen Demand (BOD @ 20° C)	mg/l	20	30		
Total Suspended Solids	mg/l	20	30		
Total Dissolved Solids	mg/l			1000⁴	
Chloride	mg/l			200	
Sulfate	mg/l			350	
Fluoride	mg/l			1.0	
Boron	mg/l			0.5	
Iron	mg/l			0.854	
Manganese	mg/l			0.15⁴	
Nitrate (as NO <sub>3</sub> )	mg/l			45 <sup>5</sup>	
рН	pH Units	Within the limits od 6.0 to 9.0 at all times			

Notes: mg/l = milligrams per liter

<sup>&</sup>lt;sup>1</sup> The 30-day average effluent limitation shall apply to the arithmetic mean of the results all samples collected during any month.

<sup>&</sup>lt;sup>2</sup> The daily maximum effluent limitation shall apply to the results of a single composite sample collected over a period of 24 hours or a grab sample.

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.

<sup>&</sup>lt;sup>4</sup> The effluent limitation for these constituents are applicable for discharges to the Bonsall HSA (903.12) and for an interim period of five years to the Lower Moosa HSA (903.13). At the end of this interim five year period the discharge limitations for these constituents will return to the Lower Moosa HSA ground water objectives set forth in the Basin Plan.

<sup>&</sup>lt;sup>5</sup> This effluent limitation is applicable only for a discharge to the percolation ponds.

- 2. Any effluent used for direct beneficial use shall conform with all applicable provisions of California Code of Regulations, Title 22, Division 4, Chapter 3.
- 3. All storage and percolation ponds shall be so managed that a dissolved oxygen concentration of not less than 2.0 milligrams per liter is maintained at all times.
- 4. Collected screenings, sludge, other solids removed from liquid wastes, and filter backwash shall be disposed in a manner described in the Findings of this Order or as approved by the Executive Officer. Sewage sludge treatment and disposal shall comply with all pertinent paragraphs of Part 503, Subchapter O, Chapter I of Title 40 Code of Federal Regulations.

#### C. FACILITY DESIGN AND OPERATION SPECIFICATIONS

### 1. PROPER OPERATION

The discharger 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 discharger 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.

### 2. **OPERATION MANUAL**

The discharger shall submit to the Executive Officer a facility operations manual within 90 days of the adoption of this Order. A copy of the facility operations manual shall be maintained at the dischargers facility and shall be available to personnel at all times.

### 3. GROUND WATER MANAGEMENT PLAN REPORT

Prior to initiation of discharge in excess of 0.3 MGD to the percolation ponds the discharger shall submit a report that provides a program for monitoring, management and forecasting of any future potential problems associated with balancing discharges to and extractions from the Bonsall HSA.

### 4. <u>CERTIFICATION REPORTS</u>

Prior to initiation of discharge in excess of 0.5 MGD from the LMCWRF the discharger shall submit a certification report, that contains a requirement by requirement analysis based on acceptable engineering practices, of how the process and physical designs of new treatment facilities will ensure compliance with these waste discharge requirements. The design engineer shall affix his/her signature and engineering license number to the certification report.

# 5. <u>ENGINEERING REPORT</u>

The discharger shall meet the design, operational, and reliability requirements of Articles 7, 8, 9 and 10 of the California Code of Regulations, Title 22, Division 4, Chapter 3. The discharger shall prepare an engineering report conforming to Section 60323, Article 7 of the California Code of Regulations, Title 22, Division 4, Chapter 3. The engineering report shall be submitted 120 days prior to initiation of a direct discharge to any reclaimed water use area, to the State Department of Health Services - Office of Drinking Water, County Department of Health Services, and the Regional Board Executive Officer for approval.

# 7. **OPERATORS' CERTIFICATION**

The discharger'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.

### 8. RECLAIMED WATER SUPERVISOR

All reclaimed water users shall designate a reclaimed water supervisor responsible for the reclaimed water system at each use area under the user's control. Reclaimed water supervisors should be responsible for the installation, operation, and maintenance of the irrigation system, enforcement of the discharger/producer's reclaimed water user rules and regulation, prevention of potential hazards, and maintenance of the reclaimed water distribution system plans in "as built" form.

# 9. FLOOD PROTECTION

All waste treatment, containment and disposal facilities with the exception of landscape irrigation areas, shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency, unless the discharger obtains revised waste discharge requirements for less stringent flood protection requirements for landscape irrigation ponds.

### 10. RUNOFF PROTECTION

Effluent storage facilities shall be designed, constructed, operated, and maintained so as to prevent surfacing of wastes on property not owned or controlled by the discharger. All waste treatment, containment and disposal facilities with the exception of landscape irrigation areas, shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency 24-hour storm.

## 11. OFFSITE DISCHARGES

The discharger shall design, construct, operate, and maintain storage facilities and irrigation areas to prevent surfacing or runoff of wastewater on property not owned or controlled by the discharger.

## 12. <u>CROSS-CONNECTIONS</u>

The potable water supply shall not be used to supplement the reclaimed water supply except through an approved air gap. In other areas where the potable water supply is piped to premises where sewage is pumped, treated or reclaimed (e.g., sewage treatment plants or pumping stations, golf course, etc.) the potable water supply shall be protected at the property line in accordance with the State Department of Health Services' Regulations Relating to Cross-Connections.

# 13. <u>CAPACITY NOTIFICATION</u>

Whenever a publicly owned wastewater treatment plant will reach capacity within four years the discharger shall notify the Regional Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The discharger must demonstrate that adequate steps are being taken to address the capacity problem. The discharger shall submit a technical report to the Regional Board showing flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Board, or within 120 days after receipt of notification from the Regional Board, of a finding that the treatment plant will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Board itself.

#### 14. <u>MONITORING AND REPORTING</u>

The discharger shall comply with attached Monitoring and Reporting Program No. 95-32, 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. 95-32.

# D. RECLAIMED WATER USE PROVISIONS

1. The Valley Center Municipal Water District (discharger/producer) shall have Rule and Regulations for Reclaimed Water Users governing the design and construction of reclaimed water use facilities and the use of reclaimed water. The Rules and Regulations shall be reviewed and updated if necessary by the discharger when a new Order or Addendum is adopted by the Regional Board, and shall, at a minimum, include the Standard Provisions for Rules and Regulations which are contained in Attachment No. 1 to this Order.

The revised rules and regulations shall be subject to the approval of the Regional Board Executive Officer; the State Department of Health Services and the San Diego County Department of Health Services, Environmental Health Services. The revised rules and regulations or a letter certifying that the discharger/producer rules and regulations contain the updated provisions in the Order, shall be submitted to the Regional Board 90 days prior to any use of reclaimed water.

- 2. The Valley Center Municipal Water District (discharger/producer) shall implement and enforce the approved rules and regulations for reclaimed water users. Use of reclaimed water by the discharger/producer shall be consistent with item D.1 above. In addition, the discharger/producer shall submit an annual report certifying that the users have implemented the rules and regulations established by the discharger.
- 3. The Valley Center Municipal Water District (discharger/producer) shall, within 90 days of any use of reclaimed water, develop and submit to the Regional Board a program of Best Management Practices (BMP) for the reclaimed water users governing the irrigation practices, management and maintenance to avoid runoff, ponding and overspray. The discharger/producer shall oversee that the reclaimed water users have implemented the BMP upon approval of the BMP program by the Regional Board Executive Officer.
- 4. The Valley Center Municipal Water District (discharger/producer) shall, within 90 days of any use of reclaimed water, develop and submit to the Regional Board a program to conduct compliance inspections of reclaimed water reuse sites to determine the status of compliance with the approved rules and regulations for reclaimed water users. The discharger/producer shall implement the inspection program upon its approval by the Regional Board Executive Officer.
- 5. Reclaimed water shall not be supplied to parties who use, transport, or store such water in a manner which causes a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.

6. Prior to delivering reclaimed water to any new user within the Valley Center Municipal Water District service area, the discharger shall submit a report to this Regional Board and the County of San Diego Department of Health Services discussing the delivering system, the use and the hydrologic Subareas where reclaimed water will be delivered.

#### E. STANDARD PROVISIONS

#### 1. <u>DUTY TO COMPLY</u>

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

- (a) Enter upon the discharger'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; and
- (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. <u>CIVIL MONETARY REMEDIES</u>

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. <u>PENALTIES FOR INVESTIGATION, MONITORING OR INSPECTION</u> <u>VIOLATIONS</u>

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 discharger 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 discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the discharger 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.
- (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 discharger 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.

## 7. <u>CORRECTIVE ACTION</u>

The discharger 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 discharger 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 discharger 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 in 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 discharger 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.

# F. REPORTING AND RECORD KEEPING REQUIREMENTS

## 1. PERMIT REPOSITORY

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

## 2. GENERAL REPORTING REQUIREMENT

The discharger 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 discharger shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.

## 3. <u>RETENTION OF RECORDS</u>

The discharger 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.

#### 4. **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 discharger 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.

## 5. <u>CHANGE IN DISCHARGE</u>

The discharger 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.

# 6. <u>CHANGE IN OWNERSHIP</u>

This Order is not transferrable to any person except after notice to the Executive Officer. The discharger 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 discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger 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 discharger and incorporate such other requirements as may be necessary under the California Water Code.

## 7. <u>INCOMPLETE REPORTS</u>

Where the discharger 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.

#### 8. 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:
  - (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."

#### 9. REGIONAL BOARD ADDRESS

The discharger shall submit reports required under this Order, or other information required by the Executive Officer, to:

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

#### G. NOTIFICATIONS

### 1. <u>VESTED RIGHTS</u>

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 discharger from liability under federal, state or local laws, nor create a vested right for the discharger to continue the waste discharge.

## 2. <u>U.S. EPA REVIEW</u>

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. <u>SEVERABILITY</u>

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.

## 4. *ORDER NO. 84-46*

This Order supersedes Order No. 84-46, "Waste Discharge Requirements for the Valley Center Municipal Water District, Lower Moosa Canyon Reclamation Facility, San Diego County". This Order becomes effective on the date of adoption by the Regional Board.

I, Arthur L. Coe, 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 February 9, 1995

Arthur L. Coe Executive Officer

## STANDARD PROVISIONS FOR RULES AND REGULATIONS

(Attachment No. 1 to Order No. 95-32)

- a. Provisions implementing Title 22, Division 4, Chapter 3, Wastewater Reclamation Criteria, and Title 17, Division 1, Chapter 5, Group 4, Article 1 & 2, of the California Code of Regulations;
- b. Provisions implementing the State Department of Health Services (DOHS) Guidelines For Use of Reclaimed Water and Guidelines for Use of Reclaimed Water for Construction Purposes and 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 or alternate measures, acceptable to DOHS, providing equivalent protection of public health;
- c. Provisions authorizing the Regional Board, the discharger/producer, or an authorized representative of these parties, upon presentation of proper credentials, to inspect the facilities of any reclaimed water user to ascertain whether the user is complying with the discharger/producer's rules and regulations;
- d. Provision for written notification, in a timely manner, to the discharger/producer by the reclaimed water user of any material change or proposed change in the character of the use of reclaimed water;
- e. Provision for submission of a preconstruction report to the discharger/producer by the reclaimed water user in order to enable the discharger/producer to determine whether the user will be in compliance with the discharger/producer's rules and regulations;
- f. Provision requiring reclaimed water users to designate a reclaimed water supervisor responsible for the reclaimed water system at each use area under the user's control. Reclaimed water supervisors should be responsible for the installation, operation, and maintenance of the irrigation system, enforcement of the discharger/producer's reclaimed water user rules and regulations, prevention of potential hazards, and maintenance of the reclaimed water distribution system plans in "as built" form;
- g. Provision authorizing the discharger/producer to cease supplying reclaimed water to any person who uses, transports, or stores such water in violation of the discharger/producer's rules and regulations;

- h. Provision requiring notification and concurrence of the State Department of Health Services and the San Diego County Department of Health Services, Environmental Health Services for new reclaimed water users. The notification of Environmental Health Services shall include a site distribution plan for new and retrofit facilities and a cross-connection control inspection plan for sites containing both potable and reclaimed water distribution lines;
- i. Provision requiring all windblown spray and surface runoff of reclaimed water applied for irrigation onto property not owned or controlled by the discharger or reclaimed water user shall be prevented by implementation of best management practices;
- j. Provision requiring all reclaimed water storage facilities owned and/or operated by reclaimed water users to 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;
- k. Provision requiring all reclaimed water storage facilities owned and/or operated by reclaimed water users to be protected against 100 year frequency peak stream flows as defined by the Riverside County flood control agency unless the Regional Board Executive Officer approves relaxed storm protection measures for the facility;
- 1. Provision for notification to reclaimed water users that the Regional Board may initiate enforcement action against any reclaimed water user who discharges reclaimed water in violation of any applicable discharge prohibitions 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; and
- m. Provision for notification to reclaimed water users that the Regional Board may initiate enforcement action against the discharger/producer, which may result in the termination of the reclaimed water supply, if any person uses, transports, or stores such water in violation of the discharger/producer's rules and regulations or in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code Section 13050.

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

# MONITORING AND REPORTING PROGRAM NO. 95-32 FOR VALLEY CENTER MUNICIPAL WATER DISTRICT LOWER MOOSA CANYON RECLAMATION FACILITY

## 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.)

## Monitoring and Reporting Program No. 95-32

- (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:
  - (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.

## Monitoring and Reporting Program No. 95-32

- 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 listed in Provision D.5.
- 11. The monitoring reports shall be signed by an authorized person as required by Report and Record Keeping Requirement E.9.
- 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 Lower Moosa Canyon Reclamation Facility shall be collected in accordance with the following criteria:

CONSTITUENT	UNIT	TYPE OF SAMPLE	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW RATE	MGD	Continuous	Continuous	Quarterly
Biochemical Oxygen Demand (BOD, @ 20°C)	mg/l	Composite	Weekly	Quarterly
Total Suspended Solids	mg/l	Composite	Weekly	Quarterly
Volatile Suspended Solids	mg/l	Composite	Weekly	Quarterly
Total Dissolved Solids	mg/l	Composite	Quarterly <sup>1</sup>	Quarterly
Chloride	mg/l	Composite	Quarterly <sup>1</sup>	Quarterly
Sulfate	mg/l	Composite	Quarterly <sup>1</sup>	Quarterly
Fluoride	mg/l	Composite	Quarterly <sup>1</sup>	Quarterly
Boron	mg/l	Composite	Quarterly <sup>1</sup>	Quarterly
Percent Sodium	%	Composite	Quarterly	Quarterly
Iron	mg/l	Composite	Quarterly	Quarterly
Manganese	mg/l	Composite	Quarterly	Quarterly
Nitrate	mg/l	Composite	Quarterly	Quarterly
рН	Unit	Grab	Weekly	Quarterly
Adjusted Sodium Adsorption Ratio <sup>3</sup>		Composite	Quarterly	Quarterly
Methylene Blue Active Substances	mg/l	Composite	Quarterly	Quarterly
Turbidity <sup>3</sup>	NTU	Continuous	*	Monthly
Chlorine Residual <sup>3</sup>	mg/l	Continuous	**	Monthly
Settleable Solids <sup>3</sup>	ml/l	Grab	***	Monthly
Coliform <sup>3</sup>	MPN/100ml	Grab	***	Monthly
Aluminum	mg/l	Composite	Annually	Annually
Arsenic	mg/l	Composite	Annually	Annually
Barium	mg/l	Composite	Annually	Annually
Cadmium	mg/l	Composite	Annually	Annually
Chromium	mg/l	Composite	Annually	Annually
Copper	mg/l	Composite	Annually	Annually
Lead	mg/l	Composite	Annually	Annually
Zinc	mg/l	Composite	Annually	Annually
Mercury	mg/l	Composite	Annually	Annually

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Selenium	mg/l	Composite	Annually	Annually
Silver	mg/l	Composite	Annually	Annually

Notes: MPN/100 ml = Most Probable Number per 100 milliliters

ml/l = milliliters per liter mg/l = milligrams per liter

NTU = Nephelometric Turbidity Units

- The discharger shall increase the sampling frequency from quarterly to monthly for any noted constituent that exceeds the limit specified by Discharger Specification B.1 of this Order. The monthly 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 quarterly frequency.
- The adjusted sodium adsorption ratio is calculated as follows:

Adjusted Sodium Adsorption Ratio (Adj. SAR): Na , where Na and Mg are in ( $Ca_x + Mg$ )/2 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."

- The discharger is required to test for these constituents when there is a direct use of reclaimed water.
- \* 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 of each day. If the turbidity value exceeds 5 NTU's at any time, its duration shall also be reported on a daily log.
- \*\* Chlorine residual analysis shall be performed by a continuous recording meter. The average value of each day shall be estimated from the flow chart and shall be reported monthly.
- \*\*\* Samples for settleable solids and 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 log of the type, quantity, and manner of disposal of solids removed in the course of sewage treatment shall be maintained and submitted quarterly to this Regional Board containing monitoring results and vector attraction reduction requirements in accordance with 40 CFR, Part 503. Additionally, the District shall include any sludge test data generated from sludge sampling.

## D. GROUND WATERS

Representative ground water samples shall be collected from the following well locations and in accordance with the following schedule. The method of sample collection shall be included with each report.

# **MONITORING WELLS**

WELL NO.	APPROXIMATE LOCATION	GROUND WATER QUALITY		
1	500 feet east of percolation ponds	upgradient of ponds		
2	center of western percolation ponds dike	at ponds		
3	750 to 1000 feet west of percolation ponds	downgradient of ponds		
SAMPLING OF FUTURE WELLS SHALL OCCUR AS THEY ARE INSTALLED				

## **SAMPLING PROGRAM**

CONSTITUENT	UNIT	TYPE OF SAMPLE	SAMPLING FREQUENCY	REPORTING FREQUENCY
Total Dissolved Solids	mg/l	Grab	Semiannual	Semiannual
Nitrate as NO <sub>3</sub>	mg/l	Grab	Semiannual	Semiannual
Chloride	mg/l	Grab	Semiannual	Semiannual
Sulfate	mg/l	Grab	Semiannual	Semiannual
Sodium	mg/l	Grab	Semiannual	Semiannual
Iron	mg/l	Grab	Semiannual	Semiannual
Manganese	mg/l	Grab	Semiannual	Semiannual
Fluoride	mg/l	Grab	Semiannual	Semiannual
Boron	mg/l	Grab	Semiannual	Semiannual

# E. RECLAIMED WATER USERS SUMMARY REPORT

A reclaimed water users summary report shall be submitted quarterly containing the following information:

# 1. Reclaimed water use site summary information

The following information shall be submitted for each reclaimed water use site.

- a. Name of the reclaimed water reuse site
- b. Owner of the reclaimed water use facility
- c. Address of the reuse site
- d. Name of the reclaimed water user supervisor
- e. Phone number of the on-site water user supervisor
- f. Mailing address, if different from site address
- g. Basin Plan name of ground water basin underlying the reuse site
- h. Volume of reclaimed water delivered to the reuse site on a monthly basis

## 2. Reclaimed Water Use Summary Information

- a. Total gallons of reclaimed water supplied to all reclaimed water users for each month of the reporting period.
- b. Total number of reclaimed water user sites

## 3. Reclaimed 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.

# 4. Reclaimed water user violations of the discharger/producer's rules and regulations.

The discharger/producer shall identify all reclaimed water users known by the discharger/producer to be in violation of the discharger/producer's rules and regulations for reclaimed 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.

#### F. ANNUAL SUMMARY OF MONITORING DATA

By January 30 of each year, the discharger shall submit an annual report to the Executive Officer. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements of this Order.

#### G. 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 30 <sup>th</sup> day of the following month	
Quarterly	January - March April - June July - September October - December	April 30 <sup>th</sup> July 30 <sup>th</sup> , October 30 <sup>th</sup> January 30 <sup>th</sup>	
Semiannual	January - June July - December	July 30 <sup>th</sup> January 30 <sup>th</sup>	
Annually	January-December	January 31st	

## Monitoring reports shall be submitted to:

California Regional Water Quality Control Board San Diego Region 9771 Clairemont Mesa Blvd., Suite B San Diego, CA 92124-1331

Ordered by

ARTHUR L. COE

**Executive Officer**