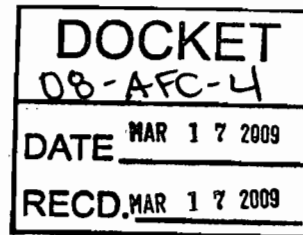


March 17, 2009

California Energy Commission
Attn: Docket No. 08-AFC-4
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512



Re: Orange Grove Energy Facility, 08-AFC-4

Dear Docket Clerk:

Enclosed is a February 2, 2009 letter from the Fallbrook Public Utility District to J-Power USA to be docketed in the above matter. This letter was formally presented to the Committee and parties at the Evidentiary Hearing and Committee Conference on March 16, 2009.

Very truly yours,

DOWNEY BRAND LLP

A handwritten signature in cursive script that reads "Jane E. Luckhardt".

Jane E. Luckhardt

:ln

Enclosure



990 East Mission Road
P.O. Box 2290
Fallbrook, California
92088-2290
(760) 728-1125
Fax (760) 728-6029
www.fpud.com

Board of Directors:

Keith Battle
Milt Davies
Al Gebhart
Bert Hayden
Don McDougal

Staff:

Keith Lewinger
General Manager

Jos. F. Jackson
Chief Engineer

Marcie Eilers
Administrative Services Mgr.

Robert H. James
Legal Counsel

Ruth Allen
Board Secretary

February 2, 2009

Mr. Mike Jones
J. Power USA
821 Good Hope Drive
Castle Rock CO 80108

This letter will certify that all reclaimed water produced at the Fallbrook Public Utility District Plant 1 in Fallbrook meets or exceeds the requirements of Title 22 of the California Code of Regulations for all uses up to and including full body contact. These regulations are contained on the Board's website at <http://www.waterboards.ca.gov/waterissues/programs/grantsloans/waterrecycling/overview/shtml>.

The FPUD currently sells over 400 acre-feet of this valuable resource to a variety of customers, all approved by the Department of Health. These customers include CalTrans for freeway landscaping, Fallbrook Sports Park, and the Fallbrook High School for athletic fields, and commercial nurseries and homeowner associations for irrigation.

The production and sale of reclaimed water by the FPUD is regulated by the San Diego Regional Water Quality Control Board under Waste Discharge Order 91-39 (WDO 91-39), insuring complete compliance with CCR Title 22 for tertiary disinfected effluent; periodic water quality reporting as required by WDO 01-39 can be obtained through Mr. Robert Pierce of RWQCB staff at (858) 627-3935. A copy of WDO 91-39 is attached to this letter along with the FPUD's latest compliance report.

Sincerely,

A handwritten signature in black ink that reads 'Keith Lewinger'.

Keith Lewinger
General Manager
KL:ra

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 91-39

WASTE DISCHARGE REQUIREMENTS
FOR
FALLBROOK SANITARY DISTRICT
PLANT NOS. 1 AND 2
RECLAMATION PROJECTS
SAN DIEGO COUNTY

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

1. Fallbrook Sanitary District submitted a Report of Waste Discharge dated January 23, 1986 for the discharge of reclaimed wastewater to be used by the California State Department of Transportation (Caltrans) for landscape irrigation. After receipt of additional materials, the Report of Waste Discharge was accepted as complete on March 25, 1986. On May 5, 1986, the Regional Board adopted Order No. 86-40, Waste Discharge Requirements for the Fallbrook Sanitary District, Wastewater Reclamation Project with Caltrans, San Diego County. Order No. 86-40 established requirements for the Fallbrook Sanitary District to supply up to 1.95 million gallons per day (MGD) of secondarily treated domestic wastewater to Caltrans for landscape irrigation along Interstate 5 (I-5). The site of the discharge described in Order No. 86-40 is located along the I-5 corridor from Tamarack Avenue in Carlsbad to Las Pulgas Road north of the City of Oceanside. This section of I-5 is located in the Agua Hedionda (4.31), Carlsbad (4.21), Loma Alta (4.10), Mission (3.11), and Ysidora (2.11) Hydrographic Subareas.
→ Camp Pendleton's Windmill Lake Golf Course
2. On May 20, 1974, the Regional Board adopted Order No. 74-43, Waste Discharge Requirements for Wastewater and Sludge Reclamation by the Fallbrook Sanitary District. Order No. 74-43 established requirements for the disposal of treated wastewater by spray irrigation and for the disposal of sludge at Fallbrook Sanitary District Plant Nos. 1 and 2. As part of the 1985/86 fiscal year Waste Discharge Order Update program, Order No. 74-43 was reviewed by Regional Board staff. On September 8, 1986, the Regional Board adopted Order No. 86-63, Waste Discharge Requirements for Wastewater Reclamation at Fallbrook Sanitary District Plants 1 and 2, San Diego County. Order No. 86-63 superseded Order

No. 74-43 and established requirements for the use of reclaimed wastewater for irrigation of approximately 43 acres of the District's property adjacent to Plant 1 and 15 acres adjacent to Plant 2. The discharge site adjacent to Plant 1 is located in the Upper Ysidora Hydrographic Subarea of the Ysidora Hydrographic Subunit of the Santa Margarita Hydrographic Unit (2.13). The discharge site adjacent to Plant 2 is located in the Bonsall Hydrographic Subarea of the Bonsall Hydrographic Subunit of the San Luis Rey Hydrographic Unit (3.12). Order No. 86-63 did not establish waste discharge requirements for the processing, use, and/or disposal of sludge from the Fallbrook Sanitary District Plant Nos. 1 and 2. Waste discharge requirements for sludge processing, use, and/or disposal will be adopted (or adoption will be waived, if appropriate) after the discharger submits a Report of Waste Discharge for the sludge operations.

3. Fallbrook Sanitary District submitted a Report of Waste Discharge, dated February 28, 1990, for the use of up to 3.1 MGD of reclaimed wastewater for irrigation of orchards, commercial nurseries and landscape areas. The District submitted amendments to the Report of Waste Discharge dated March 7, April 6, April 18, April 20, and May 4, 1990. The Report of Waste Discharge was accepted as complete by the Regional Board on August 15, 1990. The Report of Waste Discharge indicates that, at the present time, Fallbrook Sanitary District will supply reclaimed water to two users, the Good Earth Nursery and the Silverthorn Ranch. The Good Earth Nursery is located in the Upper Ysidora Hydrographic Subarea of the Ysidora Hydrographic Subunit of the Santa Margarita Hydrographic Unit (2.13) and Silverthorn Ranch is located in the Bonsall Hydrographic Subarea of the Bonsall Hydrographic Subunit of the San Luis Rey Hydrographic Unit (3.12). The District also indicated that reclaimed water may be discharged at additional reuse sites in the future.
4. Fallbrook Sanitary District provides treatment to the wastewater from its service area by means of two wastewater treatment plants, Plant Nos. 1 and 2. Fallbrook Sanitary District reports that effluent from Plant Nos. 1 and 2 can be treated to comply with all applicable requirements of California Code of Regulations, Title 22, Division 4, Chapter 3, "Reclamation Criteria." Effluent from these plants is collected into a single flow stream and discharged to the Pacific Ocean via the District's land outfall and the City of Oceanside's ocean outfall.
5. Plant No. 1 is located approximately 14 miles northeast of the City of Oceanside, adjacent to the westerly boundary of the Fallbrook Sanitary District, and serves most of the District's service area. It has a design capacity (average

dry weather flow) of 2.7 MGD. Plant No. 1 uses the following treatment processes: prechlorination for odor control, bar screens for coarse solid removal, an aerated grit removal tank, primary sedimentation, interstage pumping, emergency overflow holding, fine bubble aeration activated sludge, secondary sedimentation, secondary effluent equalization, and chlorine disinfection. To provide reclaimed water, the combined effluent from Plant Nos. 1 and 2 is further treated by alum and polymer injection, flocculation tanks, rapid sand filters, and chlorine disinfection. Storage of reclaimed water can be provided at the existing reservoir located at the southeastern corner of the District property. Filter backwash wastes are returned to the headworks of the treatment plant.

6. Plant No. 2 has a design capacity (average dry weather flow) of 0.4 MGD. It consists of a small headworks, two package wastewater treatment and solids processing units operating in parallel, an effluent pumping station and an operations building. The headworks provides the wastewater with preliminary treatment by means of a comminutor and a manually cleaned bar screen. The effluent from the headworks is distributed to the two package treatment units. Treated effluent from these units is collected into the effluent pumping station which pumps it to Plant No. 1. The Plant No. 2 effluent is mixed with the effluent of Plant No. 1 for discharge to the District's outfall or for further treatment in the tertiary treatment facilities located at Plant No. 1.
7. Treated effluent from Plant Nos. 1 and 2 is discharged into the District's land outfall. This outfall starts at the effluent of Plant No. 1 as an 18-inch pipeline, and shortly after leaving the plant, reduces to a 16-inch ductile iron pipe. The pipeline conveys treated wastewater in a southerly direction from the Fallbrook area for approximately 18 miles, joins the City of Oceanside's 36-inch diameter ocean outfall, and ultimately discharges to the Pacific Ocean. The Fallbrook Sanitary District has an agreement with the City of Oceanside to discharge wastewater through the ocean outfall at a flow rate of up to 2.4 MGD on an annual average basis. The discharge of treated effluent to the Pacific Ocean via the City of Oceanside's Ocean Outfall is currently regulated under Order No. 89-13, NPDES No. CA0108031, Waste Discharge Requirements for the Fallbrook Sanitary District Water Pollution Control Facilities Plant Nos. 1 and 2, Discharge through the Oceanside Ocean Outfall, San Diego County.

8. As described in Finding No. 1, the Fallbrook Sanitary District has been supplying the California Department of Transportation (Caltrans) with disinfected secondary effluent for irrigation of freeway landscaping since October, 1987. Following completion of new tertiary treatment facilities, the District has provided filtered tertiary effluent since January, 1990. The reclaimed water is withdrawn from the District's land outfall near its down stream end at I-5 and Hill Street within the City of Oceanside. By a cooperative agreement with Caltrans, the District will provide Caltrans with at least 250 acre-feet of reclaimed water per year.
9. Sludge generated by the wastewater treatment facilities is stabilized by aerobic digestion and dewatered prior to disposal. Following aerobic digestion in two rectangular digesters, the sludge is pumped to concrete lined sludge drying beds for dewatering. A small belt filter press is provided for sludge dewatering when weather conditions diminish the capacity of the drying beds. Dewatered solids are treated through two composting processes. All sludge is first treated by aerated static pile composting for stabilization of the organic materials in the sludge and elimination of pathogenic organisms. A portion is then treated by the vermicomposting process where earthworms utilize the composted sludge as food and produce worm castings. Both the worm castings and static pile compost may be marketed as a soil conditioner. As indicated in Finding No. 2 of this Order, waste discharge requirements for sludge operations by Fallbrook Sanitary District have not yet been developed.
10. In order to supply new reclaimed water from the land outfall to additional reuse sites, the District plans to construct pipelines and other facilities. Additional reclaimed water reuse sites located within the Community of Fallbrook will be served via the reclaimed water reservoir and a new distribution pumping station and pipeline to the south of Plant No. 1. In order to control the concentration of total dissolved solids of the reclaimed wastewater supplied to the Upper Ysidora Hydrographic Subarea of the Ysidora Hydrographic Subunit of the Santa Margarita Hydrographic Unit (2.13), the Fallbrook Public Utilities District (FPUD) will provide a potable water supply line and air-gap so that potable water can either be supplied and/or mixed with the reclaimed water.
11. Fallbrook Sanitary District plans to wholesale reclaimed wastewater to FPUD. FPUD will, in turn, sell the wastewater at retail to users located in several service areas. The service areas are described in Attachment 4 and shown in Figure 4-1 of the Report of Waste Discharge. A list of all

potential reclaimed water users in each service area is also contained in Attachment 4 to the Report of Waste Discharge. The potential users are located in the Upper Ysidora Hydrographic Subarea of the Ysidora Hydrographic Subunit of the Santa Margarita Hydrographic Unit (2.13), and the Mission (3.11) and Bonsall (3.12) Hydrographic Subareas of the Bonsall Hydrographic Subunit of the San Luis Rey Hydrographic Unit. This Order is applicable to the discharge of reclaimed water supplied by Fallbrook Sanitary District for use at all future reuse sites located within these hydrographic subareas.

12. Results of analysis of a grab sample of the combined effluent from Fallbrook Sanitary District Plant Nos. 1 and 2 to be used for irrigation at reuse sites are as follows:

<u>Constituent</u>	<u>Unit</u>	<u>Effluent Concentration</u>
Total dissolved solids	mg/l	747
Chloride	mg/l	120
Percent sodium	%	52
Sulfate	mg/l	228
Nitrate	mg/l	55.5
Iron	mg/l	0.21
Manganese	mg/l	0.02
Methylene blue active substances	mg/l	0.32
Boron	mg/l	0.43
Odor		None
Color	Units	25
Fluoride	mg/l	0.30

13. 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.
14. The Basin Plan establishes the following beneficial uses of the surface waters in the Upper Ysidora Hydrographic Subarea of the Ysidora Hydrographic Subunit of the Santa Margarita Hydrographic Unit (2.13):
- a. Municipal and Domestic Supply
 - b. Agricultural Supply
 - c. Industrial Service Supply
 - d. Industrial Process Supply
 - e. Water Contact Recreation
 - f. Non-contact Water Recreation

- g. Warm Fresh-Water Habitat
 - h. Cold Fresh-Water Habitat
 - i. Wildlife Habitat
 - j. Preservation of Rare and Endangered Species
 - k. Fish Spawning
15. The Basin Plan establishes the following beneficial uses of the ground waters in the Upper Ysidora Hydrographic Subarea of the Ysidora Hydrographic Subunit of the Santa Margarita Hydrographic Unit (2.13):
- a. Municipal and Domestic Supply
 - b. Agricultural Supply
 - c. Industrial Service Supply
 - d. Industrial Process Supply
 - e. Groundwater Recharge
16. The Basin Plan establishes the following beneficial uses of the surface waters in the Mission (3.11) and Bonsall (3.12) Hydrographic Subareas of the Bonsall Hydrographic Subunit of the San Luis Rey Hydrographic Unit:
- a. Agricultural Supply
 - b. Industrial Service Supply
 - c. Water Contact Recreation
 - d. Non-contact Water Recreation
 - e. Warm Fresh-Water Habitat
 - f. Wildlife Habitat
 - g. Preservation of Rare and Endangered Species
17. The Basin Plan establishes the following beneficial uses of the ground waters in the Mission (3.11) and Bonsall (3.12) Hydrographic Subareas of the Bonsall Hydrographic Subunit of the San Luis Rey Hydrographic Unit:
- a. Municipal and Domestic Supply
 - b. Agricultural Supply
 - c. Industrial Service Supply
 - d. Groundwater Recharge
18. The Basin Plan establishes the following water quality objectives for surface and ground waters in the Upper Ysidora Hydrographic Subarea of the Ysidora Hydrographic Subunit of the Santa Margarita Hydrographic Unit (2.13):

Constituent	Concentration not to be exceeded more than 10 percent of the time			
	Surface Water		Ground Water	
Total dissolved solids	750	mg/L	750 ^a	mg/L
Chloride	300	mg/L	300 ^a	mg/L
Percent sodium	60	%	60	%
Sulfate	300	mg/L	300 ^a	mg/L
Nitrate	---		10 ^a	mg/L
Nitrogen and phosphorus	*		---	
Iron	0.3	mg/L	0.3 ^a	mg/L
Manganese	0.05	mg/L	0.05 ^a	mg/L
Methylene blue active substances	0.5	mg/L	0.5	mg/L
Boron	0.5	mg/L	0.5 ^a	mg/L
Odor	None		None	
Turbidity	20	NTU	5	NTU
Color	20	Units	15	Units
Fluoride	1.0		1.0	mg/L

* 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. 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 percent 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 by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

^aThe 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.

Note: mg/L = milligrams per liter
NTU = Nephelometric Turbidity Units

19. The Basin Plan established the following objectives for surface and ground waters in the Mission (3.11) and Bonsall (3.12) Hydrographic Subareas of the Bonsall Hydrographic Subunit of the San Luis Rey Hydrographic Unit:

Constituent	Concentration not to be exceeded more than 10 percent of the time			
	Surface Water		Ground Water	
Total dissolved solids	500	mg/L	1500 ^{a,b}	mg/L
Chloride	250	mg/L	500 ^{a,b}	mg/L
Percent sodium	60	%	60	%
Sulfate	250	mg/L	500 ^{a,b}	mg/L
Nitrate	---		45 ^{a,b}	mg/L
Nitrogen and phosphorus	*		---	
Iron	0.3	mg/L	0.85 ^{a,b}	mg/L
Manganese	0.05	mg/L	0.15 ^{a,b}	mg/L
Methylene blue active Substances	0.5	mg/L	0.5 ^b	mg/L
Boron	0.5	mg/L	0.5 ^{a,b}	mg/L
Odor	None		None	
Turbidity	2.0	NTU	5	NTU
Color	20	Units	15 ^b	Units
Fluoride	1.0	mg/L	1.0 ^b	mg/L

Note: mg/L = milligrams per liter

NTU = Nephelometric Turbidity Units

- * 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. 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 percent 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 by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

^aThe 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.

^bA 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 hydrographic 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.

20. The Basin Plan establishes that water quality objectives and beneficial uses for ground waters do not apply westerly of the easterly boundary of I-5. Ground water quality objectives for these areas were deleted from the Basin Plan by the Regional Board in accord with the requirements of Resolution No. 68-16 and other requirements of the California Water Code, in order to encourage the use of reclaimed water in these areas. Therefore, the discharge of reclaimed wastewater for landscape irrigation by Caltrans along the I-5 corridor in the Agua Hedionda (4.31), Carlsbad (4.21), Loma Alta (4.10), Mission (3.11), and Ysidora (2.11) Hydrographic Subareas, as identified in Finding No. 1 of this Order, will not result in violation of water quality objectives or adversely affect beneficial uses as set forth in the Basin Plan.
21. Because irrigation operations can result in salts in the applied water being concentrated in the fraction of the applied water which percolates to the groundwater, and because Basin Plan groundwater quality objectives are, in most cases, intended to be achieved in the groundwater (i.e. not in the effluent), effluent mineral limits frequently require concentrations of mineral constituents in the effluent to be lower than the corresponding groundwater quality objectives. However, as indicated in the footnotes to the groundwater quality objectives for the Upper Ysidora (2.13), Mission (3.11), and Bonsall (3.12) Hydrographic Subareas (Finding Nos. 18 and 19), the groundwater quality objectives for mineral constituents in these subareas are intended to be achieved in the effluent rather than in the groundwater. Consequently, the 30-day average effluent mineral limits in this Order are the same as the applicable groundwater quality objectives. Therefore, the discharge of reclaimed wastewater for irrigation in the Upper Ysidora (2.13), Mission (3.11), and Bonsall (3.12) Hydrographic Subareas will not result in violation of water quality

objectives or adversely affect beneficial uses as set forth in the Basin Plan.

22. Potable water is supplied to the Fallbrook area by the Fallbrook Public Utilities District and the Rainbow Municipal Water District. Both districts are members of the San Diego County Water Authority which is in turn a member of the Metropolitan Water District. Both agencies receive water from the Metropolitan Water District Lake Skinner Plants 1 and 2. The District reports that effluent from these two plants contains the following average concentrations:

<u>Constituent</u>	<u>Unit</u>	<u>Average Concentration</u>
Total dissolved solids	mg/l	437
Chloride	mg/l	98
Percent sodium	%	47
Sulfate	mg/l	124
Nitrate	mg/l	1.0
Iron	mg/l	1.3
Manganese	mg/l	0.02
Fluoride	mg/l	0.14

23. The Basin Plan also 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."

"Discharge of treated or untreated sewage or industrial wastes 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."

24. On January 23, 1986, Fallbrook Sanitary District submitted "Rules and Regulations for Reclaimed Water Service, Fallbrook Sanitary District." These Rules and Regulations for Reclaimed Water Service will be enforced by the discharger for reclaimed water use along the I-5 corridor in

the Agua Hedionda (4.31), Carlsbad (4.21), Loma Alta (4.10), Mission (3.11), and Ysidora (2.11) Hydrographic Subareas and within the Upper Ysidora (2.13), Mission (3.11), and Bonsall (3.12) Hydrographic Subareas.

25. On May 23, 1990, Fallbrook Sanitary District approved a Negative Declaration for the Fallbrook Area Wastewater Reclamation Project. The project as approved by Fallbrook Sanitary District will not have a significant effect on the environment.
26. The discharge of reclaimed water to the areas authorized under this Order is in conformance with Resolution No. 68-16, Statement of Policy with Respect to Maintaining the High Quality of Waters in California. The wastewater reclamation and reuse projects that will occur in these areas under the terms and conditions of this Order will:
 - a. Have maximum benefit to the people of the State, because in the absence of reclaimed wastewater, imported potable water would be used for irrigation of the reclaimed water use areas described in this Order;
 - b. Not unreasonably effect the beneficial uses of ground water in the underlying basins; and
 - c. Not cause the ground water objectives of the underlying basins to be exceeded.
27. This Order prescribes waste discharge requirements and reclamation requirements governing the production and use of reclaimed water, which the Regional Board has determined are necessary to protect the public health, safety and welfare pursuant to California Water Code, Division 7, Chapter 7, Sections 13500 - 13550, ("Water Reclamation Law"). This Order, which applies to the producer of reclaimed water, requires that the producer of the reclaimed water establish and enforce rules and regulations which apply to users, including purveyors, of the reclaimed water.
28. The Regional Board considered all environmental factors associated with the discharge of waste.
29. The Regional Board has notified the discharger and all known interested parties of its intent to adopt waste discharge requirements for use of reclaimed water by Fallbrook Sanitary District.
30. The Regional Board in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, That Fallbrook Sanitary District (hereinafter discharger), 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 surface waters of the Santa Margarita Hydrographic Unit or the San Luis Rey Hydrographic Unit as established in the Basin Plan, to be exceeded;
 - (g) Cause odors, septicity, mosquitos or other vectors, weed growth or other nuisance conditions in the San Luis Rey River or the Santa Margarita River or their tributaries;
 - (h) Cause a surface flow recognizable as sewage in the San Luis Rey River or the Santa Margarita River or their tributaries; or

(i) Cause a pollution, contamination or nuisance or adversely affect beneficial uses of the ground or surface waters of the Santa Margarita Hydrographic Unit or the San Luis Rey Hydrographic Unit as established in the Basin Plan.

5. The discharge of a waste flow volume in excess of a thirty-day average wastewater flowrate of 2.7 MGD for Plant No. 1 and 0.4 MGD for Plant No. 2 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 bypassing of wastewater from the Fallbrook Sanitary District which does not meet the effluent limitations established in Discharge Specifications B.1 and B.2 of this Order is prohibited.
8. 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.
9. The discharge of treated or untreated wastewater to the San Luis Rey River or the Santa Margarita River or their tributaries is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The discharge of effluent to the Upper Ysidora Hydrographic Subarea of the Ysidora Hydrographic Subunit of the Santa Margarita Hydrographic Unit (2.13) containing pollutants in excess of the following effluent limitations is prohibited:

Constituent	30-day ¹ Average	Daily ² Maximum
Carbonaceous biochemical oxygen demand (CBOD ₅ @ 20° C)	25 mg/l	45 mg/l
Total suspended solids	30 mg/l	50 mg/l
pH	Within the limits of 6.0 to 9.0 at all times	
Total dissolved solids	750 mg/l	900 mg/l
Chloride	300 mg/l	350 mg/l
Percent sodium	60 %	65 %
Sulfate	300 mg/l	350 mg/l
Iron	0.3 mg/l	0.4 mg/l
Manganese	0.05 mg/l	0.06 mg/l
Methylene blue active substances	0.5 mg/l	0.6 mg/l
Boron	0.5 mg/l	0.6 mg/l
Fluoride	1.0 mg/l	1.2 mg/l
Turbidity	(3)	(3)
Coliform	(4)	(4)

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

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

³Not to exceed an average operating turbidity of 2 turbidity units. Not to exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

⁴The median number of coliform organisms shall not exceed 2.2 per 100 milliliters as determined from the bacteriological results of the last 7 days for which analysis have been completed; and the number of coliform organisms shall not exceed 23 per 100 milliliters in any sample.

2. The discharge of effluent to the Mission (3.11) and Bonsall (3.12) Hydrographic Subareas of the Bonsall Hydrographic Subunit of the San Luis Rey Hydrographic Unit and along the I-5 corridor in the Agua Hedionda (4.31), Carlsbad (4.21), Loma Alta (4.10), Mission (3.11), and Ysidora (2.11) Hydrographic Subareas containing pollutants in excess of the following effluent limitations is prohibited:

Constituent	30-day ¹ Average	Daily ² Maximum
Carbonaceous biochemical oxygen demand (CBOD ₅ @ 20° C)	25 mg/l	45 mg/l
Total suspended solids	30 mg/l	50 mg/l
pH	Within the limits of 6.0 to 9.0 at all times	
Total dissolved solids	400 ³ mg/l	450 ³ mg/l
Chloride	50 mg/l	80 ⁴ mg/l
Percent sodium	60 %	60 %
Sulfate	60 ⁵ mg/l	100 ⁵ mg/l
Iron	0.85 mg/l	1.0 mg/l
Manganese	0.15 mg/l	0.20 mg/l
Methylene blue active substances	0.5 mg/l	0.6 mg/l
Boron	0.5 mg/l	0.6 mg/l
Fluoride	1.0 mg/l	1.2 mg/l
Turbidity	(6)	(6)
Coliform	(7)	(7)

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

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

³These are the increments of TDS in effluent over supply water. However, the daily maximum concentration of TDS in effluent shall not exceed 1500 mg/l under any circumstances.

⁴These are the increments of chloride in effluent over supply water. However, the daily maximum concentration of chloride in effluent shall not exceed 500 mg/l under any circumstances.

⁵These are the increments of sulfate in effluent over supply water. However, the daily maximum concentration

of sulfate in effluent shall not exceed 500 mg/l under any circumstances.

⁶Not to exceed an average operating turbidity of 2 turbidity units. Not to exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

⁷The median number of coliform organisms shall not exceed 2.2 per 100 milliliters as determined from the bacteriological results of the last 7 days for which analysis have been completed, and the number of coliform organisms shall not exceed 23 per 100 milliliters in any sample.

3. All waste treatment, containment and disposal facilities shall be protected against 100-year peak stream flows as defined by the San Diego 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. Collected screenings, sludges, other solids removed from liquid wastes, and filter backwash shall be discharged as described in the Findings of this Order or disposed of by other means approved by the Executive Officer. Before sludge is disposed of by means other than as described in this Order, or used or supplied for use of others, the discharger shall submit written notification to the Executive Officer of the proposed disposal or use. Such disposal, use, or supply for use of others shall not be initiated until approved by the Executive Officer.
6. Effluent used for irrigation shall conform with all applicable provisions of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria) for irrigation of parks, playgrounds, schoolyards, and other areas where the public has similar access or exposure (currently Sections 60313 (b) and 60320.5).
7. Fallbrook Sanitary District 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. Fallbrook Sanitary District shall develop 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 to the State

Department of Health Services, County Department of Health Services, and the Regional Board Executive Officer. Reclaimed water from the Fallbrook Sanitary District shall not be used for irrigation until the engineering report is approved by the Regional Board Executive Officer.

8. Effluent storage ponds and sludge drying beds 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 Fallbrook Sanitary District Plant Nos. 1 and 2 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.
13. 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 (i.e., 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.

14. All waste water treatment and disposal facilities shall be completely constructed and operable prior to the initiation of any landscape irrigation, and the complete facilities shall have adequate capacity for the full design flow of 3.1 MGD. A report from design engineer certifying the adequacy of each component of the treatment and disposal facilities shall be submitted by the discharger prior to commencement of the irrigation. The certification report shall contain a requirement-by-requirement analysis based on acceptable engineering practices, of how the process and physical designs of the facilities will ensure compliance with the waste discharge requirements. The design engineer shall affix his signature and engineering license number to the certification report and should submit it prior to construction of the facilities. The irrigation shall not be initiated until:

a. The certification report is received by the Regional Board;

b. The Regional Board has been notified of the completion of facilities by the discharger;

c. An inspection of the facilities has been made by staff of the Regional Board; and

d. Staff has notified the discharger by letter that the irrigation can be initiated.

D. RECLAIMED WATER USE PROVISIONS

1. If the Fallbrook Sanitary District (discharger/producer) is supplying reclaimed water for use by the discharger/producer or other persons, the discharger/producer shall establish Rules 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, at a minimum, contain the following provisions:

a. Provisions implementing Title 22, Division 4 Chapter 3, Wastewater Reclamation Criteria, 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 or 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 that, except as authorized by the Regional Board Executive Officer, all reclaimed water storage facilities owned and/or operated by reclaimed water users shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.

i. Provision requiring that, except as authorized by the Regional Board Executive Officer, all reclaimed water storage facilities owned and/or operated by reclaimed water users shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency, 24-hour storm.

j. Provision requiring notification and concurrence of the State Department of Health Services and the County of San Diego Department of Health Services for new reclaimed water users.

k. 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

l. 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.

The rules and regulations shall be subject to the approval of the Regional Board Executive Officer, the State Department of Health Services and the County of San Diego Department of Health Services. The rules and regulations shall be submitted to the Regional Board within 90 days of adoption of this Order by the Regional Board.

2. The discharger/producer shall implement and enforce the approved rules and regulations for reclaimed water users.

3. The discharger/producer shall, within 90 days of the adoption of this Order, develop and submit to the Regional Board Executive Officer 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.

4. Reclaimed water shall only be supplied to and used in areas as described in the Findings of this Order for which valid waste discharge requirements, as established by this Order and subsequent addenda, are in force. Prior to using reclaimed water or supplying reclaimed water for use by other parties in any manner or in any area other than as described in the findings of this Order, the discharger shall obtain proper authorization from this Regional Board.

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."

E. REPORTING REQUIREMENTS

1. 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.

2. 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. 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.
4. The discharger shall comply with the attached Monitoring and Reporting Program No. 91-39, 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. 91-39.
5. 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.
6. 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.
7. 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.

8. 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. 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

F. 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.

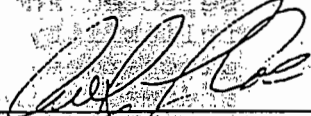
3. The California Water Code provides that any person who intentionally or negligently violates any waste discharge requirements issued, reissued, or amended by this Regional Board is subject to a civil monetary

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 Nos. 86-40 and 86-63. Order Nos. 86-40 and 86-63 are hereby rescinded when this Order becomes effective.

I, Arthur L. Coe, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of an Order No. 91-39 adopted by the California Regional Water Quality Control Board, San Diego Region, on May 20, 1991.



ARTHUR L. COE
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 SAN DIEGO REGION
 MONITORING AND REPORTING PROGRAM NO. 91-39
 FOR
 FALLBROOK SANITARY DISTRICT
 PLANT NOS. 1 AND 2
 RECLAMATION PROJECTS
 SAN DIEGO COUNTY

A. MONITORING PROVISIONS

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

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

- (a) "A Guide to Methods and Standards for the Measurement of Water Flow," U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U. S. Government Printing Office, Washington, D. C. 20402. Order by SD Catalog No. C13.10:421.)
- (b) "Water Measurement Manual," U. S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U. S. Government Printing Office, Washington D. C. 20402. Order by Catalog No. 127,19/2:W29/2, Stock No. S/N 24003-0027.)

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

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

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

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

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

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

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

course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

8. Records 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 E.7 of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement E.7.

11. The monitoring reports shall be signed by an authorized person as required by Reporting Requirement E.9.

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 operation 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.

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

B. EFFLUENT MONITORING

The following shall constitute the effluent monitoring program for Fallbrook Sanitary District:

Determination	Unit	Sample Type	Sampling Frequency	Reporting Frequency
Carbonaceous biochemical oxygen demand (5-Day @ 20 C)	mg/l	Composite	Weekly	Monthly
Total suspended solids	mg/l	Composite	Weekly	Monthly
Volatile suspended solids	mg/l	Composite	Weekly	Monthly
pH	Unit	Composite	Monthly	Monthly
Total dissolved solids	mg/l	Composite	Monthly	Monthly
Chloride	mg/l	Composite	Monthly	Monthly
Percent sodium	%	Composite	Monthly	Monthly
Sulfate	mg/l	Composite	Monthly	Monthly
Iron	mg/l	Composite	Monthly	Monthly
Manganese	mg/l	Composite	Monthly	Monthly
Methylene blue active substances	mg/l	Composite	Monthly	Monthly
Boron	mg/l	Composite	Monthly	Monthly
Fluoride	mg/l	Composite	Monthly	Monthly
Aluminum	mg/l	Composite	Semiannual	Semiannual
Arsenic	mg/l	Composite	Semiannual	Semiannual
Barium	mg/l	Composite	Semiannual	Semiannual
Cadmium	mg/l	Composite	Semiannual	Semiannual
Chromium	mg/l	Composite	Semiannual	Semiannual
Copper	mg/l	Composite	Semiannual	Semiannual
Lead	mg/l	Composite	Semiannual	Semiannual
Mercury	mg/l	Composite	Semiannual	Semiannual
Selenium	mg/l	Composite	Semiannual	Semiannual
Silver	mg/l	Composite	Semiannual	Semiannual
Zinc	mg/l	Composite	Semiannual	Semiannual
Coliform	MPN/100 ml	Grab	*	Monthly
Turbidity	NTU	Continuous	**	Monthly

* Samples for 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.

** Turbidity analysis shall be performed by a continuous recording turbidimeter.

Note: MGD = million gallons per day
 mg/l = milligrams per liter
 MPN/100 ml = Most Probable Number per 100 milliliters
 ml/l = milliliters per liter
 NTU = Nephelometric Turbidity Units

C. FLOWRATE MEASUREMENT

Effluent flowrates shall be measured on a continuous basis as indicated below. Daily flowrates and monthly average flowrates for all waste streams shall be reported monthly.

Waste Stream	Unit	Measurement Type	Reporting Frequency
Plant No. 1 effluent	MGD	Continuous	Monthly
Plant No. 2 effluent	MGD	Continuous	Monthly
Tertiary treatment effluent	MGD	Continuous	Monthly

D. POTABLE SUPPLY WATERS

Examination of the potable waters supplied to the service area of the wastewater treatment facilities shall be conducted for the following constituents monthly with the results reported monthly.

Constituent	Unit
Total dissolved solids	mg/l
Chloride	mg/l
Sulfate	mg/l

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.

- Name of the reclaimed water reuse site
- Owner of the reclaimed water use facility
- Address of the reuse site
- Name of the reclaimed water user supervisor
- Phone number of the on-site water user supervisor
- Mailing address, if different from site address
- Basin Plan name of ground water basin underlying the reuse site
- 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. SEWAGE SOLIDS

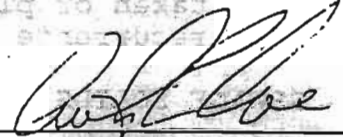
A log of the type, quantity, location, and manner of disposal of solids removed in the course of sewage treatment shall be maintained and submitted monthly.

G. 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>
Monthly	January, February, March, April, May, June, July, August, September, October, November, December	By the end of the following month
Quarterly	January-March	April 30
	April-June	July 31
	July-September	October 31
	October-December	January 31
Semiannual	January-June	July 31
	July-December	January 31

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
 May 20, 1991

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN DIEGO REGION

ADDENDUM NO. 1 TO ORDER NO. 91-39

An Addendum Transferring Responsibility
for Order No. 91-39
from Fallbrook Sanitary District
to Fallbrook Public Utility District
San Diego County

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

1. On May 20, 1991, this Regional Board Adopted Order No. 91-39, "Waste Discharge Requirements for Fallbrook Sanitary District Plant No's. 1 and 2 Reclamation Projects, San Diego County". Order No. 91-39 establishes requirements for the use of reclaimed water for irrigation of approximately 43 acres of the Districts property located next to Plant No. 1 and 15 acres located next to Plant No. 2.
2. By letter dated January 26, 1995, the Fallbrook Public Utility District notified the Regional Board that the ownership of the Fallbrook Wastewater Treatment Plant No's. 1 and 2 and the responsibility for compliance with Order No. 91-39 was transferred from the Fallbrook Sanitary District to the Fallbrook Public Utility District on December 20, 1994.
3. The Regional Board has notified all known interested parties of its intent to modify Order No. 91-39 to reflect the transfer of responsibility for complying with Order No. 91-39.
4. The Regional Board in a public hearing heard and considered all comments pertaining to the modification of Order No. 91-39.
5. 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.

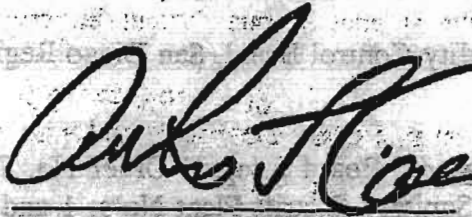
IT IS HEREBY ORDERED THAT ORDER NO. 91-39 IS MODIFIED AS FOLLOWS:

1. Order No. 91-39 shall henceforth be referred to as Waste Discharge Requirements for Fallbrook Public Utility District.
2. The waste discharge requirements contained in Order No. 91-39 shall be applicable to the Fallbrook Public Utility District and shall remain in full force and effect.

Addendum No. 1 to Order No. 91-39

3. The word discharger as it appears in Order No. 91-39 shall hereafter be construed to refer to the Fallbrook Public Utility District.

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



EPA
 San Diego
 Regional Water
 Quality Control
 Board

71 Clairemont Mesa
 Blvd., Suite A
 San Diego, CA 92124
 (619) 467-2952
 FAX (619) 571-6972

February 14, 1997

CERTIFIED RETURN RECEIPT



Pete Wilson
 Governor

Mr. Jos Jackson,
 Assistant General Manager
 Fallbrook Public Utility District
 P.O. Box 2290
 Fallbrook, CA 92088-2290

P 220 545 858

FEB 16 1997

Dear Mr. Jackson:

ADDENDUM NO. 2 TO ORDER NO. 91-39

Enclosed is a copy of the subject addendum which was adopted by this Regional Board on February 13, 1997. This addendum relaxed the mineral limitations on the discharge from the Fallbrook PUD to the Good Earth Nursery and the HMS Co. Specifically, the Addendum revised the mineral limitations for these sites to the less stringent limitations specified for reuse areas in the San Luis Rey River basin. Compliance with the new effluent limits shall begin immediately. Please note this Addendum does not change the limitations for discharges to other reuse sites in the Santa Margarita River basin.

If you have any questions on this matter, please contact Laurie Walsh at (619) 467-2970.

Respectfully,

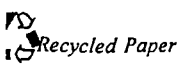
JOHN H. ROBERTUS
 Executive Officer

File No. 01-0395.02

c:\letters\91-39adp.ltr

cc(w/enclosure):

Toby Roy, DHS
 Dick Carlson, DEH
 Joel Holt, Fallbrook PUD



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

ADDENDUM NO. 2 TO ORDER NO. 91-39

**FALLBROOK PUBLIC UTILITY DISTRICT
PLANT NO. 1 AND 2
RECLAMATION PROJECTS
SAN DIEGO COUNTY**

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

1. On May 20, 1991, this Regional Board adopted Order No. 91-39, *Waste Discharge Requirements for the Fallbrook Public Utility District Plant No. 1 and 2 Reclamation Projects, San Diego County*. Order No. 91-39 as amended establishes requirements for the disposal of up to 2.7 million gallons per day (MGD) from Plant 1 and 0.4 MGD from Plant 2 of tertiary treated effluent to be used for landscape irrigation.
2. On August 28, 1996, the Fallbrook Public Utility District (FPUD) submitted a report of waste discharge (RWD) requesting modification of the discharge specification for total dissolved solids for recycled water used at the Good Earth Nursery and the HMS Co. located within the Upper Ysidora HSA (902.13).
3. Discharge Specification B.1 of Order No. 91-39 specifies discharges of recycled water within the Upper Ysidora HSA (902.13) shall not contain concentrations of total dissolved solids that exceed a thirty day average concentration of 750 milligrams per liter (mg/l) and a daily maximum of concentration 900 mg/l.
4. The discharge of recycled water via drip irrigation of potted plants at Good Earth Nursery and drip irrigation of six acres of cut flowers and cut greens at HMS Co. will result in minimal recharge of recycled water to the ground water aquifer.
5. The use of undemineralized recycled water meeting the requirements as modified by this addendum will be consistent with water quality standards established in the Basin Plan.
6. The Regional Board has notified all known interested parties of its intent to modify Order No. 91-39 to reflect a modification to the discharge requirements for the Good Earth Nursery and the HMS Co.
7. The Regional Board in a public hearing heard and considered all comments pertaining to the modification of Order No. 91-39.

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 ORDER THAT ORDER NO. 91-39 BE AMENDED AS FOLLOWS:

1. Discharge Specification B.1 is modified as follows:

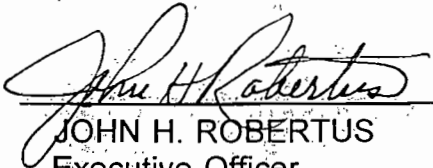
B: DISCHARGE SPECIFICATIONS

1. The discharge of effluent to the Upper Ysidora Hydrographic Subarea of the Ysidora Hydrographic Subunit of the Santa Margarita Hydrographic Unit (902.13) except to the Good Earth Nursery and the HMS Co. containing pollutants in excess of the following effluent limitations is prohibited.

TABLE UNDER THIS SECTION OF ORDER NO. 91-39 REMAINS UNCHANGED.

2. The effluent limitations described in DISCHARGE SPECIFICATION B.2 of Order No. 91-39 shall apply to discharges of recycled water to the Good Earth Nursery and the HMS Co.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, on February 13, 1997.


JOHN H. ROBERTUS
Executive Officer

April 8, 1997
Laurie Walsh
Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd. Ste. B
San Diego, California 92124-5114

Dear Laurie:

Addendum No. 2 to order No. 91-39 was implemented to revise the mineral limitations on the recycled water discharge from the Fallbrook Public Utility District reclamation facility to the Good Earth Nursery and the HMS Co. to the less stringent limitations specified for reuse areas in the San Luis Rey River basin.

Unfortunately the limitations on chloride and sulfate in the San Luis Rey Basin are actually more difficult for us to meet than the limitations in the Santa Margarita Basin. Specifically, in the San Luis Rey Basin, the Chloride 30-day average limitation is 50 mg/l over the potable water and the sulfate 30-day average limitation is 60 mg/l over the potable. In the Santa Margarita Basin the chloride and sulfate 30-day average limitation is 300 mg/l. Our chloride average in 1996 was 145 mg/l and 56 mg/l over the potable. The sulfate average for 1996 was 250 mg/l and 10 mg/l over the potable. In 1996, we exceeded the chloride limitation ten (10) times and the sulfate limitation one (1) time.

We have essentially no control over the dissolved minerals content of our potable and final effluent so we believe it is appropriate to establish reasonable limitations on our recycled effluent. Therefore we request that the chloride and sulfate limitations be based on the less stringent Santa Margarita basin limits. Thank you for your attention to this matter.

Sincerely,

Joe Jackson
Assistant General Manager and Chief Engineer

June 18, 1997

Laurie Walsh
Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd. Ste B
San Diego, California 92124-5114

Dear Laurie:

Attached find the State Water Resources Control Board Form 200 requesting a change of reclaimed effluent limitations for the constituents chloride and sulfate. We would recommend a 30-day average limitation of 100 mg/l increments over the potable water and a daily maximum limitation of 150 mg/l over the potable water for both chloride and sulfate. Alternatively, we recommend a 30 day average limitation of 300 mg/l and a daily maximum of 350 mg/l for chloride and a 30-day average of 350 mg/l and a daily maximum of 400 mg/l for sulfate.

Addendum No. 2 to Order No. 91-39 was implemented to revise the mineral limitations on the reclaimed water discharge from Fallbrook Public Utility's reclamation facility, by revising and combining the effluent limitations for the Santa Margarita and San Luis Rey Basins. Since we have essentially no control over the dissolved mineral content of our potable and final effluent, it is appropriate to establish reasonable limitations for our reclaimed water constituents. Please call me when you have the results of your survey of other water agency's reclaimed water constituent limitations and we can discuss our request as it will be presented to the local board in August. Thank you!

Sincerely,

Joel V. Holt
Compliance Operator



San Diego
Regional Water
Quality Control
Board

9771 Clairemont Mesa
Blvd., Suite A
San Diego, CA 92124
(619) 467-2952
FAX (619) 571-6972



Pete Wilson
Governor

August 14, 1997

CERTIFIED RETURN RECEIPT

P 260 996 982

AUG 15 1997

Mr. Jos Jackson,
Assistant General Manager
Fallbrook Public Utility District
P.O. Box 2290
Fallbrook, CA 92088-2290

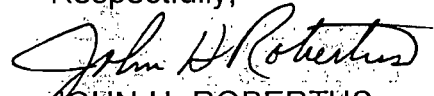
Dear Mr. Jackson:

ADDENDUM NO. 3 TO ORDER NO. 91-39

Enclosed is a copy of the subject addendum which was adopted by this Regional Board on August 13, 1997. This addendum relaxed the mineral limitations on the discharge from the Fallbrook PUD to the Good Earth Nursery and the HMS Co. Specifically, the Addendum eliminated the 30-day average limit on TDS, chloride and sulfate and relaxed the daily maximum effluent limit for sulfate and chloride. Compliance with the new effluent limits shall begin immediately.

If you have any questions on this matter, please contact Laurie Walsh at (619) 467-2970.

Respectfully,


JOHN H. ROBERTUS
Executive Officer

File No. 01-0395.02
c:\letters\91-39adp2.ltr

cc(w/enclosure): Toby Roy, DHS
Dick Carlson, DEH
Joel Holt, Fallbrook PUD



Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO. 3 TO ORDER NO. 91-39

FALLBROOK PUBLIC UTILITY DISTRICT
PLANT NO. 1 AND 2
RECLAMATION PROJECTS
SAN DIEGO COUNTY

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

1. On May 20, 1991, this Regional Board adopted Order No. 91-39, *Waste Discharge Requirements for the Fallbrook Public Utility District Plant No. 1 and 2 Reclamation Projects, San Diego County*. Order No. 91-39 as amended establishes requirements for the disposal of up to 2.7 million gallons per day (MGD) from Plant 1 and 0.4 MGD from Plant 2 of tertiary treated effluent to be used for landscape irrigation.
2. On June 18, 1997, the Fallbrook Public Utility District (FPUD) submitted a report of waste discharge (RWD) requesting modification of the discharge specification for sulfate and chloride for recycled water used at the Good Earth Nursery and the HMS Co. The report of waste discharge contained technical data documenting that an incremental increase of 150 mg/l for sulfate and chloride added to the water supply as a result of domestic use is typical for San Diego County.
3. Discharge Specification B.2 of Order No. 91-39, as amended, specifies discharges of recycled water to the Good Earth Nursery and the HMS Co. shall not contain concentrations of sulfate that exceed a thirty day average concentration of 60 milligrams per liter (mg/l) above potable water supply and a daily maximum concentration of 100 mg/l above potable water supply; and concentration of chloride that exceed a thirty day average concentration of 50 mg/l above potable water supply and a daily maximum concentration of 80 mg/l above potable water supply.
4. The use of undemineralized recycled water meeting the requirements as modified by this addendum will be consistent with water quality standards established in the Basin Plan.
5. The Regional Board has notified all known interested parties of its intent to modify Order No. 91-39 to reflect a modification to the discharge requirements for the Good Earth Nursery and the HMS Co.

ADD: 3 TO ORDER NO. 91-39

6. The Regional Board in a public hearing heard and considered all comments pertaining to the modification of Order No. 91-39.
7. 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 ORDER THAT ORDER NO. 91-39 BE AMENDED AS FOLLOWS:

Discharge Specification B.2 is modified as follows:

B. DISCHARGE SPECIFICATIONS

- The discharge of effluent to the Mission (903.11) and Bonsall (903.12) Hydrologic Subareas (HSA) of the Bonsall Hydrologic Subunit (903.10) of the San Luis Rey Hydrologic Unit (903.00) and along the I-5 corridor in the Agua Hedionda (904.31), Carlsbad (904.21), Loma Alta (904.10), Mission (903.11), and Ysidora (902.11) HSA containing pollutants in excess of the following effluent limitations is prohibited.

CONSTITUENT	UNITS	30-DAY AVERAGE ¹	DAILY MAXIMUM ²
Carbonaceous Biological Oxygen Demand (CBOD, @ 20° C)	mg/l	25	45
Total Suspended Solids	mg/l	30	50
Total Dissolved Solids	mg/l		450 ³
Percent Sodium Chloride	%	60	60
Sulfate	mg/l		150 ⁴
Fluoride	mg/l	1.0	1.2
Boron	mg/l	0.5	0.6
Iron	mg/l	0.85	1.0
Manganese	mg/l	0.15	0.20
Methylene Blue Active Substance	mg/l	0.5	0.6
Turbidity		(6)	(6)
Coliform		(7)	(7)
pH	pH Units	between 6.0 and 9.0 at all times	

^{1,2,3,4,5,6,7} no change to the notes.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, on August 13, 1997.


 JOHN ROBERTUS
 Executive Officer