

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

ORDER NO. 93-47

WASTE DISCHARGE REQUIREMENTS  
FOR  
COUNTY OF ORANGE  
JOPLIN YOUTH CENTER  
ORANGE COUNTY

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

1. On September 24, 1968, this Regional Board adopted Resolution No. 68-R30, A Resolution Prescribing Requirements for the Discharge of Treated Domestic Waste Water by the County of Orange From the Joplin Boys Ranch. Resolution No. 68-R30 established waste discharge requirements for the disposal of up to 15,000 gallons per day (GPD) of secondary effluent by turf and crop irrigation.
2. On September 8, 1986, this Regional Board adopted Order No. 86-51, Waste Discharge Requirements for the County of Orange, Joplin Youth Center, Orange County. Order No. 86-51 establishes requirements for the discharge of up to 7,500 GPD of treated wastewater by landscape irrigation.
3. As a part of the FY 1992/93 Waste Discharge Order Update Program, Order No. 86-51 has been reviewed by Regional Board staff as required by Section 13263 of California Water Code. This Order updates the Findings, Requirements, and Monitoring and Reporting Program of Order No. 86-51 in order to address current State and Regional Board policies and regulations and the current status of the project.
4. Joplin Youth Center treatment plant is a package activated sludge plant. Treated wastewater is discharged to a percolation/evaporation pond.
5. The monitoring data submitted by the discharger indicates that the discharge from Joplin Youth Center has exceeded the limits established by Order No. 86-51 for TDS, chloride, sulfate and percent sodium several times in the past.
6. Provision C.15 of Order No. 86-51 required the discharger to conduct a study of the basin's capacity to assimilate the wastewater discharge, then develop a plan to achieve compliance with Basin Plan ground water objectives.
7. On July 22, 1987, this Regional Board received a study entitled "County of Orange, Joplin Boy's Ranch, Wastewater Feasibility Study" dated June 1987 and prepared by McGoldrick Engineers Inc.. This study proposed the following three

alternatives for the disposal of wastewater at Joplin Youth Center:

- a. Modify the onsite treatment plant to bring the discharge of wastewater into compliance with Basin Plan; or
  - b. Abandon the onsite treatment plant and discharge raw sewage to the Santa Ana Mountains County Water District Robinson Ranch Treatment Plant; or
  - c. Abandon the onsite treatment plant and discharge raw sewage to the Santa Margarita Water District Chiquita Treatment Plant.
8. On August 31, 1992, this Regional Board received a study entitled "Demineralization Feasibility Scoping Study and Report" dated July 1992 and prepared by Steven Andrews Engineering for the discharger. This study recommended that the following improvements be implemented at the facility:
- a. Design and construct an 8,000 GPD capacity extended aeration package wastewater treatment plant with equalization and tertiary filters; and
  - b. Design and construct a 5,600 GPD reverse osmosis system to treat a portion of the effluent which will be blended with the RO effluent; and
  - c. Rehabilitate the existing storage pond including draining, cleaning, and lining; and
  - d. Design and modify the irrigation system.
9. The County of Orange did not submit to this Regional Board a report of waste discharge for the facility improvements as proposed in the study noted in Finding No. 8 above.
10. The Joplin Youth Center treatment facility generates sewage sludge and is therefore subject to Part 503, Subchapter O, Chapter I of Title 40 of the Code of Federal Regulations.
11. At the time of adoption of this Order, the State of California sludge regulatory program has not been approved by the Environmental Protection Agency (EPA). Consequently, the permitting authority for part 503 permits is the responsibility of the EPA Regional Office. The deadline for Joplin Youth Center to submit a permit application to EPA is February 19, 1994.
12. The County of Orange, Joplin Youth Center is comprised of

approximately 320 acres situated in the NE1/4 of Section 2, the E1/2 of the SE1/4 of Section 2, and the W1/2 of the SW1/4 of Section 1, T6S, R7W, SBB&M. It is located in the Mission Viejo Hydrologic Area of the San Juan Hydrologic Unit.

13. The discharger reports that water is supplied to the Joplin Youth Center by the Santa Ana Mountains County Water District. The partial results of analysis of potable water samples taken from October 1985 to May 1986 are as follows:

Constituent	Unit	Effluent Range
Total Dissolved Solids	mg/l	360 - 635
Chloride	mg/l	30.6 - 63.5
Sulfate	mg/l	148 - 228

14. The results of analysis of samples taken of the effluent from the Joplin Youth Center from November 1990 to December 1992 are as follows:

Constituent	Unit	Effluent Concentration Ranges
Total Dissolved Solids	mg/l	1139 - 1336
Chloride	mg/l	194 - 290
Sulfate	mg/l	270 - 402
Sodium	%	61.7 - 70.4

15. The Basin Plan established the following beneficial uses of the surface waters of the Mission Viejo Hydrologic Area:

- (a) Agricultural Supply
- (b) Industrial Service Supply
- (c) Water Contact Recreation
- (d) Noncontact Recreation
- (e) Wildlife Habitat
- (f) Warm Freshwater Habitat
- (g) Cold Freshwater Habitat
- (h) Preservation of rare and Endangered Species

16. The Basin Plan established the following beneficial uses for the ground water of the Mission Viejo Hydrologic Area:

- (a) Municipal and domestic supply
- (b) Agricultural supply

- (c) Industrial service supply  
 (d) Ground water recharge (potential)

17. The Comprehensive Water Quality Control Plan Report, San Diego Basin (9) (Basin Plan), adopted by this Regional Board on March 17, 1975, and approved by the State Water Resources Control Board on March 20, 1975, and updated by the Regional Board on February 27, 1978, March 23, 1981, January 23 and October 3, 1983, and August 27, 1984, established the following objectives for surface and ground waters in the Mission Viejo Hydrologic Area.

Constituent	Concentration not to be exceeded more than 10 percent of the time	
	Ground Water	Surface Water
Total Dissolved Solids	500 mg/l	500 mg/l
Chloride	250 mg/l	250 mg/l
Percent Sodium	60 %	60 %
Sulfate	250 mg/l	250 mg/l
Nitrate	45 mg/l	---
Nitrogen and Phosphorus	---	*
Iron	0.3 mg/l	0.3 mg/l
Manganese	0.05 mg/l	0.05 mg/l
Methylene Blue Active Substances	0.5 mg/l	0.5 mg/l
Boron	0.5 mg/l	0.5 mg/l
Dissolved Oxygen	---	**
Odor	None	None
Turbidity	5 NTU	20 NTU
Color	15 units	20 units
Fluoride	1.0 mg/l	1.0 mg/l

Note: NTU = Nephelometric Turbidity Unit

- \* 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 by more than 10 percent of the time unless studies of the specific water body in questions clearly show that water quality objectives 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 by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

\*\* Ninety percent or more of natural seasonal minimum oxygen concentrations and more than 5.0 mg/l maintained at least 90 percent of the time.

18. After reviewing the results in Finding No. 14, Regional Board staff has determined that the Joplin Youth Center wastewater discharge may not be in compliance with the groundwater quality objectives set forth in the Basin Plan for the Mission Viejo Hydrologic Area. However, the discharger is in process to develop a plan to achieve compliance with the Basin Plan groundwater objectives. This Order establishes a time schedule for the discharger to achieve compliance with the Basin Plan groundwater objectives.
19. The Basin Plan contains the following prohibitions applicable to the proposed discharge:

#### **Inland Waters**

"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 waste in such 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."

16. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:
  - (a) Past, present and probable future beneficial uses of water;
  - (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;
  - (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
  - (d) Economic considerations; and
  - (e) The need for developing housing within the region.
17. The Regional Board has considered all water resources related environmental factors associated with the proposed discharge of waste.
18. The Regional Board has notified the discharger and all known interested parties of the intent to prescribe waste discharge requirements for the proposed discharge.
19. The Regional Board in a public meeting heard and considered all comments pertaining to its proposed action.
20. This project is an ongoing project and as such is exempt from the provisions of the California Environmental Quality Act, in accordance with Title 14, California Administrative Code, Chapter 3, Article 18, Section 15261.

**IT IS HEREBY ORDERED**, that the County of Orange, 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. Discharges of wastes, including windblown spray and runoff of effluent applied for irrigation, to lands which have not been specifically described in the report of waste discharge and for which valid waste discharge requirements are not in force are prohibited.

2. The discharge of any radiological, chemical or biological warfare agent, or high-level radiological waste is prohibited.
3. Storage, use and/or disposal of wastes in a manner that would result in ponding or surfacing of wastes on lands beyond the disposal area, as described in the findings of this Order, is prohibited.
4. The discharge of wastewater shall not:
  - (a) Cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin;
  - (b) Cause the occurrence of objectionable tastes and odors in water pumped from the basin;
  - (c) Cause waters pumped from the basin to foam;
  - (d) Cause the presence of toxic materials in waters pumped from the basin;
  - (e) Cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0;
  - (f) Cause this Regional Board's objectives for the ground or surface waters of the Mission Viejo Hydrologic Area as established in the Basin Plan, to be exceeded;
  - (g) Cause odors, septicity, mosquitos or other vectors, weed growth or other nuisance conditions in any inland watercourse;
  - (h) Cause a surface flow recognizable as sewage in any inland watercourse; or
  - (i) Cause a pollution, contamination or nuisance or adversely affect beneficial uses of the ground or surface waters of the Mission Viejo Hydrologic Area as established in the Basin Plan.
5. A 30-day average wastewater flowrate at Joplin Youth Center treatment plant in excess of 7500 GPD is prohibited unless the discharger obtains revised waste discharge requirements for the proposed increased flow.
6. Odors, vectors, and other nuisances of sewage or sewage sludge origin beyond the limits of the treatment plant

site or disposal area are prohibited.

7. The discharge of waste in a manner other than as described in the findings of this Order is prohibited unless the discharger obtains revised waste discharge requirements that provide for the proposed change.

**B. DISCHARGE SPECIFICATIONS**

1. (a) The discharge of an effluent containing BOD and TSS in excess of the following effluent limitations is prohibited:

Constituent	Unit	30-day <sup>1</sup> Average	Daily <sup>2</sup> Maximum
Biochemical Oxygen Demand (BOD <sub>5</sub> @ 20°C)	mg/L	30	45
Total Suspended Solids	mg/L	30	45

<sup>1</sup> The 30-day average shall be the arithmetic mean, using the result of analysis of all samples collected during any 30-consecutive day period.

<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.

- (b) Until June 21, 1996, the discharge of an effluent containing pollutants in excess of the following effluent limitations is prohibited:

Constituent	Unit	12-month <sup>3</sup> Average	Daily Maximum
Total Dissolved Solids	mg/l	1300	1400
Chloride	mg/l	300	400
Sulfate	mg/l	300	400
Percent Sodium	%	65	70

<sup>3</sup> The 12-month average shall be the arithmetic mean, using the result of analysis of all samples collected during any 12-month period.

- (c) After June 21, 1996, the discharge of an effluent containing pollutants in excess of the following effluent limitations is prohibited:

Constituent	Unit	12-month <sup>3</sup> Average	Daily Maximum
Total Dissolved Solids	mg/l	500	600
Chloride	mg/l	250	300
Sulfate	mg/l	250	300
Percent Sodium	%	60	65

2. The disposal of sewage sludge shall be at a municipal solid waste landfill permitted to accept sewage sludge or at a site that has been approved by the Regional Board executive officer.
3. All waste treatment, containment and disposal facilities shall be protected against 100-year peak stream flows as defined by the Orange County flood control agency.
4. All waste treatment, containment and disposal facilities shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency 24-hour storm.
5. 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. Surface runoff of any wastes which surface on property owned or controlled by the discharger onto property not owned or controlled by the discharger shall be prevented.

**C. PROVISIONS**

1. Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.
2. 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.
3. 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 fails, is reduced, or is lost.

4. 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.
5. 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.
6. 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.

7. This Order is not transferrable to any person except after

notice to the Executive Officer. 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. The discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage to a new discharger as described under Reporting Requirement D.3.

8. 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.
9. 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.
10. 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.
11. A copy of this Order shall be maintained at Joplin Youth Center Treatment Plant and shall be available to operating personnel at all times.

12. 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.

#### D. REPORTING REQUIREMENTS

1. In order to address compliance with the Basin Plan ground water objective for TDS, chloride, sulfate, and percent sodium as noted by Finding No. 18 and to achieve compliance with Discharge Specification B.1 for TDS, chloride, sulfate, and percent sodium the discharger shall submit a complete RWD, on or before April 19, 1994, containing a time schedule to construct the necessary facilities for the Joplin Youth Center treatment plant to achieve an effluent quality that complies with the Basin Plan objectives; or to discharge the wastewater to other treatment plants for disposal.
2. By February 28, 1994, the discharger shall submit a technical report discussing the treatment, storage and disposal of sewage sludge generated by the Joplin Youth Center facility. If sludge is disposed at a site other than a municipal solid waste landfill, the discharger shall submit a certification statement from a license civil engineer that the disposal operation is in full compliance with 40 CFR 503.
3. 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.
4. 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.
  5. The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger. 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.
  6. The discharger shall comply with the attached Monitoring and Reporting Program No. 93-47, 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. 93-47.
  7. 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. 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 five 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.

9. 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."

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

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

**E. NOTIFICATIONS**

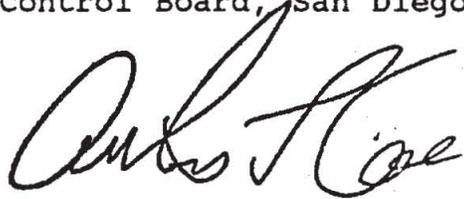
1. California Water Code Section 13263(g) states:  

"No discharge of waste into waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights."
2. 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. 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. 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.

5. This Order becomes effective on the date of adoption by the Regional Board.
6. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 86-51. Order No. 86-51 is hereby rescinded when this Order becomes effective.

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 June 21, 1993.



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Arthur L. Coe  
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. 93-47

FOR  
COUNTY OF ORANGE  
JOPLIN YOUTH CENTER  
ORANGE COUNTY

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer.
2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 5$  percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:
  - (a) "A Guide to Methods and Standards for the Measurement of Water Flow," U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U. S. Government Printing Office, Washington, D. C. 20402. Order by SD Catalog No. C13.10:421.)
  - (b) "Water Measurement Manual," U. S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U. S. Government Printing Office, Washington D. C. 20402. Order by Catalog No. 127,19/2:W29/2, Stock No. S/N 24003-0027.)
  - (c) "Flow Measurement in Open Channels and Closed Conduits," U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484,

October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Service (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273-535/5ST.)

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

3. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under the current Title 40, Code of Federal Regulations (CFR), Part 136 and 261, or the current California Code of Regulations, Title 22, Article 11 (Title 22), as appropriate, unless other test procedures have been specified in this Monitoring and Reporting Program.
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 and 261, 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.
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 Reporting Requirement D.7 of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement D.7.
  11. The monitoring reports shall be signed by an authorized person as required by Reporting Requirement D.8.
  12. A composite sample is defined as a combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquots 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. Aliquots 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.

B. EFFLUENT MONITORING

The following shall constitute the effluent monitoring program for The Joplin Youth Center:

Determination	Unit	Sample Type	Sampling Frequency	Reporting Frequency
Flowrate	GPD	*	*	Semiannual
Biochemical Oxygen Demand (5-Day @ 20°C)	mg/L	Grab	Quarterly <sup>1</sup>	Semiannual
Total Suspended Solids	mg/L	Grab	Quarterly <sup>1</sup>	Semiannual
Total Dissolved Solids	mg/L	Grab	Semiannual	Semiannual
Chloride	mg/L	Grab	Semiannual	Semiannual
Sulfate	mg/L	Grab	Semiannual	Semiannual
Nitrate (NO <sub>3</sub> )	mg/L	Grab	Semiannual	Semiannual
Percent Sodium	%	Grab	Semiannual	Semiannual

Note: GPD = gallons per day  
mg/L = milligrams per liter

\* The flowrate may be estimated based on monthly water consumption and monthly average center population.

1 The discharger shall increase the monitoring frequency from quarterly to monthly whenever the monitoring data indicates a violation of the daily maximum limit for either BOD or TSS as specified by Discharge Specification B.1.a of this Order. The monthly monitoring shall continue until the discharger achieves compliance with these limitations for two consecutive months. After compliance is achieved, the discharger shall resume monitoring at the quarterly frequency.

C. SEWAGE SOLIDS

A log of the type, quantity, location, and manner of disposal of solids removed in the course of sewage treatment shall be maintained and submitted quarterly.

D. ANNUAL SUMMARY OF MONITORING DATA

By February 28 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.

Monitoring and Reporting  
Program No. 93-47

-5-

E. REPORTING

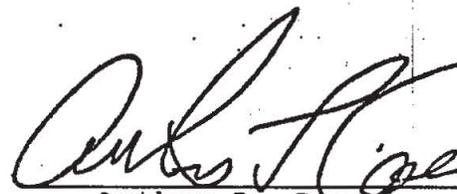
Monitoring reports shall be submitted to the Executive Officer in accordance with the following schedule:

<u>Reporting Frequency</u>	<u>Report Period</u>	<u>Report Due</u>
Semiannual	January-June July-December	July 30 February 28
Annual	January-December	February 28

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  
June 21, 1993

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

ADDENDUM NO. 1 TO ORDER NO. 93-47

AN ADDENDUM MODIFYING  
THE WASTE DISCHARGE REQUIREMENTS

FOR THE  
COUNTY OF ORANGE  
GENERAL SERVICES AGENCY  
JOPLIN YOUTH CENTER

ORANGE COUNTY

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

1. On June 21, 1993, this Regional Board adopted Order No. 93-47, *Waste Discharge Requirements for the County of Orange, Joplin Youth Center, Orange County*. Order No. 93-47 established requirements for the discharge of waste from the county facility to a package activated sludge plant. The treated wastewater is then discharged to a percolation and evaporation pond.
2. Discharge Specification B.1(b) of Order No. 93-47 established the following effluent limitations for the discharge until June 21, 1996:

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Constituent	Unit	12--month <sup>1</sup> Average	Daily <sup>2</sup> Maximum
Total Dissolved Solids	mg/l	1300	1400
Chloride	mg/l	300	400
Sulfate	mg/l	300	400
Percent Sodium	%	65	70

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3. Discharge Specification B.1(c) of Order No. 93-47 established the following effluent limitations for the discharge after June 21, 1996:

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Constituent	Unit	12--month <sup>1</sup> Average	Daily <sup>2</sup> Maximum
Total Dissolved Solids	mg/l	500	600
Chloride	mg/l	250	300
Sulfate	mg/l	250	300
Percent Sodium	%	60	65

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4. A summary of the data in this Regional Board's file for effluent samples from the Joplin Youth Center from December 1979 until June 1994 is as follows:

Constituent	Unit	Average	Range
Total Dissolved Solids	mg/l	1231	1003--1531
Chloride	mg/l	245	88--345
Sulfate	mg/l	341	286--431
Percent Sodium	%	68	62--75

5. By letter dated December 14, 1995, at the direction of the discharger, Steven Andrews Engineering submitted information demonstrating that a discharge from the Joplin Youth Center with an effluent quality complying with the discharge limits cited in above Finding No. 2 would not cause the Basin Plan objectives for ground water to be exceeded.
6. This Regional Board in a public hearing heard and considered all comments pertaining to the modification of Order No. 93-47.
7. This facility is an existing facility and, as such, is exempt from the provisions of the California environmental Quality Act, in accordance with the California Code of Regulations, Title 14, Article 19, Section 15301.

**IT IS HEREBY ORDERED**, that Order No. 93-47 is modified as follows:

1. Discharge Specifications B.1 of Order No. 93-47 is superseded by the following:

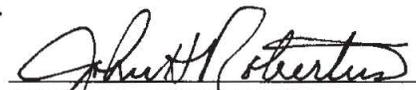
The discharge of an effluent containing constituents in excess of the following effluent limitations is prohibited:

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Constituent	Unit	12--month <sup>1</sup> Average	Daily <sup>2</sup> Maximum	30--day <sup>3</sup> Average
<hr/>				
Biochemical				
Oxygen Demand (BOD <sub>5</sub> @20°C)	mg/l	--	30	45
Total Suspended Solids	mg/l	--	30	45
Total Dissolved Solids	mg/l	1300	1400	--
Chloride	mg/l	300	400	--
Sulfate	mg/l	300	400	--
pH	unit	Within the limits of 6.0 to 9.0 at all times.		
Percent Sodium	%	65	70	--

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I, John H. Robertus, Executive Officer, do hereby certify that 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 March 14, 1996.

  
JOHN H. ROBERTUS  
Executive Officer

PJR  
File: #07--0073.02

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<sup>1</sup> The 12--month average shall be the arithmetic mean, using the results of analysis of all samples collected during any 12--month period.

<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>3</sup> The 30--day average shall be the arithmetic mean, using the result of analysis of all samples collected during any 30--consecutive day period.