

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2005-0006
CEASE AND DESIST ORDER
REQUIRING
CITY OF PLYMOUTH AND ROY E. MASON
WASTEWATER TREATMENT FACILITY
AMADOR COUNTY

TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

The Regional Water Quality Control Board, Central Valley Region, (hereafter referred to as “Regional Board”) finds that:

1. Waste Discharge Requirements (WDRs) Order No. 5-01-095, adopted by the Regional Board on 27 April 2001, prescribes requirements for the City of Plymouth’s wastewater treatment plant, which is owned and operated by the City of Plymouth (hereafter referred to as “Discharger”).
2. For the purposes of this Order, the term “wastewater treatment plant” (WWTP) shall mean the sewage collection and transport system, the wastewater treatment system, the effluent storage reservoir, and the effluent disposal system.
3. The wastewater treatment system (i.e., aerated facultative pond and polishing ponds) is located on Old Sacramento Road approximately two miles west of the City of Plymouth, in Section 9, T7N, R10E, MDB&M. The effluent storage reservoir and disposal fields are approximately one mile west of the wastewater treatment system, adjacent to Old Sacramento Road.

WASTEWATER TREATMENT PLANT AND SITE CONDITIONS

4. The WWTP receives primarily domestic wastewater from approximately 346 residential connections, 28 commercial connections, 20 community connections, the Far Horizons 49er Village, and the Amador County Fairgrounds.
5. Currently, the growth rate of the community is limited due to a lack of potable water, as evidenced by the California Department of Health Services’ Water Connection Moratorium (Order No. 01-017) and the City of Plymouth’s Resolution No. 90-2 which restricts the issuance of building permits to total of 50 water service connections. It is unknown how many building permits have been issued since this 1990 Resolution.
6. The WWTP consists of an aerated facultative pond, two polishing ponds, chlorination facilities, and a 185 acre-foot unlined effluent storage reservoir. Wastewater disposal occurs through spray irrigation on approximately 85 of the 125 acres of available land.
7. The WDRs allow an inflow of 170,000 gallons per day (gpd) average dry weather flow, although this value is significantly greater than the volume of waste currently entering the treatment plant. The WDRs state that 170,000 gpd is the design flow for the treatment portion of the WWTP. The

WDRs also state that a preliminary water balance shows that the storage reservoir does not have enough capacity to contain the design flow.

8. According to information presented in the Discharger's September 2002 Long Term Wastewater Management Plan (LTWMP), the average dry weather inflow to the WWTP for the years of 1999 through 2002 was approximately 97,000 gpd, and the highest recorded inflow (1,140,000 gpd) occurred in January 1998. However, the LTWMP concludes that flows exceeding 1,000,000 gpd are probably inaccurate since they predate the 1998 repair of the flow meter. From March 1998 to September 2002, the highest recorded inflow into the WWTP has been 560,000 gpd.
9. The Findings of WDRs Order No. 5-01-095 describe a number of major deficiencies in the Discharger's wastewater system, and therefore the Order requires the Discharger to submit reports addressing upgrades to the facility. The major reports include a water balance, a revenue plan, a groundwater monitoring well installation workplan, a report showing that a stormwater water diversion ditch has been installed around the storage reservoir, and a Long Term Wastewater Management Plan.

VIOLATIONS OF WASTE DISCHARGE REQUIREMENTS

10. Discharge Prohibition A.1 of the WDRs states "*Discharge of wastes to surface waters or surface drainage courses is prohibited.*" In addition, Reclamation Requirement D.8 of the WDRs states "*A 100 foot buffer zone shall be maintained between any water course and the wetted area produced during effluent spray disposal.*" Staff conducted inspections of the spray disposal fields in July 2000 and August 2004 and noted areas in which (a) tailwater had entered surface drainage courses and (b) tailwater runoff had entered the 100-foot buffer zone. Notices of Violation (NOV) were issued for these violations in July 2000 and November 2004. Another violation occurred on 21 November 2004 when approximately 1,000 gallons of disinfected effluent spilled from a broken sprayfield sprinkler into an adjacent surface drainage course.
11. Reclamation Requirement D.6 of the WDRs states in part "*The Discharger may not discharge effluent on the disposal fields between 1 November and 1 April of each year...*" On 10 November 2004, staff received an email from the Discharger's contract operator stating that effluent had been discharged to the spray disposal fields after 1 November 2004 and that it was necessary to continue utilizing the spray disposal fields throughout the winter of 2004 in order to prevent possible overflows from the effluent storage reservoir. A NOV was issued on 12 November 2004 for this continuing violation.
12. Discharge Specification B.3 states "*As a means of discerning compliance with Discharge Specification No. 2, the dissolved oxygen content in the upper zone (one foot) of all wastewater ponds shall not be less than 1.0 mg/l.*" The Discharger is unable to consistently maintain a DO above 1.0 mg/l, and therefore NOVs were issued on 23 October 2001 and 5 November 2004.
13. Discharge Specification B.6 of the WDRs states: "*The ponds shall be managed to prevent the breeding of mosquitoes. In particular*

- a. *An erosion control program should assure that small coves and irregularities are not created around the perimeter of the waste surface.*
- b. *Weeds shall be minimized through control of water depth, harvesting, and/or herbicides.*
- c. *Dead algae, vegetation, and debris shall not accumulate on the water surface.”*

During staff’s October 2004 inspection, some floating vegetation was noted within Pond 1. In addition, the surface of Pond 3 was covered with algae growth. An NOV was issued for this violation.

14. Effluent Limitation C.1 of the WDRs requires that concentrations of Ammonia as Nitrogen in the effluent do not exceed a daily maximum limit of 1.0 mg/l and a 30-day average limit of 0.50 mg/l. Because the Discharger is unable to consistently meet this effluent limitation, NOVs regarding this violation were issued on 23 October 2001 and 5 November 2004.
15. Provision H.2 of the WDRs states “*The Discharger shall comply with the attached Monitoring and Reporting Program No. 5-01-095.*” A review of the case file shows that between July 2003 and July 2004, the Discharger has failed to conduct all of the monitoring required by its monitoring and reporting program. In particular, the Discharger has failed to conduct collection system monitoring, monitor influent flows to the WWTP, conduct and report all of the effluent monitoring, report freeboard monitoring on all the wastewater ponds, not all of the disposal field monitoring has been conducted or reported, surface water monitoring has not conducted and reported, and failed to submit the annual report.
16. Monitoring and Reporting Program No. 5-01-095 requires that the Discharger conduct daily influent flow monitoring. During staff’s 6 October 2004 inspection of the WWTP, the Discharger stated that influent flow monitoring was not being conducted and had not been conducted since approximately September 2003. Therefore, influent flows to the WWTP for approximately the last year are unknown. The Discharger indicated that the influent flow meter was not operational and that it would install another meter. An NOV was issued requiring the Discharger to submit a report by 15 December 2004 certifying that it has installed an influent flow meter.
17. On 5 January 2005, the Discharger submitted a letter providing comments to the C&D. The letter contains two sentences stating that the City recently installed a flow meter and that it is operational. The letter does not describe the type of flow meter installed nor where the meter was installed. Therefore, the C&D requires the City to submit a Flow Meter Installation Report describing the type of flow meter that was installed and its location. In addition, the report must certify that the flow meter is accurately recording flows.
18. Provision H.1.d of the WDRs required the Discharger to submit a “*Sludge Disposal Plan*” that provided a detailed program and time schedule for permanent disposal of all solid wastes generated at the WWTP and storage reservoir. The Discharger submitted the required *Sludge Disposal Plan*; however, it does not address all of the items required by the WDRs and states that a strategy for long term management of sludge waste would be addressed in the Discharger’s LTWMP. The LTWMP failed to address long-term storage and disposal of sludge waste.

19. Provision H.1.h of the WDRs states “ By 31 August 2002, the Discharger shall submit a report showing that a diversion ditch on the west side of the storage reservoir has been physically modified to divert stormwater runoff from entering the storage reservoir.” Although the design for the diversion ditch modification was completed in 2003 the Discharger has not yet constructed the diversion. The City Manager stated in September 2004 that the work will be completed during the 2005 construction season.
20. Provision H.1.j of the WDRs required the Discharger to submit a “Revenue Plan” by 1 December 2002, which provided the estimated cost associated with completing the improvements and upgrades as recommended in the LTWMP. The plan was also to describe how the Discharger would finance each improvement and upgrade. If the Revenue plan showed that there was inadequate funds, the Discharger was to include an implementation schedule describing how the funds would be raised. On 2 December 2002, the Discharger submitted a Draft Revenue Plan. However, as of the date of this Order, the Discharger has not submitted a Final Revenue plan.
21. Discharge Specification B.9 of WDRs states “The wastewater ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary infiltration and inflow. 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.” As described in Finding No. 17, the Discharger cannot comply with this Specification at its current inflow of approximately 97,000 gpd, let alone its currently permitted inflow of 170,000 gpd.
22. Discharge Specification B.10 of the WDRs states “On or about 1 October of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification No. 8 and 9.” The water balances submitted by the Discharger in September 2002 clearly show that the facility only has enough storage capacity for the current inflows if (a) the storage reservoir is completely empty by October each year and (b) if the stormwater diversion ditch is constructed. Staff’s inspection of September 2004 found that the storage reservoir was only approximately one-third empty and that the surface water diversion ditch had not been constructed. Therefore, the Discharger is in violation of Discharge Specification B.10.

LONG TERM WASTEWATER MANAGEMENT PLAN

23. Provision H.1.f of the WDRs required the Discharger to submit a LTWMP which was to analyze problems and inadequacies of the wastewater system, as well as identify a preferred alternative and proposed time schedule to bring the City into compliance with its WDRs. The Discharger submitted the required LTWMP in September 2002. The LTWMP concludes that neither the wastewater treatment process, effluent storage reservoir, or spray disposal areas are adequately sized or designed to comply with WDRs, and provides recommended improvements and upgrades.
24. The LTWMP concludes that the current treatment process is capable of complying with all of the effluent limits set forth in the WDRs, with the exception of ammonia. The LTWMP states in order to reliably meet the ammonia limit, it would be necessary to upgrade the plant to a secondary treatment process such as an oxidation ditch, sequencing batch reactor or conventional activated sludge with nitrification. However, the LTWMP states that this upgrade should not be necessary,

since the nitrogen loading to the crops on the disposal fields is below agronomic rates and that therefore the WDRs should be modified to allow a higher ammonia effluent limit.

25. The LTWMP states that under peak BOD loading conditions, a 15 horse power (HP) aeration unit would be needed in Pond No. 1 to maintain DO levels greater than 1.0 mg/l, prevent nuisance odors, and provide adequate treatment. It was also recommended that additional aerators be installed in Ponds Nos. 2 and 3 to increase DO levels, reduce the tendency for short-circuiting, and reduce the amount of duckweed and algae growth with the ponds. However, staff's 6 October 2004 inspection found that Pond No. 1 contained only one 5 HP aerator and that no aerators were present in Ponds Nos. 2 or 3.
26. In the City's 5 January 2005 letter commenting on the C&D, the City stated that it had recently installed two 5-HP aerators in Pond No.1, and that by 1 April 2005 anticipated replacing the 5-HP aerators in Pond No. 1 with a new 20-HP surface splasher aerator unit. Additionally, the letter stated that the City would be installing a 20-HP surface splasher aerator unit in Pond No. 3. The letter also stated that Pond No.2 was now being operated differently and does not require an aeration unit since the water level in the pond is being maintained at approximately three feet, which is providing sufficient aerobic conditions.
27. The LTWMP included six water balances, which evaluated whether the WWTP has sufficient treatment, storage, and disposal capacity based on current flows (95,000 gpd average dry weather) and at future build-out (185,000 gpd average dry weather; slightly higher than the currently permitted flow limit of 170,000 gpd). Because the Discharger has not diverted surface water flows around the storage reservoir and did not empty its wastewater pond prior to this winter, it does not have sufficient storage capacity for its current influent flows with 100 year rainfall conditions. In addition, the water balances show that the Discharger does not have enough capacity for the permitted flow limit with 100-year precipitation conditions.
28. The water balance evaluating current inflow conditions (95,000 gpd) and a 100 year rainfall event shows that the wastewater system would have sufficient storage and disposal capacity if (a) the effluent storage reservoir is completely empty going into the wet season, (b) all surface runoff is diverted away from the storage reservoir, and (c) wastewater is applied to at least 55 acres of sprayfield.
29. The water balance evaluating build-out flows (185,000 gpd) and a 100 year rainfall event shows that the Discharger would need to increase the size of its storage and disposal facilities. The effluent storage reservoir would need to be increased from the current 185 acre feet to 251 acre feet, and the sprayfield would need to be increased from the current 85 acres to 95 acres.
30. According to the LTWMP, two field studies (1985 and 1997) were conducted to evaluate deficiencies in the wastewater collection system. The studies identified numerous problems ranging from sources of inflow/infiltration (I/I) to structural defects within the pipelines and manholes. The LTWMP recommends that repairs and upgrades be made based on the severity of the problem, and provides a prioritized listing of the improvements that should be made.

31. The LTWMP recommends that the City should consider reducing its storage requirements by: reducing I/I entering the collection system; requesting that Reclamation Requirement D.6 of the WDRs be modified to allow spray irrigation throughout the winter months (provided that full tailwater control is in effect); and installing a surface water diversion system to redirect surface water runoff around and away from the storage reservoir.

REGULATORY CONSIDERATIONS

32. As a result of the events and activities described in this Order, the Regional Board finds that the Discharger has caused or permitted waste to be discharged in such a manner that it has created, and continues to threaten to create, a condition of pollution or nuisance. The Regional Board also finds that the Discharger is discharging waste in violation of WDRs No. 5-01-095 as described in the above Findings.
33. Surface water drainage from the WWTP is to Little Indian Creek, a tributary to Consumnes River.
34. The Regional Board's Water Quality Control Plan (Fourth Edition) for the Sacramento River and San Joaquin River Basins (Basin Plan) designates beneficial uses, includes water quality objectives to protect the beneficial uses, and includes plans to implement the water quality objectives.
35. Surface water drainage from the facility is to the Cosumnes River. The beneficial uses of the Consumnes River, as stated in the Basin Plan are: municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; and wildlife habitat.
36. The beneficial uses of underlying groundwater are municipal and domestic water supply, agricultural supply, and industrial service and process supply.
37. Section 13301 of the California Water Code states in part: "When a Regional Board finds that a discharge of waste is taking place or threatening to take place in violation of the requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action."
38. Section 13267(b) of the California Water Code states: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the

benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

39. The Discharger owns and operates the facility subject to this Order. Monitoring reports and other technical reports are necessary to determine compliance with the Waste Discharge Requirements and with this Order.
40. The issuance of this Order is an enforcement action by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act, pursuant to Section 15321(a)(2), Title 14, California Code of Regulations.
41. On 27 January 2005, in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Regional Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order.
42. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board to review the action in accordance with Section 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA, 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, pursuant to Sections 13301 and 13267 of the California Water Code, the City of Plymouth and Roy E. Mason, their agents, successors, and assigns, shall comply with the following in order to ensure long-term compliance with WDRs Order No. 5-01-095, or any revisions to those WDRs.

Each document submitted under this Order shall bear the following certification signed by the Discharger:

“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 knowledge and 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.”

1. With the exception of Discharge Specification B.1 (flow limit), the ammonia Effluent Limitation, and Reclamation Requirement D.6 of the WDRs Order No. 5-01-095, the Discharger shall **immediately** comply with all aspects of WDRs Order No. 5-01-095.
 - a. The Discharger shall not exceed an average monthly dry weather (May through October) inflow of 97,000 gpd until the Discharger submits to, and obtains approval in writing from the Executive Officer, a technical report showing the improvements completed to increase storage and disposal capacity. The report shall contain a water balance supporting the requested flow

increase. Even after approval of the report, the Discharger may not exceed the average dry weather inflow of 170,000 gpd specified in Discharge Specification B.1.

- b. The Discharger may spray irrigate throughout the wet season, provided that at all time of the year the Discharger does not discharge effluent to the spray disposal field 24 hours prior to a predicted storm, during periods of precipitation, for at least 24 hours after cessation of precipitation, or when the ground is saturated. If the City elects to dispose of effluent to the spray disposal fields between the date of adoption of this C&D and 30 April 2005 (when the spray irrigation management plan and spray irrigation improvement reports are due), then the City must inspect each spray field twice daily (pre and post irrigation) when spray irrigation occurs for the presence of tailwater runoff and/or saturated conditions. Results of inspections shall be included in the monthly self monitoring reports.
2. By **28 February 2005**, the Discharger shall submit a Flow Meter Installation Report showing that it has installed an influent flow meter and that the meter is operational and accurately recording flows.
 3. By **28 February 2005**, the Discharger shall submit a Contingency Plan describing the steps it will take if the effluent storage reservoir encroaches within two foot of freeboard. The plan shall consider any and all steps necessary to prevent wastewater overflows including restricting water usage, hauling wastewater to another facility, and shutting down portions of the facility. This Contingency Plan shall be implemented whenever wastewater levels encroach within two foot of freeboard in the effluent storage reservoir.
 4. By **15 April 2005**, the Discharger shall submit a Wastewater Pond Aeration Report showing that it has implemented the aeration recommendation of the LTWMP. The report shall show that Pond No. 1 contains at least 15 HP of aerators and Pond No. 3 contains at least 6 HP of aeration. If the water level in Pond No. 2 is maintained at depths greater than 3 feet, then the City shall install at least 7.5 HP of aeration in this pond.
 5. By **30 April 2005**, the Discharger shall submit a Spray Irrigation Management Plan. At a minimum, the plan shall explain how the sprayfields will be managed to prevent runoff into surface water drainages and/or into the buffer areas. The plan shall (1) describe how vegetation will be managed within the spray disposal areas such that spray irrigation sprinklers and piping can be inspected and maintained to prevent tailwater runoff; (2) show the locations and boundaries of all spray irrigation fields, locations of all sprinkler lines and sprinkler heads, setbacks from property boundaries, surface water bodies and drainages; and (3) explain the methods for turning on and off the spray irrigation system
 6. By **30 April 2005**, the Discharger shall submit a Sprayfield Improvement Report, describing the installation of tailwater return systems, berms, or other physical methods to prevent tailwater runoff from leaving any of the sprayfields. In addition, the report shall describe the physical improvements that have been made to ensure that tailwater does not encroach within the buffer area required by the WDRs.

7. By **30 May 2005**, the Discharger shall submit an adopted Final Revenue Plan that describes the costs associated with the proposed upgrades/improvements to the WWTP, as described within this Order. Should the Revenue Plan show that there are inadequate funds to make all of the upgrades and improvements to comply with the WDRs and this Order, the Discharger must also include an implementation schedule that shows how the Discharger will raise the necessary funds.
8. The Discharger shall **immediately** implement its November 2002 *Operation and Maintenance Plan* and by **30 August 2005** shall submit an O&M Technical Report documenting implementation. The technical report shall verify that the Discharger's maintenance management system includes the following components:
 1. A written work order system that tracks all corrective maintenance;
 2. An equipment history file for each major piece of equipment such as pumps, motors, generators and vehicles;
 3. A written schedule of preventive maintenance broken down into weekly, monthly and annual inspections;
 4. A written summary or check sheet documenting at least the date and type of preventive maintenance work actually performed;
 5. A calibration schedule and records for all instruments and flow measuring devices;
 6. Written emergency response guidelines;
 7. A logbook for the operators and maintenance workers in which to document both the routine tasks and any unusual observations;
 8. A system to track the time and cost for major repairs;
 9. A prioritization system for corrective maintenance including identification and control of sources of inflow/infiltration;
 10. A list of backlogged work orders; and
 11. Periodic specialized tests or analyses performed on the critical or expensive pieces of equipment.
9. By **15 September 2005**, the Discharger shall submit a Nitrogen Loading Report which provides a revised estimate of the mass of nitrogen being applied to the spray disposal fields (in units of pounds/acre/day) versus the amount of nitrogen uptake by the plants being grown on the sprayfields. The report shall consider actual acreage sprayed, whether crops have been planted, whether crop residue is harvested, and the nitrogen content of the wastewater. The report shall recommend effluent limits for nitrogen and ammonia, and shall justify values used for denitrification and mineralization based on site-specific properties.
10. By **15 November 2005**, the Discharger shall submit a Diversion Ditch Construction Report certifying that the diversion ditch on the west side of the effluent storage reservoir has been physically modified to divert stormwater runoff from entering the effluent storage reservoir. The report shall describe the type of diversion system was installed and shall describe where surface water runoff is diverted too.
11. By **1 December 2005**, the Discharger shall submit a Sludge Management Plan. The plan at a minimum shall include a detailed program and schedule for periodic pond cleanout and disposal of biosolids removed during pond cleanout, including at least the items listed in Attachment A of this Order

12. By **1 January 2007**, the Discharger shall submit a Collection System Improvement Report documenting that the Discharger has made repairs/improvements to the 42 Priority A and B areas listed in Table 5.1 of the LTWMP.
13. By **30 June 2007**, the Discharger shall submit a Report of Waste Discharge (RWD) to allow the WDRs to be updated. The RWD consists of the Form 200-*Application/Report of Waste Discharge General Information* and a technical report that will serve as the response to Sections VI and VII of Form 200. The technical report must address all items listed in Attachment B, "*Additional Information Requirements for Report of Waste Discharge.*"
14. **Beginning with the first quarter of 2005**, the Discharger shall submit a Quarterly Compliance Status Report. These reports shall describe all work completed during the calendar quarter to comply with this Cease and Desist Order; and any new, modified, or renovated component of the treatment and disposal system. These reports shall be submitted by the **15th day of the month following the quarter for which the report is prepared (e.g., the quarterly reports are due by 15 April, 15 July, 15 October, and 15 January of each year).**

In addition to the above, the Discharger shall comply with all applicable provisions of the California Water Code that are not specifically referred to in this Order. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all technical reports shall be prepared by, or under the supervision of, a California Registered Engineer or Registered Geologist and shall be signed by the registered professional.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

Failure to comply with this Order may result in the assessment of an Administrative Civil Liability up to \$1,000 or up to \$10,000 per day of violation, depending on the violation, pursuant to the California Water Code, including sections 13268, 13350, and 13385. The Regional Board reserves its right to take any enforcement actions authorized by law.

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 27 January 2005.

THOMAS R. PINKOS, Executive Officer

Attachments: A- Information Needs For Sludge Management Plan
B- Additional Information Requirements for Report of Waste Discharge

JSK/WSW: 27 January 2005



Winston H. Hickox
*Secretary for
Environmental
Protection*

California Regional Water Quality Control Board

Central Valley Region



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CEASE AND DESIST ORDER NO. R5-2005-0006 **ATTACHMENT A**

INFORMATION NEEDS FOR SLUDGE MANAGEMENT PLAN

- A. Treatment Pond Cleaning
 - 1. Provide the measurements for the sludge level in each treatment pond.
 - 2. Describe the method for removing the sludge from each treatment pond.
 - 3. Provide a time schedule for the sludge removal from each treatment ponds.
- B. Sludge Production
 - 1. Provide a schematic diagram showing solids flow and sludge handling operations; include, where applicable, supernatant flow and handling operations.
 - 2. Specify annual biosolids production in dry metric tons and how this will be quantified.
 - 3. For sludge handling facilities with sludge drying beds:
 - a. Describe number and size of sludge drying beds.
 - b. Describe sludge drying bed construction (e.g., liner, leachate collection system).
 - c. If sludge drying beds are not lined, thoroughly describe measures taken to ensure that groundwater is not adversely affected by sludge drying operations.
 - d. Indicate the frequency with which sludge is wasted and applied on sludge drying beds.
- C. Biosolids Storage
 - 1. If on-site biosolids storage is used,
 - a. Describe:
 - i. Size of biosolids storage area
 - ii. How frequently it will be used (emergency basis only or routine use)
 - iii. Typical storage duration
 - iv. Leachate controls
 - v. Erosion controls

- vi. Run-on/runoff controls
 - b. Indicate measures that will be taken to ensure that area groundwater is not adversely affected by the biosolids storage facility
 - c. For biosolids storage facilities that contain biosolids between 15 October and 15 May, describe how facilities are designed and maintained to prevent washout or inundation from a storm or flood with a return frequency of 100 years.
- D. Method of Disposal
1. Describe and provide the following information related to the method of biosolids disposal. If more than one method is used, include the percentage of annual biosolids production disposed of by each method.
 - a. Landfill Disposal
 - i. Name(s) and location(s) of landfill(s).
 - ii. Name and telephone number of the contact person at the landfill(s).
 2. Incineration
 - a. Name(s) and location(s) of incineration site(s).
 - b. Method of disposal of ash from the incineration site(s).
 - c. Names and locations of facilities receiving ash from the incineration site(s), if applicable.
 - d. Name and telephone number of the contact person at the incineration site(s).
 3. Composting
 - a. Name(s) and location(s) of composting site(s).
 - b. Name and telephone number of the contact person at the composting site(s).
 4. Land Application Off-site
 - a. Ownership of the site(s) where biosolids are applied.
 - b. Name and telephone number of the contact person responsible for application of the biosolids.
- E. Disposal by Land Application On-Site
1. Provide the information required in the Notice of Intent for the Statewide General Order for the Discharge of Biosolids (Water Quality Order No. 2000-10-DWQ) (or any subsequent document which replaces Order No. 2000-10-DWQ).

- F. Grit and screenings management:
1. How much (tons or cubic yards) is generated per year.
 2. How it is collected and stored prior to disposal.
 3. What physical features of the plant or handling practices (if any) prevent spillage and potential contact with stormwater runoff or with surface water.
 4. How it will be disposed of. Describe how this disposal method will not adversely affect water quality.
 5. How frequently disposal occurs.
 6. Name any contractors are involved (including transporters and disposal sites).
- G. Sludge Management Funding
1. Submit an evaluation of the financial programs and revenue sources to implement the sludge management program. The evaluation shall determine whether additional revenue sources are required to implement the sludge management program.

CEASE AND DESIST ORDER NO. R5-2005-0006
ATTACHMENT B
ADDITIONAL INFORMATION REQUIREMENTS FOR RWD
CITY OF PLYMOUTH AND ROY E. MASON
CITY OF PLYMOUTH WASTEWATER TREATMENT PLANT
AMADOR COUNTY

Please submit a technical report, prepared to address the Additional Information Requirements for RWD. The RWD must be prepared under the direct supervision of a registered civil engineer.

Please provide the following information:

1. Site information which includes the following:
 - a. A detailed site map which shows the wastewater collection system, wastewater treatment plant, storage reservoir, and spray disposal fields.
 - b. Identify Assessors Parcel Number(s);
 - c. Report distance to residences within 1000 feet and to the nearest community. Depict nearby residences on the site map;
 - d. Indicate uses of surrounding land (i.e., agricultural, residential, business, etc.);
 - e. Indicate locations of all groundwater wells, surface streams, drainage courses (including seasonal), canals, and channels within 500 feet of the site on the site map. Identify the nearest identifiable water body or watercourse to which the site is tributary and its approximate distance.
2. All source(s) of wastewater that the site will receive (i.e., number current and future household hookups, businesses, etc.).
3. A description of the wastewater collection system. If the collection system has any lift stations, please provide a description of any safeguards (i.e., alarms, redundant features, emergency power supply, etc.) the lift station(s) may have to prevent potential spills or overflows from occurring.
4. A detailed narrative description of all treatment, storage, and disposal systems, including at a minimum the following:
 - a. Design capacity of the wastewater treatment system;
 - b. How influent flows into the WWTP are measured;
 - c. Type of wastewater treatment system, including disinfection;
 - d. Surface area, total depth, and net volume capacity (at 2-foot freeboard level) for the wastewater treatment ponds and storage reservoir;
 - e. Storm water diversion around the storage reservoir and/or sprayfields;
 - f. Operation and maintenance procedures;
 - g. Average dry weather flow; and
 - h. Peak wet weather flow.
5. Scaled plans showing the limits of all effluent irrigation areas, including their relationship to streets, storm drains, surface waters, and wells. For each discrete irrigation area, specify the following:
 - a. total available area;
 - b. size of spray irrigation areas, number of zones, setbacks of sprinklers from surface water drainage courses, wells, streets, and residential dwellings;

ATTACHMENT B

ADDITIONAL INFORMATION REQUIREMENTS FOR RWD

CITY OF PLYMOUTH WWTP

AMADOR COUNTY

- c. net available area (considering setbacks required per 22 CCR, Division 4 water reclamation regulations);
 - d. type of irrigation systems;
 - e. types of plant, crops, etc., grown;
 - f. agronomic nutrient application rates;
 - g. agronomic water application rates;
 - h. monthly projection of agronomic irrigation rates based on both plant water and nutrient needs, nutrient content of the effluent, and supplemental nutrients to be applied;
 - i. structural and operational Best Management Practices (BMPs) used to control potential runoff quality impacts associated with use of spray irrigation activities;
 - j. means and methods to control public access.
6. Projected monthly water balance demonstrating adequate containment capacity (based on 2 foot of freeboard) for the 100-year return period total annual precipitation, including consideration of at least:
- a. Current and projected future wastewater flows;
 - b. Local precipitation data (indicate what weather station was used to obtain the data, and indicate what the total annual precipitation is for the 100 year storm event, and show how the that value was distributed throughout the year, by months, based on historical rainfall patterns);
 - c. Infiltration and inflow;
 - d. Local evaporation data;
 - e. Projected percolation rates for the effluent storage pond, if unlined;
 - f. Projected irrigation usage rates; and
 - g. Projected future wastewater loading rates it the spray irrigation areas.

Please clearly identify the assumptions and calculations used in preparing the water balance.

7. A narrative description of expected solids generation rates and handling, storage, and disposal procedures for debris, grit, screenings, and biosolids. Include method and frequency of disposal; disposal site/area name(s) and locations(s), land application rates (dry tons per unit area per application, number of applications per year), soil incorporation practices, vegetation grown, runoff controls (if any), and public access controls.
8. A description of the types of soils underlying the storage pond and spray irrigation areas.
9. A description of site hydrogeology, including groundwater depth, gradient, and water quality data for the first unconfined aquifer at or near the storage pond and spray irrigation areas. Discuss how the wastewater storage and disposal system protects groundwater quality.
10. A description of any future anticipated improvement or upgrades to the wastewater collection system and/or WWTP.