

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2002-0186

REQUIRING
CITY OF TULARE
WASTEWATER TREATMENT FACILITY
TULARE COUNTY
TO CEASE AND DESIST FROM
DISCHARGING WASTE CONTRARY TO REQUIREMENTS

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) finds that:

1. The City of Tulare (hereafter Discharger or City) owns and operates a Wastewater Treatment Facility (WWTF) within Sections 16, 20, and 21, T20S, R24E, MDB&M. The WWTF features two separate wastewater treatment trains (WWTTs), a Domestic WWTT and an Industrial WWTT. Both WWTTs have been expanded and a Report of Waste Discharge (RWD) submitted.

2. Waste Discharge Requirements (WDRs) Order No. 91-133 prescribed requirements for the WWTF. WDRs Order No. 91-133, specified, in part, that:

“A.1 Discharge of wastes to surface waters, surface water drainage courses, or Tulare Canal is prohibited.

A.2 Bypass or overflow of untreated or partially treated waste is prohibited.

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B.3 The combined industrial and domestic effluent from the oxidation ponds shall not contain constituents in excess of the following:

<u>Constituents</u> ¹	<u>Unit</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>
BOD ₅ ²	mg/L	40	80
CBOD ₅ ³	mg/L	35	70

Footnotes on following page

¹ The Discharger may demonstrate compliance with either BOD₅ or CBOD₅ effluent limitations.

² Five-day, 20° Celsius biochemical oxygen demand.

³ Five-day, 20° Celsius carbonaceous biochemical oxygen demand.

B.4 The monthly average daily flow to the Industrial WWTT shall not exceed 4.39 mgd.

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B.7 Effective 1 July 1994, the maximum specific electrical conductance of any discharge shall not exceed the weighted monthly average of the source water plus 500 µmhos/cm, or a maximum of 1,000 µmhos/cm, whichever is less.

* * *

D. The discharges, in combination with other sources, shall not cause underlying ground water to:

* * *

3. Contain chemicals, heavy metals, or trace elements in concentrations that adversely affect beneficial uses or exceed maximum contaminant levels specified in Title 22, California Code of Regulations, Division 4, Chapter 15.

* * *

- E.3 The Discharger shall comply with *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991, which is attached hereto and incorporated as part of this Order.

* * *

- E.7 Effective 1 October 1992, the Discharger shall enforce the requirements promulgated under sections 307(b), (c), (d), and 402(b) of the Clean Water Act. The Discharger shall cause industrial users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

- E.8 Effective 1 October 1992, the Discharger shall perform the pretreatment functions required in 40 CFR Part 403, including, but not limited to:

* * *

- b. Enforcing the pretreatment requirements under 40 CFR 403.5 and 403.6;

* * *

- E.12. The nutritive value of the wastewater and of organic nitrogen and chemical fertilizers applied to the Use Area shall not exceed what is reasonably necessary for the crop.”

3. On 18 October 2002, WDRs Order No. R5-2002-0186, was adopted and WDRs Order No. 91-133 was rescinded. WDRs Order No. R5-2002-0186 states, in part:

“A.1 Discharge of wastes to surface waters or surface water drainage courses is prohibited.

* * *

- A.5. Bypass or overflow of untreated or partially-treated waste is prohibited, except as allowed in Provision E.2 of Standard Provisions and Reporting Requirements.

* * *

- B.10 No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of groundwater limitations.

* * *

- D.1 The following specifications apply exclusively to the discharge from the Industrial Wastewater Treatment Train.

1. The monthly average daily influent flow shall not exceed the following:
 - a. 4.39 mgd until Provision J.12 is satisfied;

* * *

- E.1 The following discharge specifications apply to the Commingled discharge.

1. **Effective until 1 November 2009**, the discharge shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u> ¹	<u>Daily Maximum</u>
Settleable Solids	mL/L	0.2	0.5
BOD ₅	mg/L	40 ²	80 ²
CBOD ₅ ³	mg/L	35 ²	70 ²

- 1 Average value for all samples collected within a calendar month
- 2 The Discharger may demonstrate compliance with either BOD₅ or CBOD₅ effluent specification.
- 3 Five-day, 20°C carbonaceous biochemical oxygen demand

E.2 The monthly average EC in effluent samples shall not exceed the flow-weighted average EC of the source water plus 500 µmhos/cm, a total of 1,000 µmhos/cm, or the concentration that ensures compliance with this Order's groundwater limitations, whichever is more stringent.

* * *

F.4 Application of wastewater, biosolids, and commercial fertilizer to the Use Area shall be at reasonable agronomic rates considering the crop, soil, climate, and irrigation management system in accordance with the use area management plan required under Provision J.9 of this Order, subject to Executive Officer approval. The annual nutrient loading to the Use Area, including the nutritive value of organic and chemical fertilizers and of the recycled water, shall not exceed the crop demand.

* * *

F.7 Recycled water shall be managed to prevent breeding of mosquitoes. More specifically:

- a. Effluent water must infiltrate completely within 48 hours after application.

* * *

G.2 Treatment and storage of sludge generated by the WWTF shall be confined to the WWTF property and conducted in a manner that precludes infiltration of waste constituents into soils in a mass or concentration that will violate Groundwater Limitations.

G.3 Any storage of residual sludge, solid waste, and biosolids on property of the WWTF shall be temporary and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate Groundwater Limitations.

* * *

H.2 The Discharger shall implement the legal authorities, programs, and controls necessary to ensure that indirect discharges do not introduce pollutants into the sewerage system that, either alone or in conjunction with a discharge or discharges from other sources:

- a. Flow through the system to the receiving water in quantities or concentrations that cause a violation of this Order, or
- b. Inhibit or disrupt treatment processes, treatment system operations, or sludge processes, use, or disposal and either cause a violation of this Order or prevent sludge use or disposal in accordance with this Order.

H.3 The Discharger shall be responsible for the performance of all pretreatment requirements contained in 40 CFR Part 403 and shall be subject to enforcement actions, penalties, fines, and other remedies by the EPA, Regional Board, or other appropriate parties, as provided in the Clean Water Act (CWA), as amended, for noncompliance.

* * *

I. Release of waste constituents from any storage, treatment, or disposal component associated with the WWTF shall not, in combination with other sources of the waste constituents, cause groundwater within the influence of the WWTF and Use Area to contain waste constituents in concentrations in excess of any of the limits listed below, unless natural background is greater, in which case the natural background concentration shall be the limit.

1. Total coliform organisms of 2.2 MPN/100 mL.

2 Chemical constituents in concentrations that adversely affect beneficial uses, including:

a. Constituent concentrations listed below:

<u>Constituent</u>	<u>Units</u>	<u>Limitation</u>
EC	µmhos/cm	900
Total Dissolved Solids ¹	mg/L	500
Total Nitrogen	mg/L	10

¹ A cumulative constituent comprised of dissolved matter consisting mainly of inorganic salts, small amounts of organic matter, and dissolved gases [e.g., ammonia, bicarbonate alkalinity, boron, calcium, chloride, copper, iron, magnesium, manganese, nitrate, phosphorus, potassium, sodium, silica, sulfate, total alkalinity]

b. For constituents identified in Title 22 (as described in Finding No. 73) — except chloride, EC and Total Dissolved Solids — that are present in the discharge, the concentrations in the discharge (as determined in this Order’s monitoring and reporting program) or the Title 22 MCLs, whichever is more stringent.

c. Toxic constituents in concentrations that produce detrimental physiological responses in human, plant, or animal life, including but not limited to, boron, chloride, and sodium in excess of concentrations in the discharge or that listed below, whichever is more stringent:

<u>Constituent</u>	<u>Units</u>	<u>Limitation</u>
Boron	mg/L	0.7
Chloride	mg/L	106
Sodium	mg/L	69

d. Taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses, including but not limited to, ammonium (ammonia and ammonium ions as NH₄) in excess of 0.5 mg/L.

* * *

J.1 The Discharger shall comply with 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).

* * *

J.21 The Discharger shall not allow pollutant-free wastewater to be discharged into the WWTF collection, treatment, and disposal systems in amounts that significantly diminish the system’s capability to comply with this Order. Pollutant-free wastewater means storm water (i.e., inflow), groundwater (i.e., infiltration), cooling waters that are essentially free of pollutants.”

4. *Standard Provisions and Reporting Requirements for Waste Discharge Requirements* (Standard Provisions) referenced in both WDRs Order No. 91-133 and WDRs Order No. R5-2002-0186, state, in part, that:

* * *

“A.11. Neither the treatment nor the discharge shall create a condition of nuisance or pollution as defined by the California Water Code, section 13050.”

Violations

5. Pollution. Groundwater data provided by the Discharger from selected wells monitoring the affect of the discharge from the WWTF indicate concentrations of nitrate-nitrogen averaging between 22 and 82 mg/L, conductivity at 25°C (EC) averaging between 736 and 2,040 µmhos/cm, total dissolved solids (TDS) between 804 and 1,476 mg/L, and chloride averaging between 88 and 228 mg/L. Iron and manganese in two monitoring wells were up to 11 mg/L and 0.18 mg/L, respectively. Groundwater limitations determined as necessary for protection of beneficial uses in the area are 10 mg/L nitrate-nitrogen (California drinking water standard maximum contaminant level (MCL)), 900 µmhos/cm EC (an MCL), 500 mg/L TDS (an MCL), 106 mg/L chloride (protection of agricultural uses), 0.3 mg/L iron (an MCL), and 0.05 mg/L manganese (an MCL). The Discharger has adversely affected beneficial uses and exceeded MCLs, and thereby violated Groundwater Limitation D.3 of WDRs Order No. 91-133 and will violate Groundwater Limitations I.2.a through I.2.c set forth in Order No. R5-2002-0186. As an an exceedance of groundwater limitations necessary to protect beneficial uses is keep defined as pollution, the Discharger violated prior WDRs and threatens to violate the provision as contained in the new WDRs.
6. Unlined Treatment and Storage Facilities. Groundwater data from downgradient and adjacent wells to the treatment ponds indicate concentrations of nitrate-nitrogen ranging from 10 mg/L to to 26 mg/L and EC ranging from 736 to 1,320 µmhos/cm. Groundwater data from wells downgradient of sludge handling and storage facilities indicate concentrations of nitrate-nitrogen average 22 mg/L and EC average 1,220 µmhos/cm. These facilities are unlined and have likely caused or contributed to waste constituents leaching and causing exceedances of the Groundwater Limitations in WDRs Order No. R5-2002-0186, causing the Discharger to threaten to violate Discharge Specification B.10 and Sludge Specifications G.2 and G.3 of WDRs Order No. R5-2002-0186.
7. Unpermitted Discharge to Surface Water Courses. The Discharger caused effluent to spill to irrigation canals in July 2001 and twice in February 2002, a violation of Order No. 91-133, Discharge Prohibition A.1. Insufficient disposal capacity and continued reliance on temporary shallow ponds for effluent disposal threatens to violate Order No. R5-2002-0186, Discharge Prohibition A.1.
8. Bypass. The Discharger's May 1999 self monitoring report (SMR) indicates that it took one aeration basin and ponds 1 and 2 out of service to facilitate construction at the Industrial WWTT. During this period, industrial wastewater flows bypassed major treatment units. Because the Discharger did not provide alternative treatment during the conversion, the bypass resulted in the discharge of partially treated waste in violation of Order No. 91-133, Discharge Prohibition A.2. Continued construction and lack of redundancy during the Industrial WWTT expansion threatens violation of Order No. R5-2002-0186, Discharge Prohibition A.5.
9. Discharge Quality. Discharger SMRs document chronic violations of Order No. 91-133, Discharge Specification B.3, Commingled discharge BOD₅/CBOD₅ limitations. From January 1999 through May 2002, the Discharger violated these limitations in 21 out of 29 months, on occasion reaching concentrations 10 times greater than allowed and monthly daily averages of

about 500 and 415 mg/L, respectively. Discharge quality of the Commingled discharge has greatly improved, due in part to the Industrial WWTT expansion project nearing completion and the Discharger's ability to use the Domestic WWTT's extra organic treatment capacity to supplement treatment at the Industrial WWTT. From June 2001 through May 2002, the Discharger complied with the Commingled discharge specification for BOD₅/CBOD, with average concentrations of 39 mg/L and 14 mg/L, respectively. However, given the lack of technical information documenting the ability of the Industrial WWTT to treat current and proposed increased flows, the Discharger threatens to violate Order No. R5-2002-0186, Commingled Discharge Specification E.1.

10. Flow. Discharger SMRs from January 1999 through June 2002 document 42 months in which the flow to the Industrial WWTT was around 5.1 mgd, which exceeds the 4.39-mgd limit prescribed by Order No. 91-133, Discharge Specification B.4. Current flow is about 6.2 mgd. Order No. R5-2002-0186, Industrial Discharge Specification D.1.a, continues the 4.39-mgd monthly average daily flow to the Industrial WWTT. The Discharger will violate Order No. R5-2002-0186, Industrial Discharge Specification D.1, until greater capacity is approved.
11. Salinity. The Discharger has been in chronic violation of Order No. 91-133, Discharge Specification B.7, for exceeding the effluent EC limit of 500 µmhos/cm over source water EC, or 1,000 µmhos/cm, whichever is less. Discharger SMRs from March 1998 through present indicate that the Commingled discharge has consistently exceeded the effluent EC limit by 200 to 500 µmhos/cm. The Discharger has not implemented controls or submitted evidence to demonstrate that it will achieve and maintain compliance with the EC limit in the near future. Until it does, the Discharger will violate Order No. R5-2002-0186, Commingled Discharge Limitation E.2.
12. Pretreatment. The Discharger has failed to develop and implement an effective pretreatment program, a violation of WDRs Order No. 91-133, Provisions E.7 and E.8. In brief, the Discharger:
 - a. Authorized a total industrial WWTT flow of 4.585 mgd to SIUs, exceeding the 4.39 mgd permitted by Order No. 91-133;
 - b. Allows almost all of the City's SIUs to operate in violation of a local limit with ineffective enforcement (e.g., notice of violation, cease and desist order); and
 - c. Implements an ineffective salinity source control program that allows cumulative salt in violation of the WWTF EC limit, which passes through to cause groundwater pollution.

Reduced local limits for EC effective February 2002 have thus far been insufficient and the Discharger's failure to fully develop and implement an effective pretreatment program will violate Order No. R5-2002-0186, Pretreatment Requirements H.2 through H.4.

13. Pollutant-Free Wastewater. Storm events result in approximately 0.5 mgd of storm water to enter the Industrial WWTT wastewater collection system. In January, the Discharger began corrective measures to segregate and remove low strength wastewater, domestic wastewater, and

storm water from the Industrial WWTT wastewater collection system. In June 2002, the City completed a storm water diversion project to divert approximately 0.5 mgd of storm water to storm water retention ponds and intends to submit certification that the project is complete once a storm event has occurred. In April 2002, the City also completed the new domestic sewer line along Paige Avenue that will convey low strength domestic wastewater flows to the Domestic WWTT beginning in September 2002. The Discharger still needs to submit certification that the storm water diversion project will be sufficient to comply with the conditions of Order No. R5-2002-0186, Provision J.21.

14. Recycling. The Discharger has regularly and consistently applied wastewater to use areas at rates exceeding what is necessary for crop production. In 2000, the amount of applied nitrogen and crop demand were 478,000 and 260,000 lbs, respectively. In 2001, the amount of applied nitrogen and crop demand were 653,000 and 195,000 lbs, respectively. The application of effluent at rates exceeding agronomic demand violated Provision E.12 of WDRs Order No. 91-133 and threatens to violate Order No. R5-2002-0186, Recycling Specification F.4. The Discharger's flooding of portions of its Use Area threatens to violate Order No. R5-2002-0186, Recycling Specification F.7.

REGULATIONS

15. Title 23, California Code of Regulations (CCR), section 2232(d), states:

“Whenever a regional board finds that the waste treatment or disposal facilities of a discharger will reach capacity within four years and that adequate steps are not being taken to address the capacity problem, it shall adopt a time schedule or other enforcement order. Such action shall be preceded by notice and a hearing.”

16. CWC, section 13301, states:

”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 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. In the event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to such system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing, or in accordance with the procedure set forth in section 13302.”

17. CWC, section 13304(a), states, in part:

“Any person who has discharged or discharges waste into waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any

waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.”

18. CWC, section 13267 states, in part:

“(a) A regional board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement or authorized by this division, may investigate the quality of any waters of the state within this region.

(b)(1) 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.”

19. Technical reports on operation, maintenance, and performance relate directly to this Board’s need to know in a timely manner whether the Discharger is in compliance with this Order.

GENERAL

20. The Discharger and interested agencies and persons were notified of the intent to consider adoption of this enforcement action and provided an opportunity for a public hearing and an opportunity to submit written views and recommendations.

21. All comments pertaining to this Order were heard and considered in public meeting on **18 October 2002.**

22. As described in Findings Nos. 5 through 14, the Discharger has violated numerous terms and conditions of Order No. 91-133 and will violate or threatens to violate Order No. R5-2002-0186. The WWTF and its discharges to land have caused pollution and unreasonable degradation of groundwater. The Discharger lacks adequate hydraulic and organic treatment capacity, effluent disposal capacity, an effective pretreatment program, and proper waste management and planning, as described in this Order’s findings. The Discharger’s Industrial WWTT expansion and improvements are too little and too late to assure constant compliance with Order No. R5-2002-0186 and the CWC. Consequently, an enforcement action is appropriate and necessary.

23. Issuance of this enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, section 21000 et seq.), in accordance with Title 14, California Code of Regulations, section 15321(a)(2).
24. Any person affected adversely by this action may petition the State Water Resources Control Board to review the action. The petition must be received by the State Board within 30 days of the date on which this action was taken. Copies of the law and regulations applicable to filing petitions are available at www.swrcb.ca.gov but will be provided on request.

IT IS HEREBY ORDERED that, pursuant to sections 13301 and 13267 of the California Water Code, the City of Tulare, its agents, successors, and assigns, shall:

1. Cease and desist discharging wastes in violation and threatened violation of Waste Discharge Requirements Order No. R5-2002-0186. No term or condition of Order No. R5-2002-0186 is superseded or stayed by this Cease and Desist Order.
2. **By 15 April 2003**, the Discharger shall submit and implement a Facilities Plan that includes, at a minimum, the following:

- a. **Industrial WWTT Flow.** A description of the measures the City has implemented or proposes to implement to comply with Order No. R5-2002-0186, Industrial Discharge Specification D.1.a (4.39 mgd Industrial WWTT flow limit). This section of the Facilities Plan shall be reviewed, approved, and jointly submitted by the planning and building departments with jurisdiction in the City of Tulare.

Until the Discharger certifies the WWTT expansion is complete (Order No. R5-2002-0186, Provisions J.12 and J.13) and until the discharge consistently meets the quality requirements of Order No. R5-2002-0186, the Discharger shall submit written quarterly reports to the Regional Board by the first day of the second month following each quarter. The quarterly reports shall tabulate the entity name and permitted flow for all permits issued during the calendar quarter to new connections to the City's Industrial WWTT wastewater collection system.

- b. **WWTF Evaluation.** An evaluation of the WWTF that includes short- and long-term modifications the Discharger will implement during and after the Industrial WWTT expansion to comply with Order No. R5-2002-0186, Commingled Discharge Specification E.1. The evaluation must address, at a minimum, the following:
 - i. A description of the existing treatment conditions at the Industrial WWTT, including a certification of the actual BVF treatment performance based on current and projected Industrial WWTT influent characteristics;
 - ii. An evaluation of the effect of discharges of partially treated waste from the Industrial WWTT to the Domestic WWTT on the Domestic WWTT's overall hydraulic and treatment capacity and ability to comply with the terms and conditions of Order No. R5-2002-0186; and

iii. A description of corrective measures the Discharger has implemented or proposes to implement to ensure consistent compliance with the terms and conditions of Order No. R5-2002-0186 during the remainder of the Industrial WWTT expansion.

c. **Adequate Effluent Disposal Capacity.** A description of the effluent disposal capacity expansion projects the Discharger has implemented or proposes to implement to accommodate, at a minimum, the monthly average daily discharge flow specified in Domestic Discharge Specification C.1.a (5.0 mgd flow limit) and Industrial Discharge Specification D.1.a. (4.39 mgd flow limit) or a total discharge flow limit of 9.39 mgd. The description shall include, at a minimum, implementation schedules and supporting calculations (water and nitrogen balances) as necessary to demonstrate the projects, once implemented, will comply with the terms and conditions of Order No. R5-2002-0186. In performing this task, the Discharger shall comply with the following schedule:

<u>Task</u>	<u>Compliance Date</u>	<u>Report Date</u>
a. Acquire property (by purchase or long-term lease) for additional use areas and, as necessary, additional effluent storage/disposal ponds.	1 Apr 2004	15 Apr 2004
b. Complete CEQA documentation for effluent disposal capacity expansion projects	1 Jul 2004	15 Jul 2004
c. Submit a technical report describing the completion of effluent disposal capacity expansion project implementation. This report shall include a Report of Water Recycling and Title 22 Engineering Report (pursuant to Title 22, CCR, Section 60320) for additional use areas and a Report of Waste Discharge, as necessary, in support of additional effluent storage/disposal ponds.	1 Sep 2004	15 Sep 2004

d. **Pollutant-free Wastes.** Certification of completion of the projects the Discharger has implemented to comply with Order No. R5-2002-0186, Provision J.21 (regarding the discharge of pollutant-free waste). If the projects are inadequate to comply, the Discharger must submit a description and implementation schedule of additional corrective measures to comply with Provision J.21.

e. **Modifications to Sludge Handling Facilities and Industrial WWTT Treatment Trains.** A description of corrective measures the Discharger has implemented or proposes to implement to comply with Order No. R5-2002-0186, General Discharge Specification B.10 and Sludge Specifications G.2 and G.3. The Discharger shall complete these corrective measures no later than **1 November 2004**. Until 1 November 2004, the Discharger shall submit written quarterly reports to the Regional Board by the

first day of the second month following each quarter. The quarterly reports shall describe work performed during the calendar quarter to comply with this task. By **15 November 2004**, the Discharger shall submit a technical report certifying the modifications are complete.

3. **Pretreatment Program.** The Discharger shall submit a revised industrial pretreatment program (IPP) for Regional Board approval that complies with Order No. R5-2002-0186, Pretreatment Requirements H.2 and H.3. The revised IPP submittal must include a technical report that identifies all significant sources of high EC industrial wastes to the Industrial WWTT and describes measures the Discharger has implemented or proposes to implement to comply with Order No. R5-2002-0186, Commingled Discharge Specification E.2 (discharge EC limit).

<u>Task</u>	<u>Report Due</u>
a. Submit a revised IPP, including, at a minimum, the following:	1 May 2003
i. Results of an industrial user survey;	
ii. An evaluation of the legal authority necessary for the administration and enforcement of the requirements of section 307(b) and (c) and 402 (b) (8) of the Clean Water Act;	
iii. A determination of the technical information necessary to develop and implement the pretreatment ordinance or other means of enforcing pretreatment standards;	
iv. An evaluation of the financial programs and revenue sources to implement the IPP, including proposed funding and staffing levels; and	
v. The design of a monitoring program that will implement the requirements of the IPP, including a list of monitoring equipment required to implement the IPP and a description of municipal facilities necessary for monitoring and analysis of industrial wastes.	
b. Submit a technical report describing specific proposed effluent limitations for general prohibition pollutants (40 CFR 403.5) and proposed local limits for conventional pollutants (BOD ₅ , TSS, EC, etc.), which shall be incorporated into the City's pretreatment ordinance.	1 Jul 2003
c. Submit complete IPP package pursuant to 40 CFR 403.8 with a request for Regional Board approval of the City's IPP and pretreatment ordinance.	1 Nov 2003

4. **Salinity Control.** By 1 November 2004, the Discharger shall submit a bound technical report prepared and certified by a qualified technical consultant not associated with its primary consultant describing an independent study of all salinity sources (e.g., industrial and commercial discharges, residential water softening or conditioning appliances, residential consumptive use). The consultant shall quantify the total salinity from each source and substantiate either that remedial actions have been required of each source to reduce salinity to the extent technologically and economically achievable or what further actions are appropriate and necessary to be able to make such substantiation.

IT IS HEREBY FURTHER ORDERED that, pursuant to section 13304 of the California Water Code, the City of Tulare, its agents, successors, and assigns shall:

5. Conduct an investigation to determine the vertical and horizontal distribution and extent of waste constituents in the soil profile and groundwater beneath and beyond the WWTF and Use Area to the extent influence by the discharge.¹ The investigation shall determine the source and cause of each constituent present in groundwater in concentrations greater than the groundwater limitations specified in WDRs Order No. R5-2002-0186. In performing this task, the Discharger shall:
 - a. **By 1 May 2003**, submit a technical report that, at a minimum, describes proposed measures to fulfill this task, including the proposed number and location of soil borings and additional groundwater monitoring wells and/or test wells, and a schedule of sampling and analysis.²

All wells shall comply with appropriate standards as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 74-81* (December 1981), and any more stringent standards adopted by the Discharger or county pursuant to CWC section 13801. The existing well network will be evaluated as part of this effort, and the proposed network should include existing monitoring wells where they will serve to measure compliance or provide other relevant information (e.g., depth to groundwater) and recommend their destruction if they will no longer serve a useful purpose.
 - b. **Within 120 days** following completion of task 5.a, submit a technical report describing the work performed pursuant to task 5.a and the results of the work.³ The technical report shall

¹ State regulations pertaining to water quality monitoring for waste management units are found in Title 27, CCR, section 20005, et seq. (hereafter Title 27). These regulations prescribe procedures for detecting and characterizing the impact of waste constituents on groundwater. While the Facility was found exempt from Title 27 in adoption of WDRs Order No. R5-2002-0186, it only applies if groundwater limitations are met, which is not the case yet. The data analysis methods of Title 27 are relevant and appropriate for determining whether the discharge complies with the terms for protection of groundwater specified in the WDRs. Similarly, it specifies follow-up and corrective action protocols (section 20425 et seq. and section 20430 et seq., respectively, of Title 27) that are relevant and appropriate.

² All monitoring wells shall meet DWR Well Standards, Bulletin Nos. 74-81 and 74-90, in addition to performance standards prescribed by Title 27, section 20415(b)(4) et seq. All well locations and construction features are subject to the prior approval of the Executive Officer and must be sufficient to monitor potential impacts of the ponds on the uppermost groundwater aquifer.

describe the distribution of waste constituents in soil and in groundwater, and groundwater gradients, including graphs and contours, where beneficial for interpretation and to the Regional Board's understanding of the situation. The technical report shall be sufficient to provide a basis for future Regional Board decisions concerning the need for further investigation, modified conditions of discharge, and cleanup. Where degradation is reported to be, in part or whole, from other sources, the technical report shall provide the reasoning and evidence that might support such a conclusion. If the distribution of waste constituents in the soil profile is such that continued discharge of wastewater to the overlying property may result in the discharge of additional waste constituents to groundwater in violation of groundwater limitations, the technical report shall conclude there is no assimilative capacity in the soil column or provide quantification of the capacity and its supporting evidence. The technical report shall include a recommendation for additional investigation and ongoing monitoring, as appropriate.

- c. Conduct whatever additional investigation is directed or approved by the Executive Officer as necessary to complete this task.
 - d. Continue to monitor the groundwater monitoring wells developed during tasks 5.a and 5.b, above, at sufficient frequency to monitor trends and effectiveness of cleanup efforts until this Order is rescinded. All monitoring shall be conducted as directed or approved by the Executive Officer.
6. Based on the results of the investigation in task 5, above, evaluate alternative cleanup actions and select and propose a cost-effective cleanup action to the Regional Board that achieves compliance with the groundwater limitations in Order No. R5-2002-0186, including a proposed time schedule. In performing this task the Discharger shall:
- a. **Within 270 days of the Executive Officer's written approval of task 5.b**, submit a technical report that describes the effectiveness, feasibility, and relative costs of applicable alternative methods of cleanup for the groundwater degradation identified therein and for cleanup or containment of waste contained in the soil column that may continue to leach and violate groundwater limitations unless mitigated. The technical report shall describe the project details and implementation schedule of the proposed, cost-effective alternative, including the beginning of remediation and the projected date for full compliance with groundwater limitations, as well as all interim milestone dates.
 - b. **Within 180 days of the Executive Officer's written approval of task 6.a**, initiate the cost-effective alternative and have all corrective actions fully operational.
 - c. Continue active cleanup as described in the approval (task 6.b) until authorized by the Executive Officer or Regional Board to cease such action. The Discharger may request

³ Including copies of drillers' logs and "as-built" construction drawings of each groundwater monitoring well, as well as properly surveyed "top of casing" reference elevations for each well.

modification of its cleanup actions at any time if supported by appropriate technical information, which shall be subject to approval of the Executive Officer.

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 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.

Adoption of this Order shall not be considered to mean that administrative civil liability will not be assessed pursuant to CWC sections 13261, 13265, 13268, 13350, or other applicable authority for violations that predate this Order.

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

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 18 October 2002.

THOMAS R. PINKOS, Executive Officer

ARP/JLK 10/18/2002