State of California
Energy Resources Conservation and Development Commission

In the Matter of:	)	Docket No. 08-AFC-4
	)	
Application for Certification for the Orange Grove Energy Project	)	**STAFF'S RESPONSE TO COMMITTEE'S QUESTIONS AND COMMENTS ON THE PMPD**

By notice dated February 25, 2009, the Orange Grove Committee directed parties to address questions in the areas of Alternatives, Land Use and Traffic, and Transportation. This submittal contains staff's response. In addition, staff submits authenticated copies of the California Regional Water Quality Control Board's Order No. 91-39 and Addendums. These documents were referenced in the proposed decision, but were never formally entered into evidence. Staff would like to take this opportunity to submit these documents into evidence given the reopening of the record. Finally, staff submits comments on the Presiding Member's Proposed Decision (PMPD).

I
ALTERNATIVES: DISCREPANCY IN WATER USAGE FIGURES

As the Committee points out, there is a discrepancy in the water usage figures between Soil and Water Resources and Project Alternatives. Attached as Exhibit A is the supplemental testimony of Suzanne Phinney, staff's witness for Alternatives. Ms. Phinney clarifies that the figure of 87.3 acre feet of water trucked per year to the site, as identified in the Alternatives section, is incorrect. The maximum amount of water to be trucked for use at the site would be 62acre-feet per year (AFY) of potable water and 38.7 AFY of reclaimed water. Expected use requirements would be 21.1 AFY of potable water and 12.1 AFY of reclaimed water. These amounts are identified in the Project Description (pages 3-2 and 3-3) and the Soils and Water Section (4.9-7).

II
LAND USE: REQUIREMENT FOR A PARCEL MAP

The Committee questioned whether the lease agreement between the applicant and San Diego Gas and Electric triggers the Subdivision Map Act and, if so, whether this lease creates a subdivision which would violate the minimum lot size for the zone. The Committee also seeks clarity on the nature of the property agreement between the applicant and San Diego Gas and Electric.

Attached as Exhibit B is the statement by Felicia Miller, staff's Project Manager, explaining that the applicant has a lease for the project site and that the tolling agreement applies to the sale of natural gas from San Diego Gas and Electric to the Orange Grove facility.

As confirmed by way of letter dated January 7, 2009, from the Department of Planning and Land Use of San Diego County to Orange Grove, the leasing and financing of the San Diego Gas and Electric land for the Orange Grove project is exempt from the Subdivision Map Act under Section 66428(a)(2) and does not require a parcel map. (See Exhibit C)

Government Code section 66428 (a) states,

> A parcel map shall be required for subdivisions as to which a final or parcel map is not otherwise required by this chapter, unless the preparation of the parcel map is waived by local ordinance as provided in this section. A parcel map shall not be required for either of the following:
>
> (2) Land conveyed to or from a ... public utility....

In this case, San Diego Gas and Electric, a public utility regulated by the California Public Utilities Commission, is conveying a lease hold to the applicant and, therefore, section 66428(a)(2) applies to exempt it from the parcel map requirement. Staff concurs with the County's position that, based on section 66428(a)(2), a parcel map is not required.

III
TRAFFIC AND TRANSPORTATION: DETAILS OF A TRAFFIC PLAN

Attached as Exhibit D is the supplemental testimony of James Adams, staff's witness in Traffic and Transportation, regarding traffic impacts during the construction phase of the gas line.

IV
SUPPLEMENTAL EVIDENTIARY SUBMISSION

During the evidentiary hearing on December 19, 2008, staff referenced the existence of an NPDES permit held by the Fallbrook Public Utilities District, issued by the California Regional Water Quality Control Board. The information found in the permit was used for purposes to cross examine intervener Archie McPhee. The permit was never officially entered as an exhibit. The PMPD nevertheless references the permit by stating, "Furthermore, Staff noted at the evidentiary hearing that FPUD's National Pollutant Discharge Elimination System (NPDES) permit indicates that FPUD indeed produces disinfected tertiary recycled water. (12/19/08 RT 130:24-131:13.)." (PMPD pg. 202) The reopening of the record at this time offers an appropriate time to admit into evidence the attached authenticated copy of the Waste Discharge Permit referenced during the hearing. Attached as Exhibit E is an authenticated copy of the Waste Discharge Permit and Addendums.

Another point of clarification is that during the evidentiary hearing staff referred to the documents as a NPDES' permit. To clarify, the document referred to during the cross examination of Archie McPhee was Waste Discharge Order, No 91-39, which is included in Exhibit E. (See the Declaration of Jared Babula Attached as Exhibit F) The PMPD should be changed to reflect the correct title of the Water Quality Control Board document.

V
STAFF COMMENTS ON THE PROPOSED DECISION

Attached as Exhibit G, are staff's comments on the Presiding Member's Proposed Decision.

Date: March 9, 2009

Respectfully submitted,

JARED J. BABULA
Senior Staff Counsel
California Energy Commission
1516 9th Street, MS-14
Sacramento, CA 95814
Ph: (916) 651-1462
E-mail: jbabula@energy.state.ca.us

Exhibit A

DECLARATION OF
Suzanne L. Phinney, D.Env.

I, Suzanne L. Phinney, declare as follows:

1. I am presently employed by Aspen Environmental Group, consultant to the California Energy Commission's Facilities Siting Office of the Systems Assessments and Facilities Siting Division as a Senior Associate.

2. I helped prepare the staff testimony on Alternatives for the Orange Grove Plant Licensing Case Project based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.

3. The figure of 87.3 acre feet of water trucked per year to the site, as identified in the Alternatives section, is incorrect. The amount of water to be trucked for use at the site should have reflected the rates identified in the Project Description, (pages 3-2 and 3-3) and the Soils and Water Section (4.9-7).

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: March 2, 2009 Signed: Suzanne L Phinney

At: Sacramento, California

Exhibit B

DECLARATION OF
Felicia Miller

I, Felicia Miller declare as follows:

1. I am presently employed by the California Energy Commission in the Facilities Siting Office of the Energy Facilities Siting Division as Project Manager.

2. I prepared staff testimony for the Orange Grove Project based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.

3. The information in the project Description is correct, as the subject site will be leased by Orange Grove Energy L.P. from San Diego Gas & Electric Company. A separate tolling agreement between Orange Grove Energy L.P. and San Diego Gas & Electric Company will guarantee delivery of natural gas from San Diego Gas & Electric Company to the project.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 3/4/09 Signed: Felicia Miller

At: Sacramento, California

Exhibit C

ERIC GIBSON
DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017
www.sdcounty.ca.gov/dplu

January 7, 2009

Stephen Thome
Orange Grove Energy, L.P.
Suite 1030
1900 E. Golf Road
Schaumburg, IL 60010

Dear Mr. Thome;

This letter is provided at the request of Orange Grove Energy, L.P., who we understand is undertaking a project located near the intersection of Pala Del Norte Road and Highway 76 in the Pala-Pauma Community Plan area of the unincorporated area of San Diego County (APN 110-072-26). It is hereby confirmed that the 25-year lease of an 8.5-acre portion of land owned by San Diego Gas and Electric Company (SDG&E) to the applicant is exempt from the requirements of the Subdivision Map Act.

The applicant has informed the County of San Diego that SDG&E will lease the site to Orange Grove for a power generation facility, and SDG&E will continue operation of the facility after the end of the lease. As stated by the applicant, Orange Grove will separately finance this project and collaterally assign this lease to its lenders. This letter also confirms that this collateral assignment of the lease by Orange Grove to its lenders and their assignees is exempt from the Subdivision Map Act.

California Government Code Section 66428(a)(2) provides for this exemption, as follows:

"....A parcel map shall not be required for....[l]and conveyed to or from a governmental agency, public entity, public utility, or for land conveyed to a

subsidiary of a public utility for conveyance to that public utility for rights-of-way, unless a showing is made in individual cases, upon substantial evidence, that public policy necessitates a parcel map. For purposes of this subdivision, land conveyed to or from a governmental agency shall include a fee interests, a leasehold interest, an easement, or a license."

The County is not aware of any showing having been made in this individual case, that public policy necessitates a parcel map. Further, the applicant has informed the County that the leasing of utility property is subject to the purview of the California Public Utilities Commission and that SDG&E has already received approval for the lease of the site by the Public Utilities Commission. Accordingly, it is understood that the leasing and financing of the SDG&E land for this project is exempt from the Subdivision Map Act under Section 66428(a)(2) and does not require a parcel map.

Please let me know if you have any questions at (858) 694-3789.

Sincerely,

Brian R Baca

Brian R. Baca
Chief, Regulatory Planning
Department of Planning and Land Use

cc: Ruth Love, San Diego Gas & Electric Company, 8335 Century Park Court, CP11D, San Diego, CA 92123
Jarrett Ramaiya, Project Manager, Department of Planning and Land Use, M.S. O-650
File

Exhibit D

DECLARATION OF
James Adams

I, James Adams declare as follows:

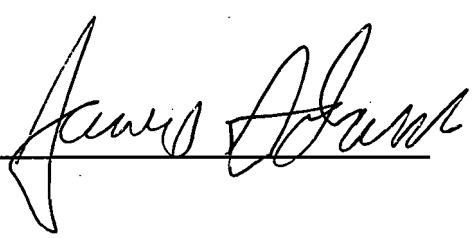
1. I am presently employed by the California Energy Commission in the Environmental Office of the Siting, Transmission, and Environmental Protection Division as a Planner II.

2. I prepared staff testimony related to Traffic and Transportation for the Orange Grove Project based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.

3. I have reviewed the Traffic and Transportation section of the Presiding Members Proposed Decision (PMPD) and the applicant's comments on this section. The applicant's supplemental information and suggested edits are reasonable. I note that the water tanks will be initially filled during the construction phase of the project and the proposed mitigation for water truck delivery during operation, Condition of Certification **TRANS-4**, should apply during the initial fill-up.

4. With respect to the installation of the natural gas pipeline, I believe there is sufficient information in staff's analysis, the PMPD, and the applicant's testimony on the PMPD to allow the project owner, Caltrans, and the compliance program manager to develop a sufficiently detailed natural gas pipeline construction plan. The specific details about the time for road closures and signalmen are normally not necessary at this time and will be worked out when the traffic construction plan is put together and reviewed by the compliance program manager. However, the applicant's supplemental testimony does discuss more detailed information about the natural gas pipeline construction which I believe is reasonable.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 3/9/09 Signed: 

At: Sacramento, California

Exhibit E

Linda S. Adams
Secretary for
Environmental Protection

California Regional Water Quality Control Board

San Diego Region

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

Arnold Schwarzenegger
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4353
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http:// www.waterboards.ca.gov/sandiego

March 5, 2009

To: Jared Babula
California Energy Commission
1516 Ninth Street, MS-14
Sacramento, CA 95814

I, Robert Morris, declare as follows:

1. I am currently a Senior Water Resource Control Engineer at the California Regional Water Quality Control Board, San Diego Region (RWQCB) where I have been employed for over 28 years.

2. I am the custodian of records for the records maintained by the RWQCB that contain documents concerning the Fallbrook Public Utilities District, formerly the Fallbrook Sanitary District. I have knowledge of and am familiar with the RWQCB's practices of maintaining records of various waste discharge orders and addendums issued by the RWQCB for the San Diego area, including the Fallbrook Public Utilities District files.

3. I have been provided for my review a copy of a document titled, 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 dated May 20, 1991. I have also been provided for my review a copy of a document titled, California Regional Water Quality Control Board San Diego Region Addendum No. 2 to Order No. 91-39, Waste Discharge Requirements for Fallbrook Public utility District Plant Nos. 1 and 2 dated February 13, 1997. A copy of these documents is attached to this declaration.

4. After reviewing these documents, I can state that these documents are true and correct copies of an order and addendum thereto issued by the RWQCB.

5. As of todays date, the RWQCB records reflect that Fallbrook Public Utilities District is still subject to the requirements of Order No. 91-39 and Addendum No. 2, thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Robert Morris

ROBERT MORRIS
Senior Water Resource Control Engineer

Enclosures: Order No. 91-39 with Addendum Nos. 1, 2, and 3.

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.

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:

Constituent	Unit	Effluent Concentration
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.

[a]The recommended plan would allow for measurable degradation of ground water in this basin to permit continued agricultural land use. Point sources, however, would be controlled to achieve effluent quality corresponding to the tabulated numerical values. In future years demineralization may be used to treat ground water to the desired quality prior to use.

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	20	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.

[a]The recommended plan would allow for measurable degradation of ground water in this basin to permit continued agricultural land use. Point sources, however, would be controlled to achieve effluent quality corresponding to the tabulated numerical values. In future years demineralization may be used to treat ground water to the desired quality prior to use.

[b]A portion of the Upper Mission Basin is being considered as an underground potable water storage reservoir for treated imported water. The area is located north of Highway 76 on the boundary of 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:

Constituent	Unit	Average Concentration
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)	

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

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

[3]Not 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.

[4]The 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[4]	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)	

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

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

[3]These 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.

[4]These 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.

[5]These 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.

[6]Not 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.

[7]The 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.

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 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 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.

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).

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

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.

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

2. **Reclaimed Water Use Summary Information**

   a. Total gallons of reclaimed water supplied to all reclaimed water users for each month of the reporting period.

   b. Total number of reclaimed water user sites.

3. **Reclaimed water user site inspections**

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

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

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

F. 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:

Reporting Frequency	Report Period	Report Due
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 Fallbook 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:

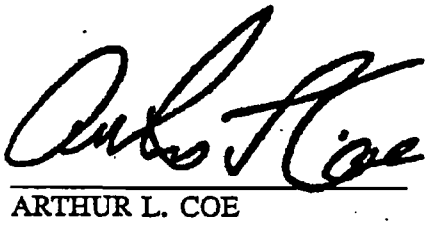
1. Order No. 91-39 shall henceforth be referred to as Waste Discharge Requirements for Fallbrook Public Utility District.

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

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

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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 undeminerialized 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.

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

2. 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 ($CBOD_5$ @ 20° C)	mg/l	25	45
Total Suspended Solids	mg/l	30	50
Total Dissolved Solids	mg/l		450[3]
Percent Sodium	%	60	60
Chloride	mg/l		150[4]
Sulfate	mg/l		150[5]
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

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Exhibit F

DECLARATION OF

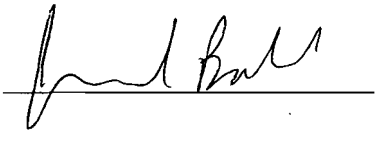
Jared Babula

1. I am presently employed by the California Energy Commission in the Chief Counsel's Office.

2. As senior staff counsel I was assigned to participate on the Orange Grove evidentiary hearing which took place on December 19, 2008.

3. During the hearing I crossed examined Archie McPhee with a document that I referred to as an NPDES permit. The correct name of the document I was referring to is Order No. 91-39, Waste Discharge Requirements for Fallbrook Sanitary District. A copy of Order No 91-39 and supplemental Addendums is attached to the Declaration of Robert Morris and identified as Exhibit E.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated: 3-9-07 Signed: 

At: Sacramento, California.

Exhibit G

Orange Grove Project 08-AFC-04
Comments and Corrections to the PMPD

Air Quality Section
Prepared by Will Walters

Page 158, Findings Number 4

4. SDAPCD is a nonattainment area for both the federal and state ozone standards and the state PM10 and PM2.5 standards.

Page 159, Findings Numbers 16 and 18

Staff notes that findings 16 and 18 are substantially redundant and could be combined into a single finding as follows:

16. The Orange Grove Project is not subject to the requirements of SB 1368 and the Emission Performance Standard of 0.500 mt CO_2/MWh because, as a peaking facility, it would be permitted for less than a 60 percent annual capacity factor.

Page 164, Condition of Certification AQ-SC5, Editorial Comment

Staff notes that the first paragraph on page 164 is part of a numbered list, where the number (1) is missing.

1. Equipment with non-Tier 2 engines tha have tailpipe retrofit controls that reduce exhaust emissions of No_x and PM to no more than Tier 2 levels.

Page 167, Condition of Certification AQ-SC12, Editorial Comment

Staff notes that this is the climate change condition **GHG-1** provided in Air Appendix A, and staff requests that condition keep the title **GHG-1** to highlight the separate staff analysis and that the condition is related to greenhouse gas/climate change and not air quality.

Page 174, Condition of Certification AQ-26

Staff inadvertently showed the new FDOC condition **AQ-26** in strikeout rather than in underline as is should have been shown. Therefore, condition **AQ-26**, shown as it should have been provided in the Amended Staff Assessment, needs to be added to the decision.

AQ-26 The discharge of particulate matter from the exhaust stack of each combustion turbine shall not exceed 0.10 grains per dry standard cubic

foot. The District may require periodic testing to verify compliance with this standard.

Verification: The project owner shall provide the source test data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC11**), due in the quarter after the source test report is completed.

Biological Resources
Prepared by Susan Sanders

Page 252, Summary and Discussion of the Evidence

Based on survey results, nine endangered, threatened, or special-status species were confirmed present at or near the site. They are: Engelmann oak, Parry's tetracoccus, ~~San Diego desert woodrat, c~~Coastal California gnatcatcher, Cooper's hawk, l~~L~~east Bell's vireo, Southern California rufous-crowned sparrow, s~~S~~outhwestern willow flycatchers, San Diego horned lizard, and n~~N~~orthern red diamond rattlesnake. ~~, arroyo toad, a~~An additional two special-status species, San Diego desert woodrat and arroyo toad ~~(Quino checkerspot butterfly and Stephen's kangaroo rat)~~ , could not be ruled out because suitable habitat is available and surveys did not conclusively demonstrate their absence. (Ex. 200, pp. 4.2-13 to 4.2-15.)

Operational Impacts and Mitigation
Page 257

3. Operational Impacts and Mitigation
The Orange Grove Project site is adjacent to SR 76, a busy roadway that generates ambient daytime noise. Noise from operation of the Orange Grove Project will be more prominent at night. As discussed in the Noise and Vibration section of this Decision, project noise control design features will reduce plant noise. Based on this analysis, operational noise from the Orange Grove Project will have no significant impacts to special status wildlife and other species in the vicinity of the site. (Ex. 200, pp. 4.2-24 to 4.2-25.).

Page 263

11. To compensate for these losses, avoid take of listed species, and to achieve consistency with the draft North County Multiple Species Conservation Program, the Applicant must implement the impact avoidance, minimization, and compensation measures of Conditions of Certification BIO-1 through BIO-~~5~~12.

12. Conditions of Certification BIO-1 through BIO-5 include specific measures to protect sensitive species and habitats, and general conditions to ensure

implementation of a worker training program, presence of a qualified biologist to monitor construction, and development of a detailed mitigation and monitoring program. These conditions and Conditions of Certification BIO-6 through BIO-14 also ensure that all protections and mitigation that would have been found in other county and state permits are included in the Energy Commission's license.

Page 264

19. With establishment of appropriate setbacks for the drilling described in Conditions of Certification BIO-9 ~~and BIO-10~~, and implementation of BMPs described in Condition of Certification BIO-6, drilling and other surface-disturbing activities are not likely to result in increased sedimentation or other water quality impacts in these drainages.

24. Implementation of Conditions of Certification BIO-9, which requires setbacks from ~~and BIO-11 require an on-site revegetation plan to replace the~~ Parry's tetracoccus ~~lost~~ during construction or fuel reduction clearing, and Condition of Certification BIO-11, which requires an on-site revegetation plan to replace the Parry's tetracoccus lost during construction or clearing, will reduce this cumulative impact to less than significant levels.

Page 274

Verification: At least 30 days prior to start of any ~~P~~project-related ground disturbance activities, the project owner shall provide evidence to the CPM of having secured 18.6 acres of Diegan coastal sage scrub and 6.8 acres of non-native annual grassland has been secured in a mitigation bank approved by the California Department of Fish &Game and the U.S. Fish and Wildlife Service, and that the project owner has implemented all mitigation requirements based on compliance with the Natural Communities Conservation Program Plan and as incorporated into the BRMIMP.

Geology and Paleontology Section
Prepared by Dal Hunter, Ph.D., C.E.G.

Page 337

The project will be situated on poorly to moderately indurated, Quaternary age, alluvial fan deposits which slope moderately to the southeast at a gradient of approximately 10 percent. The site is surrounded on the north, west, and east by relatively steeply sloping hillsides of Cretaceous gabbro (medium to coarse grained rock) associated with the Sierra Nevada Batholith. The shallow subsurface beneath the site is composed of a surficial layer of 12 to 18 inches of fine to ~~course~~ coarse grained sand and silty sand

with cobbles, and bounders. This overlies firm to hard sandy lean clay with gravel, cobbles, and boulders. (Ex. 200, pp. 5.2-3 to 5.2-4.)

Public Health Section
Prepared by Robert Fiore

Page 353, Finding A

The California Land Conservation Act specifically allows the construction and maintenance of electric facilities as a compatible use within an agricultural preserve. In addition, staff's **Land Use Table 2**, replicated below, identifies adjacent land uses, which are primarily vacant and no longer used for agricultural purposes. The surrounding region is characterized by various operations such as the former sand mine, former dairy farms, existing electric substation, nursery, paved roads, transmission line, gas pipeline, and other existing disturbances. According to Staff, the site is a suitable location for a power plant based on physical conditions, land use designations, zoning, and vicinity of proposed uses (Solid Waste Facility zoning and plans for the Gregory Canyon Landfill), and the steep terrain in the area limiting potential development.

Page 359

LAND-1 The project owner shall design the project according to applicable San Diego County design practices and policies and applicable County approved building codes.

Verification: At least sixty (60) days prior to the start of construction, the project owner shall submit to the Compliance Project Manager (CPM) applicable design standards and building codes and evidence of design review ~~and building inspection~~ by the County of San Diego Environmental Health, Public Works, Planning and Land Use
(Building) Departments and Chief Building Official.

LAND-2 The project owner shall design and construct the project in accordance with the standards found in the San Diego County Zoning Ordinance with respect to lot area, building type, building height, setbacks, lighting, fences, walls, screening, landscaping, enclosures and signs. The project owner shall provide a table of applicable Zoning Ordinance standards and criteria pertaining to lot area, building type, building height, setbacks, lighting, fences, walls, screening, landscaping, enclosures and signs and basis for compliance with each.

Verification: At least sixty (60) days prior to the start of construction the project owner shall submit the referenced table to the Compliance Project Manager and

Chief Building Official. The CBO shall review the table and building design plans and certify compliance with the Zoning Ordinance standards and criteria. If the CBO cannot certify a particular standard or criteria because compliance cannot be determined, the project owner shall provide a reasonable timeframe of when such standard or criteria can be determined in compliance. ~~The project cannot commence construction until all standards and criteria are met, unless such matter is minor in nature and authorization is granted by the CPM.~~

Public Health Section
Prepared by Dr. Alvin Greenberg

Page 199

The evidence shows that ~~the~~ Applicant's cancer risk estimate is about the same as ~~s are higher~~ than Staff's screening assessment using the HARP model (3.7 compared to 4.3 in one million, respectively). The Applicant's acute and chronic noncancer estimates are higher than staff's estimate when using the HARP model and in fact, the Applicant's estimate of the acute hazard index at the PMI (1.5) is above the threshold of significance (but is not above that threshold at the nearest residence, 0.54). The staff's estimate of acute hazard index is 0.6 which is below the level of significance. Both the Applicant's and Staff's estimates of the chronic hazard index at the PMI are in agreement (0.041 and 0.049, respectively) and are well below the level of significance. When Staff used a more refined air dispersion model (AERMOD) to estimate cancer risk and chronic hazard index at the PMI, Staff found a lower cancer risk (0.64 in one million) and a lower chronic HI (0.0072).

All cancer risks calculated by the Applicant and the Staff ~~However, even the higher figures~~ are well below the level of significant risk, which is 10 in one million. On the basis of this evidence we find that the project will not cause a significant risk of cancer to the public. And, since Staff's assessment using screening meteorology data found both the chronic and acute hazard indices to be less than significant (< 1.0), we also find that the project will not cause a significant acute or chronic hazard to the public. (Ex. 200, p. 4.7-17.)

Page 200

Staff also analyzed cancer risks and chronic hazards due to emissions from the water trucks. Staff used the maximum operational hours possible, 3,200 hrs/year, in its estimate of impacts and obtained approximately the same risk and hazard index results as the Applicant (see Public Health Table 7). In order to verify that the analysis identified the maximally impacted receptor, Staff conducted an additional analysis which resulted in a maximum cancer risk of 6.0E-06 and maximum chronic hazard index of 0.0038, located at a receptor next to the roadway.

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Written comment submitted on December 18, 2008, by the law firm Best, Best & Krieger, representing DFI Funding, Inc., notes the inconsistency between Applicant's and Staff's cancer risk and hazard index estimates – in particular the estimate by the Applicant that the acute hazard index at the PMI is 1.5 - and suggests that Applicant and Staff "correct and repeat" the risk assessments "before conclusively presuming that public health will not be impacted." However, the comment does not consider the fact that both cancer assessments as well as both chronic noncancer assessments resulted in figures substantially below the level of significance. It is only the Applicant's acute noncancer assessment that resulted in an estimate greater than the level of significance but we wish to emphasize that Staff relies on its own assessment to determine the level of risk and hazard. Most recently, on another siting case, staff's assessment demonstrated a higher level of risk than the applicant's and staff convinced the applicant to re-design the project, accept limitations on operating hours, and required stringent and unprecedented Conditions of Certification. The fact that the Orange Grove applicant's assessment differs with staff's and failed to be transparent and verifiable does not change staff's position no matter how different the assessments. Staff relies on its own assessment to make its findings. We have no evidence that contradicts Staff's risk assessment; ~~W~~we also have no evidence that repeating the risk assessments could lead to results exceeding the level of significance, and we must base our findings and conclusions upon the evidence; not "fears and desires" with no evidentiary basis (Perley v. County of Calaveras, 137 Cal.App. 424, 436).

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4. Applicant and Staff both performed ~~a~~ health risk assessments, using well-established scientific protocol, to analyze potential adverse health effects of toxic air contaminants.

Soil and Water ResourcesSection
Prepared by Cheryl Closson

Page 303-4

Recommend the following edit to Condition of Certification Soil & Water-2 because the SWPPP should address construction storm water management along the transmission and gas pipeline routes as well as the main site and laydowns areas.

SOIL & WATER-2: The project owner shall comply with the requirements of the general National Pollutant Discharge Elimination System (NPDES) permit for discharge of storm water associated with construction activity. The project owner shall submit copies of all correspondence between the project owner and the

State Water Resources Control Board (SWRCB) or the San Diego Regional Water Quality Control Board (RWQCB) regarding this permit to the CPM. The project owner shall also develop and implement a construction Storm Water Pollution Prevention Plan (SWPPP) for construction on the main Orange Grove Project (OGP) site, the transmission and gas pipeline routes, and all lay-down areas.

Page 308-9

Recommend the following edit to the verification for Condition of Certification Soil & Water- 9. There are actually six elements listed in the body of the condition and the sixth element could be expanded to include other uses. Recommend deleting "five" and just saying "water use elements listed above".

> **Verification:** At least 30 days prior to the start of project operation, the project owner shall submit to the CPM documentation identifying which of the ~~five~~ water use elements listed above could use recycled water in lieu of potable water without changes to project systems. For those elements that cannot use recycled water without changes to project systems or project operations, the project owner shall submit a plan to the CPM detailing how project system configurations or operations will be changed to accommodate recycled water use in the raw water storage tank, or how the project owner will provide adequate potable quality water during short-term potable water interruptions. The CPM shall review and approve the plan and the project owner shall implement the plan during short-term use of recycled water in the raw water storage tank.

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SOIL & WATER-12: Prior to transport and disposal of any facility operation wastewaters that are not suitable for treatment and reuse onsite, the project owner shall test and classify the stored wastewater to determine proper management and disposal requirements. The project ~~manager~~ owner shall ensure that the wastewater is transported and disposed of in accordance with the wastewater's characteristics and classification and all applicable LORS (including any CCR Title 22 Hazardous Waste and Title 23 Waste Discharges to Land requirements).

Verification: Prior to initial offsite transport and disposal of facility wastewaters, the project owner shall test and classify the stored wastewater to determine proper management and disposal requirements. At least 10 days prior to offsite transport, the project ~~manager~~ owner shall submit to the CPM for review and approval a report documenting the results of the wastewater testing and classification, and identifying the volume of wastewater to be disposed, the methods of transport, and the disposal facility to be used for offsite disposal of the wastewater. After CPM approval of the initial testing and management report,

and absent changes in waste stream characteristics or in the transport and disposal practices identified, the project owner shall report annually in the Annual Compliance Report the volume of facility wastewater transported and disposed of offsite and provide documentation that the wastewater was transported and disposed of in compliance with all applicable LORS.

Waste Management Section
Prepared by Ellie Townsend-Hough

Page 244

WASTE-6 The project owner shall provide a Debris Management Plan and a Performance Guarantee per the County of San Diego's Construction and Demolition Recycling Program (San Diego County Code of Reg.Ord. 9840 §§ 68.508 to 68.518.).The project owner shall ensure compliance with all of the county of San Diego's diversion program requirements and shall provide proof of compliance documentation to the county of San Diego and the CPM, including a Debris Management Plan, Performance Guarantee receipts, and records of measurement, consistent with the county of San Diego's normal reporting requirements. Project mobilization and construction shall not ~~precede~~ proceed until the county of San Diego issues an approval document, consistent with the county's normal building permit approval process, and the CPM provides written concurrence.

~~**Verification:** 60 days prior to the start of any construction activities, the project owner shall submit for review to the county of San Diego shall provide a Debris Management Plan and a Performance Guarantee per the County of San Diego's Construction and Demolition Recycling Program. At least 30 days prior to the start of any construction activities, the project owner shall submit the proposed Debris Management Plan, along with any comments received from the county of San Diego, to the CPM for review and approval. The CPM shall consider all comments by the city prior to approving the Debris Management Plan.~~

~~**Verification:** The project owner shall ensure that project activities are consistent with the approved Debris Management Plan and all applicable county of San Diego waste diversion requirements and provide adequate documentation of the types and volumes of wastes generated, how the wastes were managed, and volumes of wastes diverted. Project mobilization and construction shall not precede until the county of San Diego issues an approval document, consistent with the city's normal building permit approval, and the CPM provides written concurrence. Not later than 60 days after completion of project construction, the project owner shall submit documentation of compliance with the diversion program requirements to the CPM and county of San Diego. The required documentation shall include a Debris Management Plan (as set forth by the city~~

~~program), along with all necessary receipts and records of measurement from entities receiving project wastes.~~

Verification: Sixty days prior to the start of any construction activities, the project owner shall submit for review to the county of San Diego a Debris Management Plan and a Performance Guarantee per the County of San Diego's Construction and Demolition Recycling Program. At least 30 days prior to the start of any construction activities, the project owner shall submit the proposed Debris Management Plan, along with any comments received from the county of San Diego, to the CPM for review and approval. The CPM shall consider all comments by the county prior to approving the Debris Management Plan.

The project owner shall ensure that project activities are consistent with the approved Debris Management Plan and all applicable county of San Diego waste diversion requirements and provide adequate documentation of the types and volumes of wastes generated, how the wastes were managed, and volumes of wastes diverted. Project mobilization and construction shall not proceed until the county of San Diego issues an approval document, consistent with the city's normal building permit approval, and the CPM provides written concurrence. Not later than 60 days after completion of project construction, the project owner shall submit documentation of compliance with the diversion program requirements to the CPM and county of San Diego. The required documentation shall include a Debris Management Plan (as set forth by the county program), along with all necessary receipts and records of measurement from entities receiving project wastes.