

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2003-0070

REQUIRING
MARIPOSA COUNTY
YOSEMITE WEST MAINTENANCE DISTRICT
WASTEWATER TREATMENT FACILITY
MARIPOSA COUNTY
TO CEASE AND DESIST FROM
DISCHARGING WASTE CONTRARY TO REQUIREMENTS

1. The County of Mariposa special district, Yosemite West Maintenance District (hereafter Discharger), owns and operates the Yosemite West Subdivision wastewater collection, treatment, and disposal facility (hereafter WWTF). The WWTF provides sewerage service to the subdivision, which currently consists of 112 developed lots. Proposed build-out is 294 lots. The subdivision was created in the 1960s, and consists of single-family homes, transient rentals, bed and breakfast establishments, and 48 condominiums that occupy two lots. The WWTF is on 27 acres of land owned or controlled by the Discharger through an easement. Waste Discharge Requirements Order (WDRs) No. 99-004 currently regulates the WWTF and limits its discharge to 60,000 gallons per day (gpd) of treated domestic wastewater to an InfiltratorTM based leachfield.
2. Prior to 1998, the WWTF consisted of an asbestos-cement pipe collection system, a lined 225,000-gallon aerated pond (lower pond), an abandoned cobble/gravel/sand filter, and approximately 2,000 linear feet of conventional leachlines contained in three terraces. The leachlines were reconstructed in 1992. The filter only worked temporarily and was abandoned shortly after it went online.
3. Regional Board staff inspections (24 May 1993 and 9 April 1997) revealed leachline failures and surfacing effluent flowing toward Indian Creek, a water of the U.S. On 18 May 1998, the Discharger reported extensive leachline failures and off-site wastewater spills, and excessive infiltration and inflow (I/I) during snow melt resulting up to 85,000 gpd discharging into the WWTF, in excess of its design and permitted capacity.
4. To mitigate conditions of noncompliance, the Discharger began implementing interim measures to address effluent disposal problems, including a connection ban. The Discharger also submitted an engineering report, dated 24 August 1998 (revised in 15 December 1998), that described measures to implement phased construction of additional treatment and disposal capacity to meet both existing and build-out flows. These measures included: (a) the rehabilitation and repair of existing leachlines (2,000 feet), (b) the installation of new InfiltratorTM leachlines (2,000 feet) including a permanent leachfield return system, (c) the installation of a temporary sprayfield adjacent to the leachfield, (d) the allocation of funding for interim and emergency WWTF improvements, (e) the construction of a lined effluent holding pond (upper pond), (f) the repair of the most significant sources of I/I, (g) the purchase of an all-terrain vehicle to provide winter and spring access, (h) the installation of a permanent sprayfield, (i) the construction of headworks including a flow meter, a grinder, and a grit chamber; (j) the diversion of influent to upper pond; (k) the rehabilitation of the existing lower pond (remove sludge and disc into the leachfield, line the pond, and build-up the

levees); (l) the installation of a groundwater monitoring network; and (m) the addition of Infiltrator™ based leachfield for build-out flows. By October of 1998, the Discharger completed measures (a) through (g), except for construction of a permanent leachfield return system as part of (b). It also completed measure (j) and part of measure (k) except that it never built-up the levees and did not properly dispose of the sludge by Spring 2000). The Discharger never completed measures (h), (i), (l), and (m).

5. The WWTF now consists of two aeration ponds operated in series (the ponds are referred to as "lower" and "upper" ponds), a station to pump wastewater from the lower pond to the upper pond, and a temporary sprayfield (used in summer) and six-terraced leachfield (4,000 linear feet) for effluent disposal.

6. WDRs Order No. 99-004 specifies, in part, the following:

"A. Discharge Prohibitions:

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. The discharge of wastes to areas other than the designated treatment and disposal areas is prohibited.
3. Bypass or overflow of untreated or partially treated waste is prohibited.

* * *

B. Discharge Specifications:

1. The monthly average daily influent flow shall not exceed 60,000 gallons.
2. Effluent from the WWTF shall not exceed the following limits:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD	mg/l	40	80
TSS	mg/l	40	80

* * *

4. Wastewater discharged to leachlines shall remain underground at all times.

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11. Ponds shall be managed to prevent breeding of mosquitoes. In particular:

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- b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
- c. Dead algae, vegetation, and debris shall not accumulate on the water surface.

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C. Solids Disposal Specifications:

1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.

* * *

3. Use and disposal of sewage sludge shall comply with existing federal, state, and local laws, regulations, and ordinances, including permitting requirements and technical standards in 40 Code of Federal Regulations, Part 503 (40 CFR 503).

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E. Provisions:

1. The Discharger shall comply with Monitoring and Reporting Program No. 99-004, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
2. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)".

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12. A copy of this Order shall be kept at the subdivision's Mariposa County maintenance building for reference by operating personnel and Board inspectors. Personnel responsible for the operation and maintenance of WWTF shall be familiar with its contents.

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A. General Provisions:

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7. The discharger shall maintain in good working order and operate as efficiently as possible any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.

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B. General Reporting Requirements:

1. In the event the discharger does not comply or will be unable to comply with any prohibition or limitation of this Order for any reason, the discharger shall notify the Board by telephone at (559) 445-5116 as soon as it or its agents have knowledge of such noncompliance or potential for noncompliance, and shall confirm this notification in writing within two weeks. The written notification shall state the nature, time and cause of noncompliance, and shall describe the measures being taken to prevent recurrences and shall include a timetable for corrective actions.

* * *

E. Conditions Applicable to Discharge Facilities Exempted From Chapter 15 Under Section 2511

- 2. By-pass (the intentional diversion of waste streams from any portion of a treatment facility, except diversions designed to meet variable effluent limits) is prohibited. The Board may take enforcement action against the discharger for by-pass unless:
 - b. (1) by-pass is required for essential maintenance to assure efficient operation;
 - (2) neither effluent nor receiving water limitations are exceeded; and
 - (3) the discharger notifies the Board ten days in advance.

The permittee shall submit notice of an unanticipated by-pass as required in paragraph B.1. above.”

7. Cease and Desist Order (CDO) No. 99-005, adopted on 30 April 1999, addresses the unpermitted discharges described in Finding No. 3 and the circumstances cited in Finding No. 17 of this Order. In short, the Discharger was found to have violated WDRs Order No. 99-004, Discharge Prohibition A.2 and Discharge Specifications B.3 and B.4 due to:

- a. Significant leachfield failures and surfacing of effluent flowing towards Indian Creek, and
- b. Excessive I/I.

8. The Discharger’s subsequent 6 December 1999 engineering report concluded that the WWTF lacked adequate disposal capacity for wet weather flows and could not effectively be expanded. The report recommended interim improvements to the WWTF treatment components and requested additional time to acquire funding and land to relocate the WWTF leachfields to a more suitable site. The proposed interim improvements included: the installation of headworks with a comminutor; the addition of a 2-horsepower (hp) aerator in the lower pond; and the separation of the upper pond into two cells, one with a 2-hp aerator and the other for settling. The report also proposed a more thorough I/I evaluation of the collection system in the spring of 2000 with repairs to be completed during the following summer. The Discharger only installed an aerator in the upper pond.

9. Special Order No. 5-00-077, adopted on 28 April 2000, extended CDO No. 99-005 time schedules for acquiring funding and necessary land to relocate the leachfield to more suitable site based on evidence that circumstances warranted an extension. Special Order No. 5-00-077 states, in part, the following:

“2. Ensure interim WWTF capacity for the existing 118 developed lots, and compliance with Item 1, Order No. 99-005, by complying with the tasks and dates specified below:

Task	<u>Compliance Date</u>	<u>Report Due</u>
a. Provide a summary report of alternate leachfield disposal sites being considered for evaluation. The report shall include a site location map illustrating each proposed site, and a brief discussion of the site characteristics that make it suitable for consideration.		31 Jul 2000

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<u>Task</u>	<u>Compliance Date</u>	<u>Report Due</u>
b. Complete the proposed interim treatment component upgrades described in the 6 December 1999 engineering report, including installation of headworks with comminutor and an additional aerator in the aerated lagoon, separation of the holding pond into two cells, and construction of underground distribution piping in the spray field. Complete installation of the grit chamber unit for the WWTF described in the 24 August 1998 engineering report, and I/I corrections as necessary. Finish phase three tasks described in the 24 August 1998 engineering report (as revised 15 December 1998), including aerated lagoon rehabilitation, sludge removal, and monitoring well installation. Complete suitability assessment of alternate leachfield disposal site locations.	1 Nov 2000	15 Nov 2000
c. Provide as-built plans, and a detailed flow schematic of the WWTF, and a technical report. The report shall include: (1) a detailed description of the measures that have been implemented to correct subdivision I/I problems and their effectiveness; and (2) results of the alternate leachfield disposal site suitability assessment. All I/I corrective measures and their locations shall be illustrated on a map of the collection system. The report shall also describe future measures that the Discharger will implement to reduce I/I, if cost-effective to assure compliance. The report shall also address measures, possible funding sources, and a schedule (to be completed no later than the date specified in Task 3.g) to relocate all or a portion of the leachfield disposal system.		30 Nov 2000
3. Provide long term treatment and disposal capacity for wastewater generated by the subdivision at projected 15-year flows by completing specified tasks no later than the time schedule below:		

<u>Task</u>	<u>Compliance Date</u>	<u>Report Due</u>
a. Submit an engineering report that projects WWTF flows over the next 15 years and recommends modifications necessary to provide adequate long-term treatment and disposal for the 15-year planning period. The report shall include all design calculations and assumptions and their basis as well as a water balance that demonstrates that the WWTF, modified as proposed, can adequately treat and dispose of all allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.		15 Dec 2000
b. Submit a Report of Waste Discharge addressing the final design for WWTF modifications and including appropriate CEQA analysis of the project.		1 Feb 2001

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| c. | Submit a report certifying that funding has been secured for capital improvements for long-term compliance. | 15 Mar 2001 |
| d. | Submit evidence of securing necessary additional property and CEQA compliance. | 31 May 2001 |
| e. | Begin WWTF modifications | 30 Jun 2001 - 15 Jul 2001 |
| f. | Submit written status report | 2 Sep 2001 |
| g. | Complete all necessary WWTF modifications to provide adequate treatment and disposal capacity for 15-year projected wastewater flows, design seasonal precipitation, and ancillary inflow and infiltration. | 5 Oct 2001 - 20 Oct 2001 |
4. Submit a written progress report by the 20th day of the month following the end of each calendar quarter beginning with the second quarter of 2000. Progress reports must summarize all actions taken to comply with C&D Order No. 99-005 during the calendar quarter, and discuss whether uncompleted tasks remain on schedule for completion by the deadlines specified in the C&D.
5. Submit a written technical report within 30 days of granting any exception to the District connection ban and written notification of at least 60 days preceding any proposed actions to remove or modify the ban."
10. The Discharger submitted a *28 June 2000 Final I/I Report* that indicates certain collection system repairs will reduce by 50 percent the currently estimated 60,000 gpd of I/I. The Discharger identified these repairs as "high priority tasks."
11. The Discharger submitted a written status report on 21 November 2001, stating that Tasks 2.b and 2.c and Tasks 3.b, 3.c, 3.d, 3.e, and 3.f, as described in Finding No. 9, remain incomplete.
12. The Discharger requested by 12 July 2001 letter an extension of the time schedules in Special Order No. 5-00-077 (Tasks 3.b, 3.c, 3.d, 3.e, and 3.g). In a 6 December 2001 letter, the Discharger stated that it has spent thus far an estimated \$900,000 upgrading the WWTF in attempting to comply with WDRs Order No. 99-004 and CDO No. 99-005. The Discharger attributes delays to the assessment process required by Proposition 218, design constraints associated with steep terrain and adverse climate, and plan approval process by the County of Mariposa Board of Supervisors.
13. On 13 April 2001, the Discharger submitted its *Final Yosemite West Subdivision Build-out Report* (Final Report), which proposed substantial modifications to the existing WWTF, including effluent disposal by subsurface drip irrigation. As proposed, the modified WWTF will include division of the two ponds into four extended aeration cells that will be operated in series; installation of a clarifier, headworks station with a flow meter and communitor; and installation of 66,000 linear feet of polyethylene tubing with drip emitters. The Final Report also stated the Discharger completed the high priority I/I repairs to reduce flow by an estimated 20,000 gpd. The Final Report projects build-out flows at 100,000 gpd, if I/I flow reductions were effective. Otherwise, this value likely underestimates flows at full build-out.
14. Self-monitoring reports (SMRs) indicate that, from January 2000 through September 2002, the Discharger violated the monthly average BOD limit for 14 months and the daily maximum BOD

limit for 17 months. November 2001 through September 2002, discharge monthly average BOD was: 105, 143, 263, 162, 110, 52, 52, 116, 114, 49, and 46 mg/L, respectively. From January 2000 through September 2002, the Discharger violated the monthly average total suspended solids (TSS) limit for 15 months and the TSS daily maximum limit for eight months. December 2001 through September 2002 monthly average TSS was: 46, 42, 51, 90, 113, 115, 91, 114, 104, and 60 mg/L, respectively.

15. A 23 August 2001 Regional Board staff inspection documented six collection system spills of raw sewage to land from January 2001 through 13 August 2001. Spills were reportedly caused by collection system blockages, among other things. One spill occurred when an illegal WWTF bypass constructed by the Discharger was broken by a bear. Two of the larger spills were only reported to the Regional Board after a Regional Board staff inspection. The spills could have likely been avoided by proper collection system operation and maintenance.
16. During Regional Board staff inspections on 23 August 2001 and 28 May 2002 the WWTF operators did not know how to operate or maintain the WWTF flow meter. During the 23 August inspection, the operators did not know how to retrieve flow or SMR data and did not have a copy of WDRs Order No. 99-004 on site.
17. The SMRs for 2002 indicate discontinued flow monitoring. The Discharger reported erroneous flow data for March and April 2002 and no flow data for January and February and from May through September 2002. The Discharger's 2001 reported flow data is an estimated 20,000 gpd with no daily fluctuations. No flow data was submitted for October, November, or December of 2001. Reported flow data for 2000 ranges from 10,000 to 20,000 gpd with daily maximum flows as high as 80,000 gpd (January and February).
18. On 13 April 2001, the Discharger submitted a groundwater monitoring well installation work plan. In a 21 December 2001 NOV, Regional Board staff found the work plan incomplete and in an attachment to the letter, *Standard Monitoring Well Provisions*, outlined the requirements for a complete work plan. In subsequent correspondence of 30 January 2002, 1 May 2002, 5 June 2002, and 9 August 2002, the Discharger satisfied all the requirements for a complete work plan. However, the Discharger has not implemented groundwater monitoring. WDRs Order No. 99-004 required the Discharger to submit the groundwater monitoring well installation work plan by 1 June 1999 and implement the work plan by 20 October 2000.
19. The information described in Finding Nos. 14 through 18 indicate the Discharger violated or threatens to violate Discharge Prohibitions A.1 through A.3; Discharge Specifications B.1, B.2, B.4, and B.11; Solids Disposal Specifications C.1 and C.3; and Provisions E.1, E.2 (Standard Provisions A.7, B.1, and E.2.b. (3)), and E.12.

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20. Section 13301 of the California Water Codes (CWC) states, in part, that:

When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions... the regional board may issue an order to cease and desist and direct that those persons ... (a) comply forthwith, (b) comply in accordance with a time schedule set by the regional board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action.

21. The Discharger, as well as interested agencies and persons, were notified of intent to adopt a Cease and Desist Order and provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
22. By letter dated 13 March 2003 commenting on the tentative Order, the Discharger requested that the completion of the remaining I/I repairs (described in the technical report cited in Finding No. 10) and the installation of headworks with a comminutor be included in this Order's Task 5f, which requires the Discharger to complete the remaining WWTF modifications necessary to provide adequate treatment and disposal capacity for project 15-year wastewater flows. Both of these activities have been included in the bid documents and WWTF upgrades design, and are to be funded by the California Proposition 218 Assessment. This request is reasonable and this Order has been revised to reflect this request.
23. In a public hearing on 25 April 2003, all comments pertaining to this Order were heard and considered.
24. Issuing an enforcement action is exempt from the provisions of the California Environmental Quality Act (CEQA), (Public Resources Code, section 21000 et seq.), in accordance with Title 14, California Code of Regulations, section 13321.
25. Any person adversely affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action in accordance with sections 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Board Office of the Chief Counsel, P.O. Box 100, Sacramento, California 95812-0100, within 30 days of the date on which the Regional Board action took place. Copies of the law and regulations applicable to filing petitions are available at www.swrcb.ca.gov/water_laws/index.html and also will be provided upon request.

IT IS HEREBY ORDERED that Cease and Desist Order No. 99-055 and Special Order No. 5-00-077 are rescinded and that, pursuant to sections 13267 and 13301 of the California Water Code, Mariposa County, Yosemite West Maintenance District, its agents, successors, and assigns shall:

1. Cease and desist discharging wastes in violation or threatened violation of Waste Discharge Requirements Order No. 99-004. No term or condition of Order No. 99-004 is superseded or stayed by this Cease and Desist Order.
2. Ensure appropriate discharge flow monitoring at the WWTF in accordance with the following tasks and time schedules:

<u>Task</u>	<u>Compliance Date</u>	<u>Report Due</u>
a. Submit a technical report describing a work plan and implementation schedule to (1) install a permanent flow meter that provides continuous documented monitoring (e.g., chart recorder), and (2) provide training of WWTF operators on flow meter operation and maintenance.	15 Jul 2003	1 Jul 2003
b. Begin flow meter installation and operator training.	25 Jul 2003	1 Aug 2003
c. Complete flow meter installation and operator training and submit a written report documenting the task is complete.		
3. Provide interim WWTF capacity for the existing 112 developed lots (i.e., provide capacity for current WWTF influent flows and anticipated I/I flows), and ensure compliance with Item 1, above, by complying with the tasks and dates specified below:		

<u>Task</u>	<u>Compliance Date</u>	<u>Report Due</u>
a. Submit a written report documenting the proposed interim WWTF treatment and disposal system component upgrades, as described in Finding No. 8 with the exception of the headworks installation, have been completed.		31 Oct 2003
4. Implement the approved work plan described in Finding No. 18 for groundwater monitoring in accordance with the following tasks and time schedules:		

<u>Task</u>	<u>Compliance Date</u>	<u>Report Due</u>
a. Complete the installation of proposed groundwater monitoring wells according to <i>Standard Monitoring Well Provisions</i> referred to in Finding No. 18 unless directed to do otherwise by the Executive Officer and commence groundwater monitoring in accordance with Monitoring and Reporting Program No. 99-004. Submit a written report documenting the task is complete.	5 Sep 2003	12 Sep 2003
5. Provide long-term wastewater treatment and disposal capacity for the subdivision at projected 15-year flows and full build-out flows by completing the specified tasks no later than the dates below:		

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<u>Task</u>	<u>Compliance Date</u>	<u>Report Due</u>
a. Submit a technical report that describes WWTF modifications necessary to provide adequate treatment and disposal for flows projected over the next 15 years. The report shall include all design calculations and justify all assumptions, and present a water balance that demonstrates that the WWTF, modified as proposed, can adequately treat and dispose of the all allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.		5 Feb 2004
b. Submit a Report of Waste Discharge for the modified WWTF.		3 Apr 2004
c. Submit a written report certifying that funding has been secured funding for capital improvements necessary for long-term compliance.		3 Apr 2004
d. Submit written evidence that an environmental review of WWTF modifications pursuant to CEQA and State CEQA guidelines is complete.		1 May 2004
e. Begin WWTF modifications.	1 Jun 2004	
f. Complete all necessary WWTF modifications to provide adequate treatment and disposal capacity for 15-year projected wastewater flows, design seasonal precipitation, and ancillary inflow and infiltration.	1 Nov 2004	
g. Submit a technical report describing the completion of high priority tasks identified in the 28 June 2000 <i>Final I/I Report</i> (described in Finding No. 10). The report shall describe the collection system repairs performed to reduce I/I flows to reasonable levels, and provide a map depicting the location of all collection system repairs performed pursuant to this task. The report shall also describe proposed measures that the Discharger will implement to monitor and, if necessary, reduce I/I flows to acceptable levels.		15 Nov 2004

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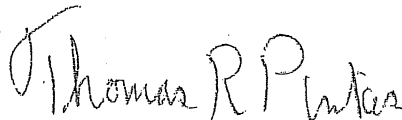
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- h. Submit certification from a California registered civil engineer that the modified WWTF is capable of providing adequate treatment and disposal capacity for 15-year projected wastewater flows, design seasonal precipitation, and ancillary inflow and infiltration.
6. Submit written progress reports by the 1st day of the second month following the end of each calendar quarter beginning with the third quarter of 2003. Progress reports must summarize all actions taken to comply with this CDO during the calendar quarter, and discuss whether uncompleted tasks remain on schedule for completion by the deadlines specified in the CDO.
7. Submit a written technical report within 30 days granting any exemption to the connection ban, and written notification at least 60 days preceding any proposed actions by the Discharger to remove or modify the ban.

All **technical reports** required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be (a) prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1; and (b) subject to written Executive Officer Approval. To demonstrate compliance with Title 16, CCR, sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

If, in the opinion of the Executive Officer, the Discharger violates this Order, the Executive Officer may refer the matter to the Attorney General for judicial enforcement or, alternately issue a formal complaint for Administrative Civil Liability.

I, THOMAS R. PINKOS, 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, Central Valley Region, on 25 April 2003.



THOMAS R. PINKOS, Executive Officer