California Regional Water Quality Control Board
Santa Ana Region

November 5, 2004

ITEM: 7

SUBJECT: Waste Discharge Requirements for Hines Nurseries, Inc., Order No. R8-2004-0060

DISCUSSION:

Hines Nurseries, Inc., (Hines) operates a wholesale nursery complex at 12621 Jeffrey Road in the Irvine area of Orange County. Hines is a national supplier of containerized ornamental shrubs and color plants, marketing its products to retail and commercial customers throughout the United States.

Hines occupies 542 acres of property leased from The Irvine Company. Four hundred ninety-nine (499) acres are under nursery production and 43 acres are currently subleased to B&E Farms, a strawberry producer. Two hundred fifty four (254) acres are located on the east side of Jeffrey Road (Hines East). Two hundred eighty-eight (288) acres, including the 43 acre subleased area, are located on the west side of Jeffrey Road (Hines West). In July 2005, the 43 acres that are subleased to B&E Farms will be developed as container nursery production grounds. On June 30, 2006, Hines will yield 114 acres of Hines East back to The Irvine Company. On December 31, 2006, Hines will yield the remaining 140 acres of Hines East to The Irvine Company. On December 31, 2010, Hines is scheduled to yield the remaining 288 acres of leased property (Hines West) to The Irvine Company.

The facility grows plants in containers and fertilizes plants with a combination of soil incorporated granular preplant slow release fertilizers and injection of liquid fertilizers into irrigation water. Pesticides and herbicides are also used at the facility.

The facility irrigates with water from Irvine Ranch Water District and Irvine Lake. It also recycles about 80 percent of irrigation tailwater. The water and the recycled tailwater is filtered and injected with fertilizer before use. Monitoring data from June 2003 through June 2004 indicate that water use at the nursery ranges from 32 million gallons per month (MGM) to 116 MGM and the amount of wastewater discharged ranges from 0.7 MGM to 10.8 MGM.

Currently, 85% of the nurseries' plants are irrigated by overhead impact sprinklers. Overhead suspended sprinklers or mini sprinklers and drip irrigation are also utilized at the facility.

All tailwater from irrigation of the western portion of the nursery (Hines West) drains by gravity to three unlined settling ponds located along the southwestern part of the facility. These ponds average about 40,000 cubic feet capacity and are approximately 2-3 feet deep. From the settling ponds, the tail water flows by gravity to a 1.5 million gallon lined storage reservoir (about 11 feet deep) located next to the settling ponds. Tailwater from the eastern portion of the nursery

On April 17, 1998, the Regional Board adopted Resolution No. 98-9 amending the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) to include a nutrient Total Maximum Daily Load (TMDL) for the Newport Bay/San Diego Creek Watershed. The nutrient TMDL was amended by Resolution No.98-100 on October 9, 1998. Thereafter, it was approved by the State Water Resources Control Board, Office of Administrative Law and the US EPA. The TMDL includes specific total nitrogen waste load allocations for Hines Nurseries (and other nurseries). The TMDL also includes phosphorus load allcations that apply to agricultural areas within the Newport Bay watershed. The primary reduction of phosphorus loading is expected to be achieved by the implementation of the sediment TMDL, discussed below. However, the TMDL specifies that limits on phosphorous will be incorporated in revised waste discharge requirements as necessary.

On April 17, 1998, the Regional Board adopted Resolution No. 98-69, amending the Basin Plan to include a TMDL for sediment in the Newport Bay/San Diego Creek Watershed. This sediment TMDL was amended by Resolution No. 98-101 on October 9, 1998 and has also been approved by the State Water Resources Control Board, Office of Administrative Law and the US EPA. The sediment TMDL provides a load allocation for all agricultural operations of 19,000 tons per year for discharges of sediment into San Diego Creek and its tributaries (10 year running average).

The proposed Order will update the existing waste discharge requirements for Hines Nurseries, Inc., to include the wasteload allocations for total nitrogen specified in the nutrient TMDL and a limit on total phosphorous.

The proposed Order also includes a limit on total suspended solids based on the load allocations for agricultural land specified in the sediment TMDL.

Order No. R8-2004-0060 should be adequate to protect these beneficial uses and to assure appropriate mitigation of impacts to waters of the State.

The facility site map and location of discharge points are shown on Attachments "A" and "B", respectively.

RECOMMENDATION:

Adopt Order No. R8-2004-0060, as presented.

Comments were solicited from the following agencies and/or persons:

State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon
State Water Resources Control Board, Division of Water Quality - James Maughan
State Department of Water Resources, Glendale
California Department of Fish and Game, San Diego – Tim Dillingham
Orange County Health Care Agency – Jack Miller
Orange County Resources and Development Management Department – Chris Crompton

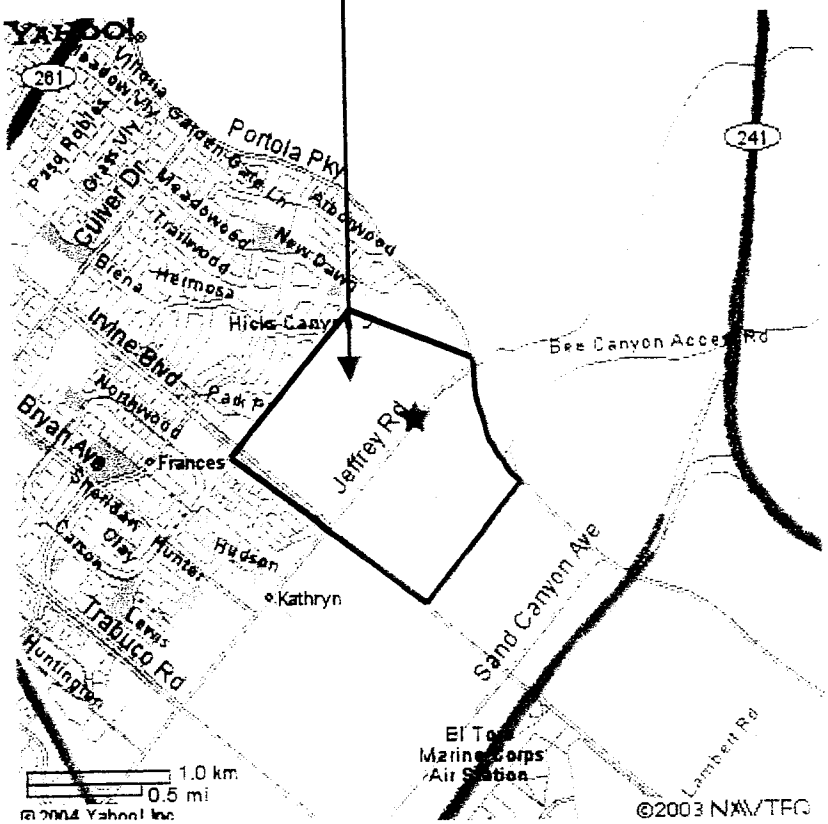
Orange County Farm Bureau - Kathy Nakase
Irvine Ranch Water District – John Hills
University of California Cooperative Extension, South Coast Research Center – John Kabashima
City of Newport Beach – Dave Kiff
City of Irvine – Mike Loving
Bordier's Nursery , Inc. – Bill Russel
El Modeno Gardens – Jo-Anne Newton
Defend the Bay – Bob Caustin
SPON – John Skinner
Natural Resources Defense Council – David Beckman
Orange County Coastkeeper
Lawyers for Clean Water C/c San Francisco Baykeeper

Attachment "A"
Staff Report
Hines Nurseries, Inc.

LOCATION MAP

VICINITY MAP

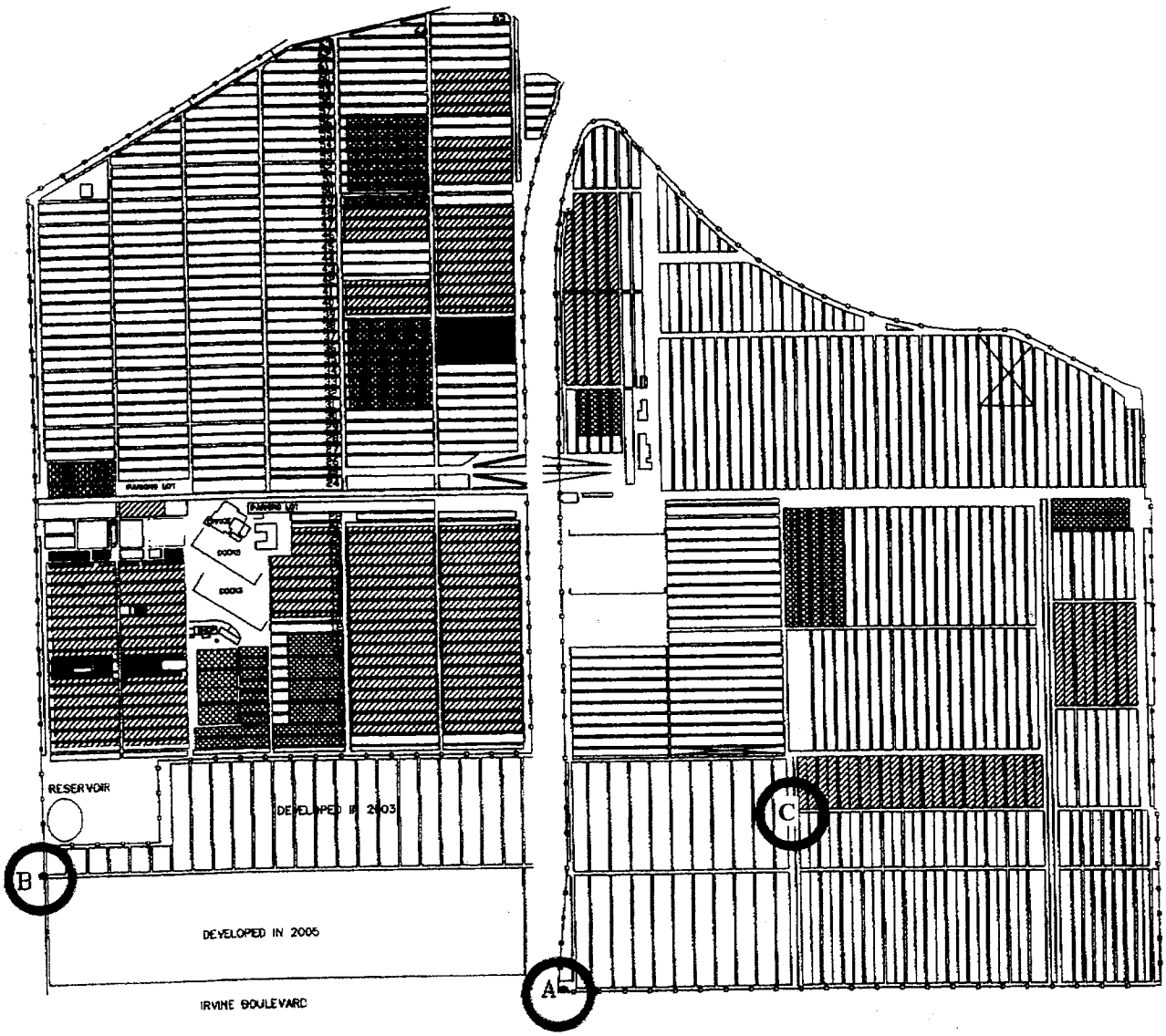
HINES NURSERIES, INC.
12621 JEFFREY ROAD
IRVINE, CA 92720



LOCATION MAP

Attachment "B"
Staff Report
Order No. R8-2004-0060
Hines Nurseries, Inc.

DISCHARGE LOCATIONS



Indicates discharge point

California Regional Water Quality Control Board
Santa Ana Region

Order No. R8-2004-0060

Waste Discharge Requirements
For
Hines Nurseries, Inc.
Orange County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. On September 3, 2004, Hines Nurseries, Inc. (hereinafter discharger), submitted a complete Report of Waste Discharge for updated waste discharge requirements for the discharge of nursery irrigation and storm runoff. Currently, waste discharges from the facility are regulated under Order No. 90-82. Order No 90-82 is being updated to reflect current State regulations and changes in plans and policies of the State and Regional Board.

2. The discharger operates a wholesale nursery complex at 12621 Jeffrey Road in the Irvine area of Orange County.

3. The nurseries occupies approximately 542 acres, including 43 acres that are currently subleased.

4. The facility receives water from Irvine Ranch Water District and Irvine Lake. It also recycles about 80 percent of irrigation tailwater. Monitoring data from June 2003 through June 2004 indicate that water use at the nursery ranges from 32 million gallons per month (MGM) to 116 MGM and the amount of wastewater discharged ranges from 0.7 MGM to 10.8 MGM. The freshwater and recycled tailwater is filtered and injected with fertilizer before use. The facility grows plants in containers and fertilizes plants with a combination of soil incorporated granular preplant slow release fertilizers and injection of liquid fertilizers into irrigation water. Pesticides and herbicides are also used at the facility.

5. Currently, 85% of the nursery plants are irrigated by overhead impact sprinklers. Overhead suspended sprinklers or mini sprinklers and drip irrigation are also utilized at the facility.

6. All tailwater from the western portion of the nursery (Hines West) drains by gravity to three settling ponds and then to a 1.5 million gallon storage reservoir. Tailwater from the eastern portion of the nursery (Hines East) is isolated from stormwater channels and flows by gravity into two recycling wet wells. The tailwater is pumped from the wet wells is pumped to Hines West, where it is used for irrigation. Tailwater then, it flows by gravity into the three settling ponds and into the storage reservoir. The collected water is blended with fresh water and recycled back into the irrigation system.

TENTATIVE

7. Wastewater is discharged into Glenn Road Channel, then to Hicks Canyon, and then to Peters Canyon, which are tributary to San Diego Creek and Newport Bay. The discharge points are as follows:

   a <u>Station A</u> Latitude N33°42.448', Longitude W117°44.724'

   This station is located at the eastern portion of Hines Nurseries (Hines East) (east of Jeffrey Road). All tailwater discharges generated at the southernmost parts of Hines East gravity flow to one of two wet wells from where the tailwater is pumped to the western portion of Hines Nurseries (Hines West). The tailwater is used for irrigation at Hines West and flows by gravity to the settling ponds and then to the storage reservoir.

   b <u>Station B</u> Latitude N33°42.889', Longitude W117°45.326'

   This station is located at the southwest corner of Hines West (storage reservoir). All tailwater and stormwater discharges from Hines East and Hines West flow to this station. In addition, any excess irrigation and stormwater runoff from the west, north, east, and adjacent to Jeffrey Road that cannot be directed into the settling ponds, is also discharged to this station.

   The location of this discharge point will change to Latitude N33°42.736', Longitude W117°45.440' at the end of 2005.

   c <u>Station C</u> Latitude N33°42.426', Longitude W117°44.724'

   This station is located at Hines East, in the middle of the easternmost part of the facility, and runs along the ditch that runs parallel to and near Jeffrey Road. This station receives tailwater and stormwater runoff from the northeastern portions and the mid-easternmost portions of the facility.

8. A revised Water Quality Control Plan (the Basin Plan) became effective on January 24, 1995. The Basin Plan contains beneficial uses and water quality objectives for waters in the Santa Ana Region.

9. The requirements contained in this Order are necessary to implement the Water Quality Control Plan.

10. The beneficial uses of San Diego Creek and Newport Bay include:

    a. Navigation;
    b. Water contact recreation;
    c. Non-water contact recreation;
    d. Commercial and sportfishing;
    e. Preservation of biological habitats of special significance;
    f. Wildlife habitat;
    g. Rare, threatened or endangered species;
    h. Spawning, reproduction, and development;

i. Marine habitat;
j. Shellfish harvesting;
k. Warm freshwater habitat; and
l. Estuarine habitat.

11. On April 17, 1998, the Regional Board adopted Resolution No. 98-69, amending the Basin Plan to include a TMDL for sediment in the Newport Bay/San Diego Creek Watershed. The sediment TMDL requires the implementation of Best Management Practices (BMPs) to control sediment to provide a reasonable assurance that water quality standards will be met. This sediment TMDL was amended by Resolution No. 98-101 on October 9, 1998 and has been approved by the State Water Resources Control Board, Office of Administrative Law and the US EPA. The sediment TMDL provides an allocation for all agricultural operations of 19,000 tons per year into San Diego Creek and its tributaries.

12. On April 17, 1998, the Regional Board also adopted Resolution No. 98-9, amending the Basin Plan for the Santa Ana River Basin to incorporate a Nutrient Total Maximum Daily Load (TMDL) for the Newport Bay/ San Diego Creek Watershed. The TMDL was amended by Resolution No. 98-100 on October 9, 1998 and thereafter approved by the State Water Resources Control Board, Office of Administrative Law and the US EPA. The TMDL provides a total nitrogen allocation for Hines Nurseries of 211 lbs per day (monthly average) to be achieved no later than 2007. The TMDL provides a total phosphorous load allocation for all agricultural operations in the Newport Bay watershed of 18,720 lbs per year, to be achieved no later than 2007. The TMDL indicates that the implementation of the sediment TMDL is expected to be the primary means of achieving phosphorus loading reductions. However, the TMDL specifies that phosphorus limitations will be included in waste discharge requirements as necessary.

13. This Order implements relevant requirements and provisions of the Nutrient TMDL specified in Resolution No. 98-9, as amended by Resolution No. 98-100.

14. This Order includes an effluent limit for total suspended solids (TSS) based on the sediment TMDL allocation (19,000 tons/year implemented as a 10-year running annual average) for agricultural land. Because of the limited data available to develop an the TSS limitation for this specific discharger, this Order requires monitoring for TSS. The TSS limit will be revisited based on evaluation of these data.

15. The project involves the update of waste discharge requirements for an existing facility and, as such, is exempt from the California Environmental Quality Act (Public Resources Code, Section 21100 et. seq.) in accordance with Section 15301, Chapter 3, Title 14, California Code of Regulations.

16. The quality characteristics of the discharge and the impacts of the discharge on the affected receiving waters (including San Diego Creek and Newport Bay) have been carefully considered. If conducted in accordance with the terms and conditions of this Order, the discharge will not result in a lowering of the water quality of the affected receiving waters. The discharge is consistent with State antidegradation policy (State Water Resources Control Board Resolution No. 68-16). There is no indication that the

receiving waters affected by the discharge are high quality. The discharge will not result in water quality less than that prescribed in the Basin Plan. The discharge limitations specified in the Order implement relevant TMDLs specified in the Basin Plan to assure that water quality standards (objectives and beneficial uses) are achieved. The discharge will not result in any adverse impacts to the present or potential beneficial uses of the receiving waters.

17. The Regional Board has notified the discharger and other interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with the opportunity to submit their written views and recommendations.

18. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the 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. DISCHARGE SPECIFICATIONS:[1]

1. The discharge of wastes containing a monthly average total nitrogen or total phosphorous mass emission rate that exceeds the values shown in the following table is prohibited.

Dates	Monthly Average Mass Emission Rate	
	Total Nitrogen	Total Phosphorous
Beginning December 1, 2004	224 lbs/day	127 lbs/month
By December 31, 2007	211 lbs/day	91 lbs/month

2. The discharge of waste containing a 12-month average mass total suspended solids in excess of 111.25 tons/month[2] is prohibited.

3. The discharge of wastewater other than agricultural irrigation runoff and stormwater runoff is prohibited.

4. The discharge of hazardous wastes is prohibited.

5. The discharge shall not cause toxicity to animal or plant life in affected receiving waters.

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1 *See Provisions B.3 and B.4., below for compliance with effluent limitations.*

2 *Calculated from the sediment TMDL load allocation of 19,000 tons per year for agricultural land multiplied by 542 (site acreage) divided by 12 and 7,714 (total agricultural acreage in the watershed)*

6. The discharge shall not contain any visible oil and grease.

B. PROVISIONS:

1. Neither the treatment nor the discharge of waste shall create, or threaten to create, a nuisance or pollution as defined by Section 13050 of the California Water Code.

2. Order No. 90-82 is hereby rescinded.

3. Compliance with the monthly average mass emission rate specified under Discharge Specification A.1 for Total Nitrogen and Total Phosphorous shall be determined by the total flow discharged within the month (in million gallons) multiplied by the average of all measurements for the parameter (in mg/l) within the month and multiplied by 8.34. Compliance with Total Nitrogen limits (lbs/day) shall be determined by dividing the monthly mass emission rate by the total number of calendar days within the month in consideration. Discharges that occur between October 1 and March 31 when the storm-induced mean daily flow rate measured at San Diego Creek at Campus Drive[3] is above 50 cfs shall not be included in the determination of compliance with the Total Nitrogen limits.

4. Compliance with the 12-month average mass limits specified in Discharge Specification A.2. shall be determined monthly by the arithmetic mean of the last twelve monthly averages.

5. The discharger shall comply with Monitoring and Reporting Program (M&RP) No. R8-2004-0060 as issued by the Executive Officer. This M&RP may be modified by the Executive Officer at any time during the term of this Order, and may include a reduction or an increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples collected.

6. By January 1, 2005, the discharger shall submit a listing of chemicals/pesticides/herbicides that are used onsite. This shall include the estimated application rate and intended time/date of application. The discharger shall provide notice and resubmit a revised listing of chemicals whenever this listing is updated/revised.

7. The discharger shall update and implement best management practices to maximize reduction of nutrients (nitrogen and phosphorous) and sediment in the discharge and to minimize waste discharges from the site to the maximum extent practicable.

8. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

9. The discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any requirements specified in this

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3 *Measurements taken by Orange County Resources and Development Management Department.*

Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

10. This Order does not exempt the discharger from compliance with any other applicable laws, regulations or ordinances which may be applicable; this Order does not legalize the discharge of waste from the facility and they leave unaffected any further restraint on the disposal of wastes at this facility which may be required by other agencies or contained in other statutes or required by other agencies.

11. This Order does not convey any property rights of any sort, or any exclusive privilege.

12. This Order is not transferable to any person except after notice to, and approval by the Executive Officer. The Regional Board may require modification or revocation and re-issuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary.

13. In the event of any change in control or ownership of land or waste discharge facility presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Board.

14. All hazardous wastes from this facility must be collected for disposal or treatment at an approved waste management unit.

15. The discharge of wastes to property not owned or controlled by the discharger is prohibited, unless authorized in this Order.

16. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

17. The Regional Board and other authorized representatives shall be allowed:

    a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the requirements of this Order;

    b. Access to copy any records that are kept under the requirements of this Order;

    c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

    d. To photograph, sample and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the California Water Code.

18. This Order may be reopened to address any changes in State or federal plans, policies or regulations that would affect the quality requirements for the discharges. This includes changes in relevant TMDLs and wasteload allocations specified therein for the discharge.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, November 5, 2004.

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Gerard J. Thibeault
Executive Officer

California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. R8-2004-0060
for
Hines Nurseries, Inc.
Orange County

A. MONITORING AND REPORTING REQUIREMENTS:

1. All sampling and sample preservation shall be in accordance with the current edition of "*Standard Methods for the Examination of Water and Wastewater*" (American Public Health Association).

2. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services or at laboratories approved by the Regional Board's Executive Officer.

3. All analytical data reported as "non detected" shall identify either the method detection limit[1] (MDLs), practical quantitation levels (PQLs[2]) or limits of quantitation (LOQs).

4. Laboratory data must quantify each constituent down to the Practical Quantitation Levels specified in Attachment "A." Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.

5. Discharge monitoring data shall be submitted in a format acceptable by the Regional Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this Order shall be reported to the Regional Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order.

6. The discharger shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the Order.

TENTATIVE

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1 *The standardized test procedure to be used to determine the method detection limit (MDL) is given at Appendix B, 'Definition and Procedure for the Determination of the Method Detection Limit' of 40 CFR 136.*

2 *PQL is the lowest concentration of a substance which can be determined within ± 20 percent of the true concentration by 75 percent of the analytical laboratories tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL is the method detection limit (MDL) x 5 for carcinogens and MDL x 10 for noncarcinogens.*

7. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the discharger will be in compliance. The discharger shall notify the Regional Board by letter when compliance with the time schedule has been achieved.

8. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.

9. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the discharger shall obtain a representative grab sample each day the equipment is out of service. The discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the discharger shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

10. Monitoring and reporting shall be in accordance with the following:

    a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

    b. Whenever the discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.

    c. A "grab" sample is defined as any individual sample collected in less than 15 minutes.

    d. A composite sample is defined as a combination of no fewer than eight individual grab samples obtained over the specified sampling period. The volume of each individual grab sample shall be proportional to the discharge flow rate at the time of sampling. The compositing period shall equal the specific sampling period, or 24 hours, if no period is specified.

    e. Quarterly samples shall be collected from the first discharge of February, May, August, and November. If no discharge occurs during these months, then the next succeeding discharge shall be sampled.

f. Semi-annual samples shall be collected from the first storm-induced discharge between October and April and the first dry weather discharge between April and October.

g. Annual samples shall be collected of the first discharge of October. If no discharge occurs during that month, then the next succeeding discharge shall be sampled.

h. The monthly mass emission rate for total nitrogen and total phosphorous shall be determined by using the following formula:

$$Mass\ (lbs/month) = 8.34 \times Q \times C$$

Where:

Q = total flow discharged within the month in million gallons.

C = the sum of all measurements for the parameter within the month (in milligrams per liter) divided by the total number of samples.

The daily mass emission rate for total nitrogen shall be determined by dividing the monthly mass emission rate by the number of calendar days within the month in consideration. Discharges that occur between October 1 and March 31 when the storm-induced mean daily flow rate measured at San Diego Creek at Campus Drive[3] is above 50 cfs shall not be included in the determination of compliance with the Total Nitrogen limits. The daily mass emission rate shall be calculated annually in December and shall be submitted with the required monthly report for January.

i. Mass emissions for sediments

The discharger shall estimate mass loading of sediments for all dry weather discharges as well as storm water discharges from all discharge points at the site. To estimate mass loading, the discharger may develop a relationship between total suspended solids in the discharge and flow. Alternatively, the discharger may use the formula above to estimate mass loading, but with C equal to the sum of all measurements of TSS for the month (storm and nonstorm flows, in mg/l) divided by the total number of samples.

11. All reports and/or information submitted to the Regional Board shall be signed by a responsible officer or duly authorized representative of the discharger and shall be submitted under penalty of perjury.

12. The discharger, unless otherwise specified elsewhere in this M&RP, shall deliver a copy of each monitoring report in the appropriate format to:

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3 *Measured by Orange County Resources and Development Management Department*

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

B. EFFLUENT MONITORING:

1. Sampling stations shall be established at the point(s) of discharge (Stations A, B, and C) and shall be located where representative samples of the effluent can be obtained. The date and time of sampling shall be reported with the analytical values determined.

2. The following shall constitute the effluent monitoring program for all discharges:

Constituent	Units	Type of Sample	Minimum Frequency of Sampling & Analysis
Irrigation Wastewater Discharges[4]	mgd	Recorder/Totalizer	Continuous
Stormwater Discharges[5]	"	"	"
Total Dissolved Solids	mg/l	Grab	Weekly (See B.6, below)
Electrical Conductivity	µmhos/cm	"	"
Nitrate (NO_3)	mg/l	"	"
Ammonia Nitrogen (NH_4)	"	"	"
Total Nitrogen	"	"	"
Total Phosphorous	"	"	"
Total Suspended Solids	"	"	"
Copper	"	"	"
Total Hardness	"	"	"
Diazinon	"	"	"
Chlorpyrophos	"	"	"

4 *Discharges during dry weather conditions.*

5 *Discharges due to storm events. "Storm Event" means a rainfall event that produces more than 0.1 inch of precipitation and that is separated from the previous storm event by at least 72 hours of dry weather.*

Constituent	Units	Type of Sample	Minimum Frequency of Sampling & Analysis
Organophosphate	mg/l	Grab	Weekly (See B.6, below)
Selenium[6]	µg/l	"	Semi-annually (see also paragraph B.3 and 4., below)
Aldrin	"	"	"
Chlordane	"	"	"
Dieldrin	"	"	"
2, 4' – DDD[6]	"	"	"
2, 4' – DDE[6]	"	"	"
2, 4' – DDD[6]	"	"	"
4, 4' – DDT[6]	"	"	"
4, 4' – DDE[6]	"	"	"
4, 4' – DDD[6]	"	"	"
Alpha Endosulfan	"	"	"
Beta Endosulfan	"	"	"
Endosulfan Sulfate	"	"	"
Endrin	"	"	"
Endrin Aldehyde	"	"	"
Heptachlor	"	"	"
Heptachlor Epoxide	"	"	"
Alpha BHC	"	"	"
Beta BHC	µg/l	Grab	Semi-annually (see also paragraph B.3 and 4., below)
Delta BHC	"	"	"
Gamma BHC	"	"	"
Toxaphene	"	"	"
PCB 1016	"	"	"
PCB 1221	"	"	"
PCB 1232	"	"	"
PCB 1242	"	"	"
PCB 1248	"	"	"
PCB 1254	"	"	"
PCB 1260	"	"	
Remaining EPA Priority Pollutants (See Attachment "B")	µg/l	Grab	Annually

3. In conjunction with sampling for organochlorine pesticides and selenium, the discharger shall conduct a sediment particle size analysis and analysis for total organic carbon. Particle analysis may be performed using the standard hydrometer method.

4. Minimum frequency of sampling and analysis shall be twice per year, however quarterly monitoring for those constituents that are detected in the above test shall be implemented for one year following detection.

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6 *Selenium, DDTs, chlordane, PCBs, dieldrin and toxaphene are to be analyzed on an unfiltered sample.*

5. When a discharge occurs, the discharger shall conduct a visual inspection of where, when and whether the discharge percolates. The results of this visual inspection shall be recorded in a permanent log and submitted with the monthly report.

6. Minimum frequency of sampling and analysis shall be as follows:

   a. For dry weather flow discharges: within one hour of every daily discharge.
   b. For storm-induced discharges: within 1 hour of first flush discharge very storm event.

C. REPORTING:

1. Monitoring reports shall be submitted monthly following the monitoring period. The monitoring reports shall also include copies of Monthly Summary Pesticide Use Report the discharger submits to the Department of Pesticide Regulations (DPR). Monitoring reports shall be submitted by the dates in the following schedule:

Report[7]	Reporting period	Report Due Date
Irrigation Wastewater Discharges	Monthly	By the 30th day of the month following the monitoring period
Storm Water Discharges	"	"
Particle Size Analysis & Total Organic Carbon	(See B.3, above)	"
Annual Priority Pollutants Analysis	(See A.10.g, above)	By the 30th day of the month following the monitoring period

2. The total volume of water purchased and recycled every month shall be reported.

3. If no discharge occurs during the previous monitoring period, a statement to that effect shall be included in the monitoring report.

Gerard J. Thibeault
Executive Officer

November 5, 2004

[7] *This table attempts to summarize all of the special reports that are required to be submitted in accordance with Order No. R8-2004-0060; however, the omission of a report from this table does not absolve the discharger from the requirement to submit that report*

Attachment "A"
M&RP No. R8-2004-0060

PRACTICAL QUANTITATION LEVELS FOR COMPLIANCE DETERMINATION

	Constituent	PQL µg/l	Analysis Method
1	Arsenic	7.5	GF/AA
2	Barium	20.0	ICP/GFAA
3	Cadmium	15.0	ICP
4	Chromium (VI)	15.0	ICP
5	Cobalt	10.0	GF/AA
6	Copper	19.0	GF/ICP
7	Cyanide	50.0	335.2/335.3
8	Iron	100.0	ICP
9	Lead	26.0	GF/AA
10	Manganese	20.0	ICP
11	Mercury	0.50	CV/AA
12	Nickel	50.0	ICP
13	Selenium	2.0	EPA Method 1638, 1640 or 7742
14	Silver	16.0	ICP
15	Zinc	20.0	ICP
16	1,2 - Dichlorobenzene	5.0	601/602/624
17	1,3 - Dichlorobenzene	5.0	601
18	1,4 - Dichlorobenzene	5.0	601
18	2,4 - Dichlorophenol	10.0	604/625
20	4 - Chloro -3- methylphenol	10.0	604/625
21	Aldrin	0.04	608
22	Benzene	1.0	602/624
23	Chlordane	0.30	608
24	Chloroform	5.0	601/624
25	DDT	0.10	608
26	Dichloromethane	5.0	601/624
27	Dieldrin	0.10	608
28	Fluorantene	10.0	610/625
29	Endosulfan	0.50	608
30	Endrin	0.10	608
31	Halomethanes	5.0	601/624
32	Heptachlor	0.03	608
33	Hepthachlor Epoxide	0.05	608
34	Hexachlorobenzene	10.0	625
35	Hexachlorocyclohexane		
	Alpha	0.03	608
	Beta	0.03	608
	Gamma	0.03	608
36	PAH's	10.0	610/625
37	PCB	1.0	608
38	Pentachlorophenol	10.0	604/625
39	Phenol	10.0	604/625
40	TCDD Equivalent	0.05	8280
41	Toluene	1.0	602/625
42	Toxaphene	2.0	608
43	Tributyltin	0.02	GC
44	2,4,6-Trichlorophenol	10.0	604/625

Attachment "B"
M&RP No. R8-2004-0060

EPA PRIORITY POLLUTANT LIST

Metals		Acid Extractibles		Base/Neutral Extractibles (continuation)	
1.	Antimony	45.	2-Chlorophenol	91.	Hexachloroethane
2.	Arsenic	46.	2,4-Dichlorophenol	92.	Indeno (1,2,3-cd) Pyrene
3.	Beryllium	47.	2,4-Dimethylphenol	93.	Isophorone
4.	Cadmium	48.	2-Methyl-4,6-Dinitrophenol	94.	Naphthalene
5a.	Chromium (III)	49.	2,4-Dinitrophenol	95.	Nitrobenzene
5b.	Chromium (VI)	50.	2-Nitrophenol	96.	N-Nitrosodimethylamine
6.	Copper	51.	4-Nitrophenol	97.	N-Nitrosodi-N-Propylamine
7.	Lead	52.	3-Methyl-4-Chlorophenol	98.	N-Nitrosodiphenylamine
8.	Mercury	53.	Pentachlorophenol	99.	Phenanthrene
9.	Nickel	54.	Phenol	100.	Pyrene
10.	Selenium	55.	2, 4, 6 – Trichlorophenol	101.	1,2,4-Trichlorobenzene
11.	Silver	**Base/Neutral Extractibles**		**Pesticides**	
12.	Thallium	56.	Acenaphthene	102.	Aldrin
13.	Zinc	57.	Acenaphthylene	103.	Alpha BHC
Miscellaneous		58.	Anthracene	104.	Beta BHC
14.	Cyanide	59.	Benzidine	105.	Delta BHC
15.	Asbestos (not required unless requested)	60.	Benzo (a) Anthracene	106.	Gamma BHC
16.	2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD)	61.	Benzo (a) Pyrene	107.	Chlordane
Volatile Organics		62.	Benzo (b) Fluoranthene	108.	4, 4' - DDT
17.	Acrolein	63.	Benzo (g,h,i) Perylene	109.	4, 4' - DDE
18.	Acrylonitrile	64.	Benzo (k) Fluoranthene	110.	4, 4' - DDD
19.	Benzene	65.	Bis (2-Chloroethoxy) Methane	111.	Dieldrin
20.	Bromoform	66.	Bis (2-Chloroethyl) Ether	112.	Alpha Endosulfan
21.	Carbon Tetrachloride	67.	Bis (2-Chloroisopropyl) Ether	113.	Beta Endosulfan
22.	Chlorobenzene	68.	Bis (2-Ethylhexyl) Phthalate	114.	Endosulfan Sulfate
23.	Chlorodibromomethane	69.	4-Bromophenyl Phenyl Ether	115.	Endrin
24.	Chloroethane	70.	Butylbenzyl Phthalate	116.	Endrin Aldehyde
25.	2-Chloroethyl Vinyl Ether	71.	2-Chloronaphthalene	117.	Heptachlor
26.	Chloroform	72.	4-Chlorophenyl Phenyl Ether	118.	Heptachlor Epoxide
27.	Dichlorobromomethane	73.	Chrysene	119.	PCB 1016
28.	1,1-Dichloroethane	74.	Dibenzo (a,h) Anthracene	120.	PCB 1221
29.	1,2-Dichloroethane	75.	1,2-Dichlorobenzene	121.	PCB 1232
30.	1,1-Dichloroethylene	76.	1,3-Dichlorobenzene	122.	PCB 1242
31.	1,2-Dichloropropane	77.	1,4-Dichlorobenzene	123.	PCB 1248
32.	1,3-Dichloropropylene	78.	3,3'-Dichlorobenzidine	124.	PCB 1254
33.	Ethylbenzene	79.	Diethyl Phthalate	125.	PCB 1260
34.	Methyl Bromide	80.	Dimethyl Phthalate	126.	Toxaphene
35.	Methyl Chloride	81.	Di-n-Butyl Phthalate		
36.	Methylene Chloride	82.	2,4-Dinitrotoluene		
37.	1,1,2,2-Tetrachloroethane	83.	2-6-Dinitrotoluene		
38.	Tetrachloroethylene	84.	Di-n-Octyl Phthalate		
39.	Toluene	85.	1,2-Dipenylhydrazine		
40.	1,2-Trans-Dichloroethylene	86.	Fluoranthene		
41.	1,1,1-Trichloroethane	87.	Fluorene		
42.	1,1,2-Trichloroethane	88.	Hexachlorobenzene		
43.	Trichloroethylene	89.	Hexachlorobutadiene		
44.	Vinyl Chloride	90.	Hexachlorocyclopentadiene		

Revised: 7/7/2000

California Regional Water Quality Control Board
Santa Ana Region

Terry Tamminen
Secretary for Environmental Protection

3737 Main Street, Suite 500, Riverside, California 92501-3348
(951) 782-4130 • Fax (951) 781-6288
http://www.swrcb.ca.gov/rwqcb8

Arnold Schwarzenegger
Governor

October 5, 2004

State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon
State Water Resources Control Board, Division of Water Quality - James Maughan
State Department of Water Resources, Glendale
California Department of Fish and Game, San Diego – Tim Dillingham
Orange County Health Care Agency – Jack Miller
Orange County Resources and Development Management Department – Chris Crompton
Orange County Farm Bureau - Kathy Nakase
Irvine Ranch Water District – John Hills
University of California Cooperative Extension, South Coast Research Center – John Kabashima
City of Newport Beach – Dave Kiff
City of Irvine – Mike Loving
Bordier's Nursery , Inc. – Bill Russel
El Modeno Gardens – Jo-Anne Newton
Defend the Bay – Bob Caustin
SPON – John Skinner
Natural Resources Defense Council- David Beckman
Orange County Coastkeeper – Garry Brown
Lawyers for Clean Water C/c San Francisco Baykeeper

RENEWAL OF WASTE DISCHARGE REQUIREMENTS FOR THE HINES NURSERIES, INC., ORDER NO. R8-2004-0060

Ladies and Gentlemen:

Enclosed is a copy of tentative Order No. R8-2004-0060 for your review and comments. The tentative Order renews waste discharge requirements for Hines Nurseries, Inc for the discharge of irrigation and storm runoff from the nurseries into Glenn Road Channel, then to Hicks Canyon, and then to Peters Canyon, which are tributary to San Diego Creek and Newport Bay.

This Order is scheduled for consideration by the Regional Board on November 5, 2004. The Board meeting will start at 9 a.m. and will be held at Eastern Municipal Water District's conference room, 2270 Trumble Road, Perris. Although all comments that are provided up to and during the public hearing on this matter will be considered, receipt of comments by October 18, 2004, would be appreciated so that they can be used in the formulation of the draft Order that will be transmitted to the Board two weeks prior to the hearing. The draft Order may contain changes resulting from comments received from you and others. To view and/or download a copy of the draft Order, please access our website at *http://www.swrcb.ca.gov/rwqcb8* on or after October 25, 2004.

If you have any questions, please contact Jun Martirez at (951) 782-3258 or J. Shami at (951) 782-3288.

Sincerely,

for Filomeno T. Martirez

Joanne E. Schneider
Environmental Program Manager

Enclosures: Tentative Order No. R8-2004-0060 and Staff Report

JIS/Hines.ltr2

California Regional Water Quality Control Board
Santa Ana Region

Terry Tamminen
Secretary for Environmental Protection

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Arnold Schwarzenegger
Governor

October 5, 2004

Michael MacDavid, Manager of Nursery Services
Hines Nurseries
12621 Jeffrey Road
Irvine, CA 92720

RENEWAL OF WASTE DISCHARGE REQUIREMENTS FOR THE HINES NURSERIES, INC., ORDER NO. R8-2004-0060

Dear Mr. MacDavid:

Enclosed is a copy of tentative Order No. R8-2004-0060 for your review and comments. The tentative Order renews waste discharge requirements for Hines Nurseries, Inc. for the discharge of irrigation and storm runoff from the nurseries into Glenn Road Channel, then to Hicks Canyon, and then to Peters Canyon, which are tributary to San Diego Creek and Newport Bay.

This Order is scheduled for consideration by the Regional Board on November 5, 2004. The Board meeting will start at 9 a.m. and will be held at Eastern Municipal Water District's conference room, 2270 Trumble Road, Perris. Although all comments that are provided up to and during the public hearing on this matter will be considered, receipt of comments by October 18, 2004 would be appreciated so that they can be used in the formulation of the draft Order that will be transmitted to the Board two weeks prior to the hearing. The draft Order may contain changes resulting from comments received from you and others. To view and/or download a copy of the draft Order, please access our website at *http://www.swrcb.ca.gov/rwqcb8* on or after October 25, 2004.

State regulations require that the public be notified of the public hearing regarding these waste discharge requirements at least 30 days in advance. Therefore, in order for the Board to consider your waste discharge requirements on November 5, 2004, such notice must be made by October 6, 2004. Copies of the "Notice of Public Hearing" are also enclosed. Two copies are to be posted by October 6, 2004, in conspicuous places, one in the vicinity of the facility and one in the locality to be affected by the discharge (e.g. local post office, library, city hall, or courthouse). Please retain the third copy of the notice for your records. By October 18, 2004, you must file with this office proof of posting on the enclosed "Statement of Posting Notice".

If you have any questions, please contact Jun Martirez at (951) 782-3258 or J. Shami at (951) 782-3288.

Sincerely,

Filomeno T. Martirez Jr.
for Joanne E. Schneider
Environmental Program Manager

Enclosures: Tentative Order No. R8-2004-0060 and Staff Report

JIS/Hinesltr1

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

NOTICE OF PUBLIC HEARING

For
WASTE DISCHARGE REQUIREMENTS
Order No. R8-2004-0060
For
Hines Nurseries, Inc.
Orange County

On the basis of preliminary staff review and application of lawful standards and regulations, the California Regional Water Quality Control Board, Santa Ana Region, proposes to renew waste discharge requirements for the Hines Nurseries, Inc. for the discharge of irrigation and storm runoff from the nurseries into Glenn Road Channel, then to Hicks Canyon, and then to Peters Canyon, which are tributary to San Diego Creek and Newport Bay.

The Board is seeking comments concerning the potential effects of this action on the water quality and beneficial uses of the affected receiving waters in the Santa Ana Region.

The Board will hold a public hearing to consider adoption of the proposed waste discharge requirements as follows:

DATE:	November 5, 2004
TIME:	9:00 a.m.
PLACE:	Eastern Municipal Water District Conference Room 2270 Trumble Road Perris

Interested persons are invited to submit written comments on the proposed Order No. R8-2004-0060. Interested persons are also invited to attend the public hearing and express their views on issues relating to the proposed Order. Oral statements will be heard, but should be brief to allow all interested persons time to be heard. For the accuracy of the record, all testimony (oral statements) should be submitted in writing.

Although all comments that are provided up to and during the public hearing on this matter will be considered, receipt of comments by October 18, 2004 would be appreciated so that they can be used in the formulation of the draft Order that will be transmitted to the Board two weeks prior to the hearing. The draft Order may contain changes resulting from comments received from the public. To view on/or download a copy of the draft Order, please access our website at *www.swrcb.ca.gov/rwqcb8* on or after October 25, 2004.

The Board's proposed Order, related documents, and all comments and petitions received may be inspected and copied at the Regional Board office, 3737 Main Street, Suite 500, Riverside, CA 92501-3348 (phone 951-782-4130) by appointment scheduled between the hours of 9:00 a.m. and 3:00 p.m., Monday through Friday. Copies of the proposed Order will be mailed to interested persons upon request to Jun Martirez (951) 782-3258.

Any person who is physically handicapped and requires reasonable accommodation to participate in this Regional Board Meeting should contact Catherine Ehrenfeld at (951) 782-3285 no later than October 25, 2004.