

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

REVISED ORDER NO. R5-2002-0014-R01

CALIFORNIA WATER CODE SECTION 13308 ORDER  
TIME SCHEDULE ORDER

REQUIRING  
MUSCO OLIVE PRODUCTS AND THE STUDLEY COMPANY  
SAN JOAQUIN COUNTY  
TO COMPLY WITH A TIME SCHEDULE

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

1. Waste Discharge Requirements (WDRs) Order No. 97-037, adopted by the Regional Board on 28 February 1997, prescribes requirements for Musco Olive Products and the Studley Company (hereafter jointly referred to as “Discharger”).
2. Musco Olive Products is an olive brining and packaging facility located south of the town of Tracy, near Patterson Pass Road. The facility (Assessor’s Parcel Number 251-3200-08) is in Section 4, T3S, R4E, MDB&M. Musco Olive Products operates the facility on land leased from the Studley Company, a California Limited Partnership.
3. Wastewater generated at the facility is regulated by two separate WDRs. Order No. 96-075 regulates the Title 27 Class II surface impoundments that are used to store concentrated brines, while Order No. 97-037 regulates the less concentrated wastewater which is applied to land. This Cease and Desist Order refers to violations of Order No. 97-037.
4. Cleanup and Abatement (C&A) Order No. 5-00-717 was issued by the Executive Officer on 17 November 2000. The C&A Order requires the Discharger to prepare technical reports and construct wastewater treatment system improvements to comply with WDRs No. 97-037.

**WASTEWATER SYSTEM**

5. The facility processes olives on a year-round basis. The wastewater system is used to collect and land apply industrial wastewater. Primary treatment (settling) occurs at a one million gallon storage pond. The wastewater is then pumped to land application areas.
6. Waste lye solutions, pit floatation brine, and the rinse water with the highest total dissolved solids (TDS) concentrations are discharged to the Class II ponds. Retort cooling water, wash waters (including weak lye solutions), acetic acid storage solutions, pitting machine wastewater, and cannery floor wastewater (despite high TDS concentration), are sent to the land application system.
7. Lye is reclaimed in above ground stainless steel tanks located near the one million gallon storage pond. Adding sodium hydroxide to the tank to increase the concentration reclaims most lye. Lye that is too contaminated for further use is discharged to the Class II ponds.
8. Boiler feed water is treated with an ion exchange column. The ion exchange column is regenerated in place; regeneration brine is discharged to the Class II ponds.

9. The WDRs limit the wastewater flow to land to 500,000 gallons per day (gpd). However, a review of the self-monitoring reports from January 2001 through September 2001 shows that daily flow discharged to land ranges from 8,610 to 1,616,927 gpd, and that the permit limit was exceeded 47% of the time.
10. The January 2001 through September 2001 self-monitoring reports show that the total dissolved solids (TDS) concentrations in the wastewater ranged from approximately 2,500 to 5,600 mg/l. Dissolved Inorganic Solids (DIS) concentrations ranged from 800 to 3,700 mg/l, with an average concentration of 2,400 mg/l. These values exceed both the yearly average and daily maximum DIS loading limits contained in the WDRs. Sodium and chloride are also present at elevated concentrations in the wastewater. Sodium has been reported at average concentrations of approximately 864 mg/l; chloride has been reported at average concentrations of approximately 557 mg/l.
11. The Discharger's facility is on approximately 280 acres, of which approximately 200 acres are available for land application of process wastewater. Wastewater is currently spray irrigated to land containing mainly volunteer weeds and grass. The WDRs require that a crop be grown on the disposal land, but the Discharger did not begin planting a crop until 2001. In correspondence dated 15 January 2002, the Discharger reported that, since October 2001, approximately 50 acres of land has been planted to oats or winter wheat. Approximately 75 of the 200 acres are currently cropped. Because wastewater is applied to the land application areas at rates greater than can be used or disposed of by percolation and/or evapotranspiration, a significant amount of tailwater is generated.
12. The Discharger has stated that approximately 350 employees work on-site. Based on San Joaquin County Environmental Health Department (SJCEHD) records dated 25 October 2001, the facility is served by a septic tank that was sized for 164 employees. The records indicate the septic tank effluent discharges to eight, 95-foot long leach lines that are equipped with 25-foot deep seepage pits at the ends. The Discharger recently began applying industrial wastewater to the land over the leach lines. This will likely reduce the infiltration capacity of the soil and may impact the underlying groundwater quality.

#### **VIOLATIONS OF THE WASTE DISCHARGE REQUIREMENTS**

13. A 2 November 2001 inspection of the facility and land application areas, as well as a review of the case file, revealed numerous violations of the WDRs. On 30 November 2001 a Notice of Violation was transmitted to the Discharger. The violations of the WDRs are summarized below:
  - a. WDRs Finding No. 5 limits the wastewater flow rate at 500,000 gallons per day. Between January 2001 and September 2001, the Discharger has exceeded the flow rate 47% of the time. Additionally, the Discharger has failed to accurately monitor the flow rate using a meter.
  - b. WDRs Findings No. 5, 7, and 17 limit the wastewater application to cropped areas. The Discharger has failed to plant crops on most of the land application areas. The small areas that have been cropped show severe plant tissue damage.
  - c. WDRs Prohibition No. A.1 prohibits discharge of wastewater to surface water drainage courses. The Discharger has routinely used surface water drainage courses to convey wastewater. Two berms have been installed across the surface drainage to control tailwater

running off the slopes from escaping the site. In addition, the Discharger has installed an overfill pipe from the one million gallon storage pond to the surface water drainage.

- d. WDRs Prohibition A.3 prohibits discharge of designated waste to the land application system. The Discharger is mixing designated waste into the land application wastewater system. Examples of designated wastes that are discharged to land include cannery floor wastewater (which is high in TDS), spills from the process water tanks where olives are cured in a strong lye solution, and spillage from storage tanks which contain acetic acid. It is expected that further scrutiny will reveal other sources of designated waste being discharged to the land application system.
- e. WDRs Prohibition A.4 prohibits discharge of wastewater to ponded water. The Discharger has regularly discharged wastewater to drainage courses and to irrigation checks that contain ponded water.
- f. WDRs Prohibition A.5 prohibits the use of a natural drainage to transmit wastewater. Discharge of wastewater within 100 feet of surface waters is also prohibited. The Discharger routinely discharges wastewater to natural drainage courses. The one million gallon storage pond overfill pipe discharges directly into a surface water drainage course.
- g. WDRs Discharge Specification B.1 states that the use or production of wastewater shall not cause a pollution or nuisance as defined by the California Water Code, Section 13050. The Discharger has created a condition of offensive odors at the facility and the land application areas as a result of over application of wastewater. The Regional Board received odor complaints on 22 October 2001 and 19 November 2001 from residents living in the area.
- h. WDRs Discharge Specification B.2 states the use of production wastewater shall not cause a degradation of any water supply. Groundwater samples collected as part of the initial groundwater characterization study performed in June 2001 indicated higher concentrations of sodium, chloride, and TDS in the groundwater sample collected from the boring located near the one million gallon storage pond compared to the second boring drilled in the land application area.
- i. WDRs Discharge Specification B.4 requires water used for irrigation to be managed to minimize erosion and runoff. The Discharger's application of wastewater has resulted in significant tailwater generation, which has resulted in significant runoff and erosion.
- j. WDRs Discharge Specification B.5 prohibits water from standing continuously on any border check or irrigation area for more than 12 hours after wastewater application has ceased. Standing water in land application areas and checks was observed during the site inspections performed in May 2000 and November 2001.
- k. WDRs Discharge Specification B.6 limits the daily maximum Dissolved Inorganic Solids (DIS) concentration (1,340 mg/l) and BOD concentration (3,176 mg/l) in the wastewater applied to land. The Discharger regularly exceeds the limits; between January 2001 and September 2001, the daily maximum DIS concentration exceeded the permit limit 97% of the time and exceeded the BOD limit 44% of the time.
- l. WDRs Discharge Specification B.7 requires land application areas to be cropped where wastewater is applied. The Discharger has failed to crop the land application areas except in small areas. The crops have generally not grown well.

- m. WDRs Discharge Specification B.7 and Finding No. 17 prohibit application of wastewater during rain events, and states that there will be a three day resting period between applications and precipitation events. The Discharger's self-monitoring reports indicate wastewater was routinely applied during rain events. Based on the amount of tailwater generated on all fields, it is likely that the Discharger is not resting application areas between applications of wastewater and rain events.
  - n. WDRs Discharge Specification B.8 requires erosion control measures to be implemented prior to 1 November each year. The Discharger has failed to control erosion of the berms at the one million gallon storage pond or land application areas. The over application of wastewater has resulted in erosion gullies at tailwater runoff areas in the land application areas.
  - o. WDRs Provision D.2 requires the Discharger to comply with the general reporting requirements contained in the Standard Provisions which require notification of the Regional Board whenever a wastewater spill event occurs. The Discharger has failed to perform this notification despite having regular overflows of the one million gallon storage pond.
14. On 11 October 2001, Regional Board staff performed an aerial inspection of the facility and noted the following violations of the WDRs: natural drainage course being used to control and transmit wastewater flow, lack of cropping in land application areas, and overspray of wastewater onto adjacent properties.
15. On 22 October 2001, Regional Board staff received an odor complaint from a resident living near the Discharger's facility. The complainant stated odors and flies have been a problem for a long time but the conditions have worsened with the Discharger's recent facility expansion.
16. On 19 November 2001, Regional Board staff received a written odor complaint that described on-going objectionable odors. The written complaint was followed up with a telephone call on 3 December 2001.

#### **VIOLATIONS OF THE CLEANUP AND ABATEMENT ORDER**

17. Due to failure to comply with the WDRs, C&A Order No. 5-00-717 was signed by the Executive Officer on 17 November 2000. The Order required the Discharger to comply with WDRs No. 97-037, and to implement certain immediate measures including complying with the wastewater loading rates, ceasing the discharges to surface waters, ceasing the discharge of waste within 100 feet of surface waters, and ceasing the application of waste during rain events. The Order also required the Discharger to complete short term measures that consisted of a contingency plan to allow operation through the winter; evaluation of present conditions (technical reports that evaluated surface water, soil quality, crop health, and groundwater quality); and design and construction of long term storage and disposal facilities. The C&A Order required all improvements to be constructed by 1 November 2001. The Discharger has not completed the improvements.
18. The Discharger has submitted technical reports as required by the C&A Order but has failed to implement recommendations contained in the reports to improve the wastewater treatment system.
19. A 2 November 2001 inspection of the facility and land application areas, as well as a review of the case file, revealed the following violations of the C&A Order:

- a. C&A Order Nos. A.1.a and A.1.b require the Discharger to control wastewater from entering surface water drainage courses. On 2 November 2001, staff inspected the Discharger's facility and discovered wastewater was directly discharged, through an overflow pipe, to the surface drainage from the one million gallon storage pond and that tailwater routinely drains to the surface water drainage courses.
  - b. C&A Order No. A.1.e requires the Discharger to comply with the effluent concentration limits for DIS and BOD. The Discharger's self-monitoring reports indicate these analyte concentrations exceed the Order limits.
  - c. C&A Order No. A.1.c requires the Discharger to limit irrigation to those times when it is not raining and to allow a three day resting period between applications and precipitation events. The Discharger's self-monitoring reports indicate irrigation occurs during rain events. Inspections of the land application areas reveals a significant amount of tailwater runoff, indicating the three day resting period is not occurring.
  - d. C&A Order No. B.1 requires implementation of a Winter Contingency Plan to prevent tailwater runoff and comply with the WDRs. Observations on 2 November 2001 indicate the Winter Contingency Plan was not fully implemented. Only small areas of the land application areas showed evidence of discing.
  - e. C&A Order No. D.2 requires construction of a storage facility to allow wastewater storage during times of precipitation by 1 November 2001. The Discharger failed to construct the storage facility.
20. During the 2 November 2001 inspection, the Discharger stated the land application areas had been disced as required by the C&A's Winter Contingency Plan. However, observation of the land application areas on 2 November 2001 indicated less than half of the area had been disced, and in the upper application area, almost none of the area had been disced.
21. The Discharger stated that 15-20 acres of the 95 acre land application area was planted with sorghum, a portion of 10 acres was planted with perennial grass, sudan grass was planted on 15 acres in the southeast corner, and oats had been planted on the lower parcel. However, during the 2 November 2001 inspection, no sorghum, perennial grass, or oats were observable. A crop reported to be sudan grass was observed in two of the checks. Each of the checks was flooded with strongly discolored and odiferous water.
22. Recommendations to improve cropping presented in the Discharger's technical reports required by the C&A Order (i.e. adding organic material to soil or addition of fertilizer to improve crop growth) were not implemented until December 2001, when the Discharger began injecting liquid fertilizer at the irrigation system. In addition, none of the Discharger's consultant's recommended boron plant tissue tests have been performed.

#### **OTHER CONSIDERATIONS**

23. On 8 January 2001, staff responded to State Clearinghouse Negative Declaration document number 2000122093, which addressed expansion of the olive storage tanks and construction of an interim wastewater storage pond. Staff informed the Clearinghouse and the Discharger by letter of the need for industrial activity and construction stormwater permits, as well as the need for a Section 404 permit from the U.S. Army Corps of Engineers. The Discharger did not obtain the permits.

24. On 21 May 2001, the U.S. Fish and Wildlife Service (FWS) recommended the San Joaquin County Community Development Department issue a building permit for construction of a tank farm, receiving slab, and culvert which were already constructed. However, the FWS objected to issuance of a permit for the proposed wastewater storage pond because it would be in an area that had not previously been disturbed.
25. On 24 September 2001, the California Department of Fish and Game (DFG) notified the Discharger that alteration of the streambed while constructing the proposed wastewater storage pond requires notification of DFG and may require a Streambed Alteration Agreement. The Discharger applied for the permit on 15 October 2001.
26. On 2 November 2001, staff was informed by DFG that the Discharger's wastewater system violated water pollution control laws by allowing wastewater to discharge into the intermittent creek. Violations of Fish and Game Code Sections 1603, 5650(a)(2), and 5650(6) were cited.
27. A total of 98 process tanks exist on site presently. On 2 November 2002, the Discharger stated that they are considering expanding the facility to include 40 more process tanks. Each process tank can contain 10 tons of olives and 3,000 to 3,500 gallons of lye solution.

#### **REGULATORY CONSIDERATIONS**

28. Due to plant expansions, the Discharger submitted a January 2000 Report of Waste Discharge seeking to increase both the allowable flow rate and the DIS limits for wastewater applied to land. The application seeks to increase the flow by 350,000 gpd and to increase the DIS effluent limit by 1,116 mg/l. On 11 February 2000, staff responded in writing that the RWD is incomplete because the Discharger has failed to demonstrate that these increases will not adversely impact surface water or groundwater quality.
29. Staff has met with the Discharger several times since a draft version of this Order was circulated, and the Order has been revised based on those meetings. The Discharger indicates it will not have a viable business if it is held to the flow and salt limits of WDRs No. 97-037. Therefore, it intends to submit a Report of Waste Discharge (RWD) for updated WDRs with higher flow and salt limits. In order for the Board to consider updated WDRs at its 6 September 2002 meeting, the Discharger must submit a *complete* RWD no later than 20 May 2002. The RWD must demonstrate how the proposed increase in discharge volume and strength will comply with the Basin Plan and with the State Water Resources Control Board's Resolution No. 68-16.
30. 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 Order No. 97-037 (as described in Findings 13 through 16), and in violation of C&A Order No. 5-00-717 (as described in Findings 17 through 22).
31. Surface water drainage from the facility is to the Sacramento San Joaquin Delta.
32. The Regional Board's Water Quality Control Plan (Fourth Edition) for the Sacramento River and San Joaquin River Basins (Basin Plan) establishes the beneficial uses of the waters of the Sacramento San Joaquin Delta. These beneficial uses are municipal and domestic supply, irrigation, stock watering, industrial process and service supply, contact recreation, other non-

contact recreation, warm and cold freshwater habitat, warm and cold migration, warm water spawning, and navigation.

33. 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 having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters 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.”
34. Technical reports are required by this Order. The need for each of the technical reports is described below:
  - a. The monitoring reports required by Monitoring and Reporting Program No. 97-037 are needed to determine whether the discharge is in compliance with C&A Order No. 5-00-717 and WDRs No. 97-037.
  - b. The monthly status reports are needed so staff can monitor the Discharger’s progress toward solving the wastewater system inadequacies.
  - c. The Groundwater Monitoring Well Workplan and Installation Report are required to document the installation and construction of a groundwater monitoring network to determine whether the discharge of wastewater is impacting groundwater quality.
  - d. The domestic wastewater treatment system report is required to evaluate the adequacy of the existing domestic wastewater system and whether its use is threatening groundwater quality.
  - e. The reports about the storage pond and tailwater return system are necessary to determine whether the Discharger is constructing the improvements in the timeframe proposed by the Discharger.
  - f. The report regarding the status of the cropland is necessary to ensure that the Discharger maintains an aggressive schedule in planting its acreage to crops.
35. Section 13308(a) of the California Water Code (CWC) provides that:

“If the regional board determines there is a threatened or continuing violation of any cleanup and abatement order, cease and desist order, or any order issued under Section 13267 or 13383, the regional board may issue an order establishing a time schedule and prescribing a civil penalty which shall become due if compliance is not achieved in accordance with that time schedule.”
36. Section 13308(b) of the CWC provides that:

“... The amount of the penalty may not exceed ten thousand dollars (\$10,000) for each day in which violation occurs.”
37. This Time Schedule Order is issued in accordance with Section 13308 of the California Water Code establishing a time schedule for compliance and civil penalties for violation(s) of the Time Schedule Order.
38. The penalties allowed under CWC Section 13308 are specified below for the tasks required to attain compliance with C&A Order No. 5-00-717 and WDRs No. 97-037. A lesser amount would

not provide the incentive to make improvements to the wastewater system necessary to achieve compliance. The specified civil penalty amounts are not intended to punish or redress previous violations. Issuance of this Order does not preclude the Board from adopting a future order assessing civil liability or penalties for the violations of C&A Order No. 5-00-717 and WDRs No. 97-037 which occurred previous to adoption of this Time Schedule Order or are not addressed in this Order.

39. In accordance with California Water Code section 13308(c), if the Executive Officer determines that the Discharger has failed to comply with the time schedule contained in this Order, the Executive Officer may issue a complaint pursuant to CWC Section 13323(a) alleging the violation(s) of the time schedule and setting forth the amount of civil penalty due under this Order. The Discharger may either pay the civil penalty or request a hearing before the Regional Board.
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 25 January 2002, in Sacramento, 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 California Water Code Section 13308 Time Schedule 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](http://www.swrcb.ca.gov/water_laws/index.html) and also will be provided upon request.

#### **REVISIONS TO THIS ORDER**

43. On 5 April 2002, the Discharger requested a flow limit increase for the time period from April 2002 to 6 September 2002. The Discharger has made improvements to the land application areas that will allow higher hydraulic application rates during the summer months when evapotranspiration is higher than what is presently allowed by the TSO. However concerns about loading rates of dissolved solids, nitrogen compounds, and BOD still exist. The BOD concern can be addressed with management provisions, nitrogen can largely be addressed by improved cropping activities, but the DIS loading rate will require source control. The Discharger has performed some source control activities such as installing catch pans to collect high salinity wastewater and a new sump to divert high salinity wastewater generated in the cannery but it is anticipated that additional measures will be required in the future. On 3 June 2002, the Discharger also requested a time extension of one month to finish constructing the pond and tailwater system.
44. The following changes to TSO No. R5-2002-0014 were incorporated at the Board's 6 June 2002 meeting: a change in flow limitations (Task No. 4), allowing the use of wastewater for dust control measures on the active pond construction area (Task No. 12), the requirement to submit a report describing additional steps to minimize odors (Task No. 13), the requirement to evaluate the adequacy of monitoring well MW-9 (Task No. 14), the requirement to submit the results of an additional groundwater monitoring event (Task No. 17), an extension of one month to complete

construction of the pond and tailwater return system (Task No. 16), and the requirement to cease discharge and/or ponding of waste to the surface water drainage course effective 15 July 2002 (Task No. 15).

**IT IS HEREBY ORDERED** that, pursuant to Sections 13308 and 13267 of the California Water Code, Musco Olive Products and the Studley Company, its agents successors, and assigns, shall in accordance with the following tasks and time schedule, implement the following measures and the facility upgrades required to ensure long-term compliance with WDRs No. 97-037, or any revisions to those WDRs.

Any person signing a document submitted under this Order shall make the following certification:

*“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my 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. Effective **25 January 2002**, the Discharger shall comply with all aspects of Revised Monitoring and Reporting Program (MRP) No. 97-037. Failure to submit complete monitoring reports shall result in a penalty of \$2,500 per day in which a report is late or incomplete.
2. Beginning with the month of **January 2002**, the Discharger shall submit monthly project status reports. In addition to the information required by the Revised MRP, the reports shall describe all work completed during the month in response to this Time Schedule Order, and shall contain daily tabulations of the flow and DIS concentrations discharged to land. The reports shall also describe the work completed to date regarding the potential for source control or pretreatment activities (i.e., bicarbonate removal equipment, the impact of increased sulfate concentrations on the crops and soil, the potential for converting to potassium hydroxide, the impact of increased potassium discharges on crops and soil), the status of obtaining permits for the storage pond, and the status of submitting a complete Report of Waste Discharge. Monthly status reports may be combined with the monthly reports required by the MRP and shall be submitted by the **1<sup>st</sup> day of the second month following the month for which the report was prepared** (i.e., the January 2002 report is due by 1 March 2002). The penalty shall be \$2,500 for each day in which a report is late or incomplete.
3. Between **1 February and 6 June 2002**, the 7-day average flow discharged to land shall not exceed 600,000 gpd. The daily maximum flow shall not exceed 750,000 gpd. The 7-day averaging period shall be for a calendar week, from Monday through Sunday. Each weekly or daily violation shall result in a penalty of \$2,500 per day of violation.
4. Between **7 June and 6 September 2002**, the 7-day average flow discharged to land shall not exceed 820,000 gpd. The daily maximum flow shall not exceed 950,000 gpd. The 7-day averaging period shall be for a calendar week, from Monday through Sunday. Each weekly or daily violation shall result in a penalty of \$2,500 per day of violation.

5. Between **1 February and 6 September 2002**, the 7-day average dissolved inorganic solids (DIS) concentration in the effluent discharged to land shall not exceed 2,500 mg/l. The 7-day averaging period shall be for a calendar week, from Monday through Sunday. Each day of violation shall result in a penalty of \$2,500 per day of violation.
6. Effective **1 February 2002**, the Discharger shall modify its wastewater treatment system and/or disposal system such that nuisance conditions are not perceivable beyond the boundary of the Discharger's property. The penalty shall be \$5,000 for each day in which staff receive a complaint from the public and verify the existence of off-site nuisance conditions.
7. By **25 February 2002**, the Discharger shall submit a Groundwater Monitoring Workplan that is consistent with the first section of Attachment A titled "Items to be Included in a Monitoring Well Installation Workplan and a Monitoring Well Installation Report of Results." Groundwater monitoring shall be performed upgradient and downgradient of all areas where wastewater storage or application occurs. Every monitoring well shall be constructed to yield representative samples from the uppermost aquifer and to comply with applicable well standards. The penalty shall be \$2,500 for each day in which this report is late or incomplete.
8. By **25 March 2002**, the Discharger shall submit a report evaluating the current domestic wastewater disposal system. In particular, the report shall evaluate the design size of the system relative to the current number of employees, evaluate any impacts of applying industrial wastewater to land overlying the leach lines, and evaluate whether there is the potential for groundwater impacts from the continuing discharge of domestic waste to this system. If there is the potential for impacts, then the report shall contain recommendations and a proposed time schedule for upgrading the system forthwith. The penalty shall be \$2,500 for each day in which this report is late or incomplete.
9. By **1 May 2002**, the Discharger shall submit a report showing that it has begun construction of the 114 million gallon storage pond and tailwater system. The report shall show that the pond will contain a liner designed to prevent the stored wastewater from impacting the underlying groundwater. The penalty shall be \$2,500 per day after 1 May 2002 in which pond construction has not begun.
10. By **1 May 2002**, the Discharger shall submit a Groundwater Monitoring Well Installation Report of Results. The report shall be consistent with the second section of Attachment A. The penalty shall be \$2,500 for each day in which this report is late or incomplete.
11. By **15 May 2002**, the Discharger shall submit a report showing that it has planted crops on all land used for wastewater disposal (i.e., 200 acres less the land used for the storage pond). The report shall also show that all crops planted prior to January 2002 are actively growing. The penalty shall be \$2,500 per day for each day after 15 May 2002 in which the land is not fully cropped.
12. Effective **7 June 2002**, the Discharger shall limit wastewater application for dust control and construction purposes to active impoundment construction areas only. The penalty for applying wastewater to dirt roads as dust control out of the active impoundment construction area shall be \$5,000 for each day after 7 June 2002 in which such a discharge occurs.

13. By **28 June 2002**, the Discharger shall submit a report describing the additional steps it has taken to minimize offensive odors due to the land application of wastewater. The penalty shall be \$5,000 for each day in which this report is late or incomplete.
14. By **10 July 2002**, the Discharger shall submit a report describing whether groundwater monitoring well MW-9 is capable of being consistently used as a groundwater monitoring point. The penalty shall be \$2,500 for each day in which this report is late or incomplete.
15. As of **15 July 2002**, neither irrigation tailwater nor process wastewater shall be discharged to, or ponded within, the surface water drainage course. This requirement does not apply to the 114 million gallon storage pond. Each day of violation after 15 July 2002 shall result in a penalty of \$2,500 per day.
16. By **15 August 2002**, the Discharger shall submit a report showing that the pond and tailwater system have been fully constructed and are operational. The report shall also describe the pond construction details and show that a liner, adequate to prevent the stored wastewater from impacting the groundwater, has been installed. The penalty shall be \$5,000 for each day after 15 August 2002 in which the pond and/or tailwater system are not operational.
17. By **31 July 2002**, the Discharger shall submit a report presenting the results of a second groundwater sampling event of all existing groundwater monitoring wells. Samples shall be analyzed for the same constituents as those in the April 2002 monitoring event. The penalty shall be \$2,500 for each day in which this report is late or incomplete.
18. Effective **7 September 2002**, the Discharger shall be continuous compliance with the daily flow limit of 500,000 gpd discharged to land (as described in WDRs No. 97-037). The 500,000 gpd shall be the sum of daily applied wastewater and any tailwater that has been collected and reapplied to the land. Each day of violation after 7 September 2002 shall result in a penalty of \$2,500 per day of violation.
19. Effective **7 September 2002**, the Discharger shall be in continuous compliance with the BOD and DIS daily maximum loading limits contained in Discharge Specification B.6 of WDRs No. 97-037. For each constituent, each day of violation after 7 September 2002 shall result in a penalty of \$2,500 per day of violation.
20. 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 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. To demonstrate compliance with sections 415 and 3065 of Title 16, CCR, 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.

I, THOMAS R. PINKOS, Acting 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 6 June 2002.

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THOMAS R. PINKOS, Acting Executive Officer

AMENDED  
REVISED: 6 June 2002



**Winston H. Hickox**  
*Secretary for  
Environmental  
Protection*

# California Regional Water Quality Control Board Central Valley Region

**Robert Schneider, Chair**



**Gray Davis**  
*Governor*

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### **ORDER NO. R5-2002-0014-R01**

#### **ATTACHMENT A**

### **ITEMS TO BE INCLUDED IN A MONITORING WELL INSTALLATION WORKPLAN AND A MONITORING WELL INSTALLATION REPORT OF RESULTS**

Prior to installation of groundwater monitoring wells, the Discharger shall submit a workplan containing the minimum listed information. Wells may be installed after staff approve the workplan. Upon installation of the monitoring wells, the Discharger shall submit a report of results, as described below. All workplans and reports must be signed by a registered geologist, certified engineering geologist, or civil engineer registered or certified by the State of California.

#### **I. Monitoring Well Installation Workplan**

##### **A. General Information:**

Monitoring well locations and rationale

Survey details

Equipment decontamination procedures

Health and safety plan

Topographic map showing any existing monitoring wells, proposed wells, waste handling facilities, utilities, and other major physical and man-made features.

##### **B. Drilling Details: describe drilling and logging methods**

##### **C. Monitoring Well Design:**

Casing diameter

Borehole diameter

Depth of surface seal

Well construction materials

Diagram of well construction

Type of well cap

Size of perforations and rationale

Grain size of sand pack and rationale

Thickness and position of bentonite seal and sand pack

Depth of well, length and position of perforated interval

##### **D. Well Development:**

Method of development to be used

Method of determining when development is complete

Method of development water disposal

##### **E. Surveying Details: discuss how each well will be surveyed to a common reference point horizontal and vertical survey data is required.**

F. Soil Sampling (if applicable):

- Cuttings disposal method
- Analyses to be run and methods
- Sample collection and preservation method
- Intervals at which soil samples are to be collected
- Number of soil samples to be analyzed and rationale
- Location of soil samples and rationale
- QA/QC procedures

G. Well Sampling:

- Minimum time after development before sampling (48 hours)
- Well purging method and amount of purge water
- Sample collection and preservation method
- Table describing sample volumes, sample containers, preservation agents, and hold times
- QA/QC procedures

H. Water Level Measurement:

The elevation reference point at each monitoring well shall be within 0.01 foot. Ground surface elevation at each monitoring well shall be within 0.1 foot. Method and time of water level measurement shall be specified.

I. Proposed time schedule for work.

**II. Monitoring Well Installation Report of Results**

A. Well Construction:

- Number and depth of wells drilled
- Date(s) wells drilled
- Description of drilling and construction
- Approximate locations relative to facility site(s)
- A well construction diagram for each well must be included in the report, and should contain the following details:
  - Total depth drilled
  - Depth of open hole (same as total depth drilled if no caving occurs)
  - Footage of hole collapsed
  - Length of slotted casing installed
  - Depth of bottom of casing
  - Depth to top of sand pack
  - Thickness of sand pack
  - Depth to top of bentonite seal
  - Thickness of bentonite seal
  - Thickness of concrete grout
  - Boring diameter
  - Casing diameter
  - Casing material

- Size of perforations
- Number of bags of sand
- Well elevation at top of casing
- Depth to ground water
- Date of water level measurement
- Monitoring well number
- Date drilled
- Location

B. Well Development:

- Date(s) of development of each well
- Method of development
- Volume of water purged from well
- How well development completion was determined
- Method of effluent disposal
- Field notes from well development should be included in report.

C. Well Surveying: provide reference elevations for each well and surveyor's notes

D. Water Sampling:

- Date(s) of sampling
- How well was purged
- How many well volumes purged
- Levels of temperature, EC, and pH at stabilization
- Sample collection, handling, and preservation methods
- Sample identification
- Analytical methods used
- Laboratory analytical data sheets
- Water level elevation(s)
- Groundwater contour map

E. Soil Sampling (if applicable):

- Date(s) of sampling
- Sample collection, handling, and preservation method
- Sample identification
- Analytical methods used
- Laboratory analytical data sheets