

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER R5-2023-XXXX

AMENDING  
ORDER R5-2022-0004  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT  
CA0085359

CITY OF LATHROP  
CONSOLIDATED TREATMENT FACILITY,  
SAN JOAQUIN COUNTY

**FINDINGS**

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

1. On 17 February 2022, the Central Valley Water Board adopted Waste Discharge Requirements Order R5-2022-0004, prescribing waste discharge requirements for the consolidated treatment facility. For the purposes of this Order, the City of Lathrop is hereafter referred to as “Discharger” and the consolidated treatment facility is hereafter referred to as “Facility.”
2. Waste Discharge Requirements Order R5-2022-0004 (NPDES Permit No. CA0085359) authorizes the discharge of up to 2.5 million gallons per day of treated municipal wastewater to the San Joaquin River, a water of the United States and within the legal boundary of the Sacramento-San Joaquin Delta.
3. The Facility’s treatment system consists of a three-stage screening process (fine screening, grit removal, ultra-fine screening), a two-train biological treatment consisting of an anoxic basin followed by an aeration basin, a membrane bioreactor filtration system, chlorine disinfection by sodium hypochlorite, and dechlorination by sodium bisulfite. Following dechlorination, the Facility utilizes cooling ponds to meet temperature effluent limitations. Effluent will either be discharged to the San Joaquin River or to the recycled water distribution system. Discharge to surface water will occur when the recycled water distribution system is at capacity. The sludge handling facilities include a 190,000-gallon aerobic sludge storage tank, two belt filter press units housed in the dewatering building, and a concrete pad for “air drying” of the dewatered sludge. Dewatered cake from the filter press is transferred either to a sludge haul truck or to the drying bed for supplemental drying when weather conditions permit.
4. The Discharger is ceasing discharges of wastewater to land to maximize the beneficial use of recycled water mainly through landscape irrigation and construction uses. The remaining effluent will be discharged via the surface water outfall to the San Joaquin River. The distribution and use of recycled water is regulated under the State Water

Board Water Quality Order WQ 2016-0068-DDW, Water Reclamation Requirements for Recycled Water Use.

5. The Discharger requested an amendment to Order R5-2022-0004 to include the production of recycled water by the Facility in accordance with the accepted Title 22 Engineering Report by the Division of Drinking Water. This Order amends Order R5-2022-0004 to include production of recycled water by the Discharger's Facility, and to include biosolids requirements and monitoring, a groundwater limitation, and clarifications to the pyrethroids pesticides language.
6. Order R5-2022-0004 may be reopened and modified in accordance with 40 CFR § 122.62(a)(2).
7. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) ("CEQA") pursuant to Water Code section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to implement a NPDES permit. (Pacific Water Conditioning Ass'n, Inc. v. Discharger Council of Discharger of Riverside (1977) 73 Cal.App.3d 546, 555-556.). Issuance of this Order is also exempt from the provisions of CEQA in accordance with California Code of Regulations (CCR), title 14, section 15301.
8. The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to amend Waste Discharge Requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

**BOARD ACTION**  
**IT IS HEREBY ORDERED THAT:**

Effective immediately, Waste Discharge Requirements Order R5-2022-0004 (NPDES CA0077682) is amended as shown in items 1 through 34, below.

1. The Order number is changed from R5-2022-0004 to R5-2022-0004-01 throughout the Order.
2. Cover Page. Modify the last paragraph to the text shown below:  
  
I, PATRICK PULUPA, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **17 February 2022** and amended by Order R5-2022-XXXX on **XX June 2023**.
3. Section II. FINDINGS. Replace Section II.A and II.D with updated section II.A and II.D below:

- A. Legal Authorities.** This Order serves as waste discharge requirements (WDR's) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDR's in this Order. This Order regulates discharges to the San Joaquin River and includes reclamation specifications and monitoring for the production of recycled water.
- D. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections **IV.B.2, V.B, VI.C.5.b-c and VI.C.6** are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

4. Section IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS. Insert the entirety of Section IV.B Recycling Specifications as shown below:

**B. Recycling Specifications**

1. Recycling water specifications for the Facility are separately regulated under Water Quality Order WQ 2016-0068-DDW, Water Reclamation Requirements for Recycled Water Use.
2. **Production of Disinfected Tertiary Recycled Water for Distribution.** Enrollment under the State Water Board Water Quality Order WQ 2016-0068-DDW, Water Reclamation Requirements for Recycled Water Use, provides coverage for the distribution and use of Title 22 disinfected tertiary recycled water. The Discharger submitted a Title 22 Engineering Report prepared pursuant to Title 22, section 60323, which was accepted by the State Water Board Division of Drinking Water (DDW) on 1 April 2020. Hereinafter the term "Title 22 Engineering Report" refers to the 1 April 2020 Title 22 Engineering Report or any subsequently revised Title 22 Engineering Report that has been accepted by DDW. The Discharger was enrolled under Order WQ 2016-0068-DDW on 9 June 2020.

When producing Title 22 disinfected tertiary recycled water for use under Order WQ 2016-0068-DDW, the Discharger shall meet the recycling specifications below:

- a. The Discharger shall operate the Facility consistent with the accepted Title 22 Engineering Report.

- b. Prior to implementing any changes in operations, for the production of recycled water, the Discharger shall revise the Title 22 Engineering Report and receive DDW acceptance.
- c. For discharges of recycled water, the Discharger shall comply with the operating specifications per the accepted Title 22 Engineering Report as follows:
  - i. **Turbidity.** When discharging to the San Joaquin River or the reclamation system, to ensure the filtration system is operating properly to provide adequate disinfection of the wastewater, the turbidity of the filter effluent measured at Monitoring Location FIL-001 shall not exceed the following:
    - (a) 0.2 NTU more than 5 percent of the time within a 24-hour period;
    - (b) 0.5 NTU at any time.
  - ii. **Total Coliform Organisms.** Effluent total coliform organisms shall not exceed the following, with compliance measured at Monitoring Location TCO-001 as described in the MRP, Attachment E:
    - (a) 2.2 most probable number per 100 milliliters (MPN/100 mL), as a 7-day median;
    - (b) 23 MPN/100 mL, more than once in any 30-day period; and
    - (c) 240 MPN/100 mL, at any time.

5. Section V. RECEIVING WATER LIMITATIONS. Add Section V.B as shown below:

**B. Groundwater Limitations**

Release of waste constituents from any storage, treatment, or disposal component associated with the Facility shall not cause the underlying groundwater to contain waste constituents in concentrations greater than background water quality or water quality objectives, whichever is greater.

6. Section VI. PROVISIONS. Remove Section VI.C.1.h as shown below:

h. **Rescission of Land Discharge WDRs.** The Discharger anticipates transitioning WDR coverage from its current land-discharge WDRs (Order R5-2016-0028-02) to coverage under the State Water Resources Control Board Recycled Water General Order (WQO 2016-0068-DDW). The Discharger would seek to terminate Order R5-2016-0028-02. This Order may be reopened to incorporate various storage pond operating, biosolids, and other specifications that are not addressed with the Discharger's coverage under the Recycled Water General Order.

7. Section VI. PROVISIONS. Add the following Section VI.C.3.d as shown below:

**d. Pyrethroid Management Plan.** If the Pyrethroid Pesticides Water Column Chemistry Monitoring results in an exceedance of any acute and/or chronic pyrethroid numeric trigger, the Discharger shall develop and submit a Pyrethroid Management Plan to the Central Valley Water Board, per the requirements described in Section 4.2.2.4.12 of the Basin Plan, within one year from the date that an exceedance is identified by either the Discharger or Central Valley Water Board staff. If an exceedance is identified, the Discharger shall submit a formal letter notifying the Central Valley Water Board of the exceedance and the Discharger's intent to submit a Pyrethroid Management Plan.

The Pyrethroid Management Plan shall identify management practices to reduce discharges of pyrethroid pesticides, as outlined in Section 4.5.5.2.2.3 of the Basin Plan, and to consider whether there are potential water quality concerns with replacement insecticide products. Dischargers shall begin implementing their pyrethroid management plans within 30 days after receipt of written approval of their management plan. The Pyrethroid Management Plan shall be deemed complete when it can be demonstrated that the acute and chronic pyrethroids triggers are not exceeded in the final effluent and the demonstration is approved by the Executive Officer.

- i. If a Pyrethroid Management Plan is required and approved by 1 February 2025, the Discharger shall provide an end-term progress report to document the management practices that have been implemented to track the effectiveness of the Pyrethroid Management Plan. The end-term progress report, if applicable, shall be submitted to the Central Valley Water Board with the ROWD by the due date in the Technical Reports Table. If a Pyrethroid Management Plan is required during this permit term, mid-term and end-term progress reports will be required by subsequently reissued NPDES permits.

8. Section VI. PROVISIONS. Modify the following Section VI.C.4 as shown below:

**4. Construction, Operation and Maintenance Specifications – NOT APPLICABLE**

9. Section VI. PROVISIONS FOR PUBLICLY OWNED TREATMENT WORKS (POTWs). Add the following Section VI.C.5.b as shown below:

- b. **Sludge/Biosolids Treatment or Discharge Specifications.** Sludge in this document means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screening material generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the wastewater treatment plant. Biosolids refer to sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agricultural, silvicultural, horticultural, and land reclamation activities as specified under 40 C.F.R. Part 503.

- i. Collected screenings, residual sludge, biosolids, and other solids removed from liquid wastes shall be disposed of in a manner consistent with Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, division 2, subdivision 1, section 20005, et seq. Removal for further treatment, storage, disposal, or reuse at sites (e.g., landfill, composting sites, soil amendment sites) that are operated in accordance with valid waste discharge requirements issued by a Regional Water Board will satisfy these specifications.

Sludge and solid waste shall be removed from screens, sumps, ponds, clarifiers, etc. as needed to ensure optimal plant performance.

The treatment of sludge generated at the Facility shall be confined to the Facility property and conducted in a manner that precludes infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations in section V.B. of this Order. In addition, the storage of residual sludge, solid waste, and biosolids on Facility property 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 included in section V.B. of this Order.

- ii. The use, disposal, storage, and transportation of biosolids shall comply with existing federal and state laws and regulations, including permitting requirements and technical standards included in 40 C.F.R. Part 503. If the State Water Board and the Central Valley Water Board are given the authority to implement regulations contained in 40 C.F.R. Part 503, this Order may be reopened to incorporate appropriate time schedules and technical standards. The Discharger must comply with the standards and time schedules contained in 40 C.F.R. Part 503 whether or not they have been incorporated into this Order.
- iii. The Discharger shall comply with section IX.A. of the Monitoring and Reporting Program, Attachment E.
- iv. The Discharger shall implement onsite sludge/biosolids treatment, processing, and storage for the Facility as described in the Fact Sheet (Attachment F, section II.A). This Order may be reopened to address any proposed change in the onsite treatment, processing, or storage of sludge/biosolids.

10. Section VI. PROVISIONS FOR PUBLICLY OWNED TREATMENT WORKS (POTWs). Modify Section VI.C.6.a as shown below:

- a. **Title 22, or Equivalent, Disinfection Requirements.** When discharging to the San Joaquin River or the reclamation system, wastewater shall be oxidized, coagulated, filtered, and adequately disinfected pursuant to the State Water Board, Division of Drinking Water (DDW) reclamation criteria, CCR, Title 22, division 4, chapter 3, (Title 22), or equivalent.

11. Attachment C – Flow Schematic. The Flow schematic has been replaced with an updated version that reflects the new process flow without land discharge.
12. Attachment E – Monitoring and Reporting Program (MRP), Section II. MONITORING LOCATIONS. Only sections of the table with changes are shown. Modify Table E-1 Monitoring Station Locations to modify Monitoring Location Description for FIL-001; and add Monitoring Location Names and descriptions for BIO-001, TCO-001, and REC-001:

**Table E-1. Monitoring Station Locations**

<b>Discharge Point Name</b>	<b>Monitoring Location Name</b>	<b>Monitoring Location Description</b>
--	FIL-001	Monitoring of the filter effluent to be measured immediately downstream of the filters prior to chlorination. This location is for purposes of determining compliance with recycled water discharge specifications, Section IV.B of the WDRs.
--	BIO-001	A location where a representative sample of biosolids can be collected for compliance determination with pretreatment regulations.
001	TCO-001	A location immediately following chlorine disinfection where a representative sample for the effluent total coliform organisms can be collected.
--	REC-001	A location where a representative flow measurement to the reclamation system can be obtained.

13. Attachment E – Monitoring and Reporting Program (MRP), Section IV. EFFLUENT MONITORING REQUIREMENTS. Only sections of the table and table notes with changes are shown. Modify Table E-3 Effluent Monitoring (EFF-001) to modify pH and Total Coliform Organisms Sample Type and Minimum Sample Frequency; and add Turbidity Sample Type and Minimum Sample Frequency as shown below:

<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>	<b>Minimum Sampling Frequency</b>
pH	standard units	Meter	Continuous
Total Coliform Organism	MPN/100 mL	Grab	3/Week
Turbidity	NTU	Meter	Continuous

- e. **Temperature and pH.** Shall be recorded at the time of ammonia sample collection. Report instantaneous minimum, instantaneous maximum, and daily average.

- k. **Total Coliform Organisms.** Samples for total coliform organisms shall be collected at Monitoring Location TCO-001.
- r. **pH.** Monitoring for pH may be ceased for up to 30 minutes each day for cleaning and calibration of probes.
- s. **Turbidity.** Turbidity shall be monitored at FIL-001. Report daily average and maximum turbidity. The Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation and no continuous turbidity measurements are available to report for the duration the meter is out of service. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.

14. Attachment E – Monitoring and Reporting Program (MRP), Section IV. EFFLUENT MONITORING REQUIREMENTS. Modify Table E-4 Effluent Monitoring (EFF-002) Minimum Sampling Frequencies for pH and Temperature and add table note e as shown below:

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	standard units	Grab	5/Week
Dissolved Oxygen	mg/L	Grab	2/Month
Temperature	°F	Grab	5/Week

- e. **pH and Temperature.** On weeks with federal holidays, minimum sampling frequency shall be 3/week.

15. Attachment E – Monitoring and Reporting Program (MRP), Section V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS. Modify Table E-5 to remove the 6.25%:93.75% (Effluent:Control Water) dilution series as shown below:

Sample	Dilution	Dilution	Dilution	Dilution	Dilution	Dilution
Effluent	100%	75%	50%	25%	12.5%	0%
Control Water	0%	25%	50%	75%	87.5%	100%

16. Attachment E – Monitoring and Reporting Program (MRP), Section VII. RECYCLING MONITORING REQUIREMENTS. Add Sections VII.A.1, and VII.A.2 as shown below:

**A. Monitoring Locations FIL-001, REC-001, and TCO-001**

- 1. The Discharger shall monitor recycled water discharge at Monitoring Locations FIL-001, REC-001, and TCO-001 when producing recycled water in accordance



with Table E-6 and the testing requirements described in section VII.A.2 below:

**Table E-6. Recycled Water Monitoring Requirements**

Parameter	Units	Sample Type	Sample Location	Minimum Sampling Frequency
Total Coliform Organisms	MPN/100mL	Grab	TCO-001	1/Day
Turbidity	NTU	Meter	FIL-001	Continuous
Flow	MGD	Meter	REC-001	Continuous

2. **Table E-6 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table E-6:
  - a. **Applicable to all parameters.** Parameters shall be analyzed using the analytical methods described in 40 CFR part 136 or by methods approved by the Central Valley Water Board or the State Water Board. In addition, if requested by the Discharger, the sample type may be modified by the Executive Officer to another 40 CFR part 136 allowed sample type.
  - b. **Turbidity.** Report daily average and maximum turbidity. The Discharger shall report documented routine meter maintenance activities including date, time of day, and duration, in which the analyzer(s) is not in operation and no continuous turbidity measurements are available to report for the duration the meter is out of service. If analyzer(s) fail to provide continuous monitoring for more than two hours and influent and/or effluent from the disinfection process is not diverted for retreatment, the Discharger shall obtain and report hourly manual and/or grab sample results.
  - c. If monitoring for the parameters in Table E-6 has already been conducted per Order WQ 2016-0068-DDW, then the same sample results can be reported to the Central Valley Water Board to fulfill the monitoring requirements in Table E-6.

17. Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER REPORTING REQUIREMENTS. Remove Section IX.A Filtration System and add Section IX.A Biosolids as shown below:

**A. Biosolids**

1. Monitoring Location BIO-001
  - a. A grab sample of sludge shall be collected annually, starting in 2024, at Monitoring Location BIO-001 in accordance with EPA's POTW Sludge

Sampling and Analysis Guidance Document, August 1989, and tested for priority pollutants (excluding asbestos).

- b. Biosolids monitoring shall be conducted using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical methods (EPA publication SW-846), as required in 40 C.F.R. section 503.8(b)(4). All results must be reported on a 100% dry weight basis. Records of all analyses must state on each page of the laboratory report whether the results are expressed in "100% dry weight" or "as is."

18. Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER REPORTING REQUIREMENTS. Modify Section B.1 Pyrethroid Pesticide Monitoring, Water Column Chemistry Monitoring Requirements as shown below:

1. **Water Column Chemistry Monitoring Requirements.** When discharging to the San Joaquin River, the Discharger shall conduct effluent and receiving water (San Joaquin River) baseline monitoring in accordance with Table E-8. **Quarterly monitoring shall be conducted for one year** concurrent with the Effluent and Receiving Water Characterization Monitoring (see section IX.C.1 of this MRP for specific dates). The discharger shall also submit a minimum of one quality assurance/quality control (QA/QC) sample during the year to be analyzed for the constituents listed in Table E-8.

The monitoring shall be conducted in the effluent at monitoring location EFF-001 and downstream receiving water at monitoring location RSW-003 or RSW-002 (depending on the flow direction) and the results of such monitoring be submitted to the Central Valley Water Board with the quarterly self-monitoring reports. The Discharger shall use Environmental Laboratory Accreditation Program (ELAP)-accredited laboratories and methods validated by Central Valley Water Board staff for pyrethroid pesticides water column chemistry monitoring.. A current list of ELAP approved laboratories and points of contact can be found on the [Central Valley Water Board's Pyrethroid Pesticides TMDL and Basin Plan Amendment Webpage](https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/central_valley_pesticides/pyrethroid_tmdl_bpa/index.html), [https://www.waterboards.ca.gov/centralvalley/water\\_issues/tmdl/central\\_valley\\_projects/central\\_valley\\_pesticides/pyrethroid\\_tmdl\\_bpa/index.html](https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/central_valley_pesticides/pyrethroid_tmdl_bpa/index.html).

Monitoring can either be conducted by the Discharger or can be done as part of a group monitoring effort. If the Discharger chooses to participate in a group monitoring effort, the timing and the other study requirements of the monitoring can be modified by the Executive Officer.

19. Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER REPORTING REQUIREMENTS. The entirety Table E-8 and new table notes are shown below. Modify Table E-8 Analytical Methods for Total Bifenthrin, Total Cyfluthrin, Total Cypermethrin, Total Esfenvalerate, Total Lambda-cyhalothrin, and Total Permethrin. Add notes to the Parameter column for Dissolved Organic Carbon, and Total Organic Carbon.

<b>Parameter</b>	<b>CAS Number</b>	<b>Sample Units</b>	<b>Sample Type</b>	<b>Analytical Method</b>	<b>Reporting Level</b>
Total Bifenthrin	82657-04-3	ng/L	Grab	See table note 1	1.3
Total Cyfluthrin	68359-37-5	ng/L	Grab	See table note 1	1.3
Total Cypermethrin	52315-07-8	ng/L	Grab	See table note 1	1.7
Total Esfenvalerate	51630-58-1	ng/L	Grab	See table note 1	3.3
Total Lambda-cyhalothrin	91465-08-6	ng/L	Grab	See table note 1	1.2
Total Permethrin	52645-53-1	ng/L	Grab	See table note 1	10
Freely Dissolved Bifenthrin	82657-04-3	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Cyfluthrin	68359-37-5	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Cypermethrin	52315-07-8	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Esfenvalerate	51630-58-1	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Lambda-cyhalothrin	91465-08-6	ng/L	Calculated	Calculated from total concentration	--
Freely Dissolved Permethrin	52645-53-1	ng/L	Calculated	Calculated from total concentration	--
Dissolved Organic Carbon (DOC) (see table note 2)	--	mg/L	Grab	--	--
Total Organic Carbon (TOC) (see table note 2)	--	mg/L	Grab	--	--

Table E-8 Notes:

1. The Discharger shall use ELAP-accredited laboratories and methods validated by Central Valley Water Board staff for pyrethroid pesticides water column chemistry monitoring. A current list of ELAP-approved laboratories and points of contact can be found on the [Central Valley Water Board's Pyrethroid Pesticides TMDL and Basin Plan Amendment Webpage](#).

2. DOC and TOC samples shall be taken concurrently with pyrethroid pesticide parameters.

20. Attachment E – Monitoring and Reporting Program (MRP), Section IX. OTHER REPORTING REQUIREMENTS. Add Section B.3 Exceedance of Numeric Triggers as shown below:

3. **Exceedance of Numeric Triggers.** If the Pyrethroid Pesticides Water Column Chemistry Monitoring results in an exceedance of any prohibition numeric trigger, the Discharger shall submit a formal letter notifying the Central Valley Water Board of the exceedance and the Discharger's intent to submit a Pyrethroid Management Plan. The Pyrethroid Management Plan, as outlined in Section VI.C.3 of this Order, shall be submitted to the Central Valley Water Board within one year from the date that an exceedance is identified by either the Discharger or Central Valley Water Board staff. Pyrethroid concentrations that exceed the acute and/or chronic pyrethroid numeric triggers as outlined in Table 4-2 of the Basin Plan constitute an exceedance. In the absence of a pyrethroid numeric trigger exceedance, observed toxicity in the water column does not constitute a violation of the pyrethroid conditional prohibition.

Identification of an exceedance provides the information that the Pyrethroid Pesticides Water Column Chemistry Monitoring was designed to collect, per Chapter V of the Basin Plan; therefore, once an exceedance is identified, the Discharger may cease conducting subsequent Pyrethroid Pesticides Water Column Chemistry Monitoring.

21. Attachment E – Monitoring and Reporting Program (MRP), Section X. REPORTING REQUIREMENTS. Add Section X.D.3 and associated technical reports to Table E-12 as shown below:

3. **Recycled Water Policy Annual Reports.** In accordance with Section 3 of the Water Quality Control Policy for Recycled Water (Recycled Water Policy), the Discharger shall electronically submit an annual report of monthly data to the State Water Board by 30 April annually covering the previous calendar year using the State Water Board's [GeoTracker website](https://geotracker.waterboards.ca.gov/) (<https://geotracker.waterboards.ca.gov/>). Information for setting up and using the GeoTracker system can be found in the *ESI Guide for Responsible Parties* document on the State Water Board's website for [Electronic Submittal of Information](#)

([https://www.waterboards.ca.gov/ust/electronic\\_submittal/index.html](https://www.waterboards.ca.gov/ust/electronic_submittal/index.html)).

The annual report to GeoTracker must include volumetric reporting of the items listed in Section 3.2 of the [Recycled Water Policy](#) ([https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/resolutions/2018/121118\\_7\\_final\\_amendment\\_oal.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf)). A pdf of the upload confirmation from GeoTracker for the Recycled Water Policy Annual Report shall be uploaded into CIWQS annually as a technical report per Table E-12, to demonstrate compliance with this reporting requirement.

**Table E-12. Technical Reports**

<b>Report #</b>	<b>Technical Report</b>	<b>Due Date</b>	<b>CIWQS Report Name</b>
9	Recycled Water Policy Annual Report Submittal Confirmation	30 April 2024	MRP X.D.3
10	Recycled Water Policy Annual Report Submittal Confirmation	30 April 2025	MRP X.D.3
11	Recycled Water Policy Annual Report Submittal Confirmation	30 April 2026	MRP X.D.3
12	Recycled Water Policy Annual Report Submittal Confirmation	30 April 2027	MRP X.D.3

22. Attachment F – Fact Sheet, Section I. PERMIT INFORMATION. Modify Table F-1 as shown below:

**Table F-1. Facility Information**

<b>Recycling Requirements:</b>	Producer
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23. Attachment F – Fact Sheet, Section I. PERMIT INFORMATION. Modify Subsection B as shown below:

The Facility discharges wastewater to the San Joaquin River, a water of the United States within the Sacramento-San Joaquin Delta. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

24. Attachment F – Fact Sheet, Section I. PERMIT INFORMATION. Modify Subsection F as shown below:

This Order is an NPDES permit and regulates the tertiary treated wastewater discharge to the San Joaquin River and the wastewater treatment facility and includes reclamation specifications for the production of recycled water. Reclamation is regulated through enrollment in State Water Board Order WQ 2016-0068-DDW Water

Reclamation Requirements for Recycled Water Use.

25. Attachment F – Fact Sheet, Section II. FACILITY DESCRIPTION. Modify Section II.A, third and fourth paragraph, as shown below:

The waste activated sludge (WAS) generated from the CTF is pumped to a 190,000 gallon aerobic sludge storage tank. In addition, the existing sludge handling facilities include two belt filter press units housed in the dewatering building and a concrete pad for “air drying” of the dewatered sludge. Dewatered cake from the filter press is transferred either to a sludge haul truck or to the drying bed for storage or supplemental drying when weather conditions permit. The sludge beds are used daily, the beds are concrete lined, and any excess liquid is pumped to the headworks. Transportation and disposal/reuse of the biosolids is regulated by U.S. EPA under 40 C.F.R. part 503.

Effluent will either be discharged to the San Joaquin River or to the recycled water distribution system. The Discharger recycles a portion of its wastewater for irrigation of agricultural and landscape use areas. Recycled water distribution is regulated by separate State Water Board Water Quality Order WQ 2016-0068-DDW, Water Reclamation Requirements for Recycled Water Use. This order regulates the production of recycled water. Discharge to surface water will occur when the recycled water distribution system is at capacity.

26. Attachment F – Fact Sheet, Section IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS. Add Section IV.G as shown below:

**G. Recycling Specifications**

Treated wastewater discharged for reclamation is regulated under separate waste discharge requirements Order WQ 2016-0068-DDW. The Discharger submitted a Title 22 Engineering Report dated March 2020 prepared pursuant to Title 22, section 60323, which was accepted with no additional comments by the State Water Board Division of Drinking Water (DDW) on 1 April 2020. The Discharger is enrolled under the State Water Board Water Quality Order WQ 2016-0068-DDW, Water Reclamation Requirements for Recycled Water Use.

The Discharger's Title 22 Engineering Report included operational specifications to ensure treatment equivalent to Title 22 tertiary recycled water. The Recycling Specifications require that any revisions to the Title 22 Engineering Report receives DDW acceptance prior to implementation. Due to possible changes to the Title 22 Engineering Report, the Recycling Specifications require operation per the accepted Title 22 Engineering Report or any subsequently revised Title 22 Engineering Report that has been accepted by DDW.

27. Attachment F – Fact Sheet, Section IV. RATIONALE FOR RECEIVING WATER LIMITATIONS. Add Section V.B as shown below:

B. Groundwater

A narrative groundwater limitation has been established to ensure that onsite biosolids handling does not cause the underlying groundwater to contain waste constituents in concentrations greater than background water quality or water quality objectives, whichever is greater.

28. Attachment F – Fact Sheet, Section VI. RATIONALE FOR PROVISIONS. Remove Section VI.B.1.f as shown below:
- f. Rescission of Land Discharge WDRs.** The Discharger anticipates transitioning WDR coverage from its current land-discharge WDRs (Order R5-2016-0028-02) to coverage under the State Water Resources Control Board Recycled Water General Order (WQO 2016-0068-DDW). The Discharger would seek to terminate Order R5-2016-0028-02. This Order may be reopened to incorporate various storage pond operating, biosolids, and other specifications that are not addressed with the Discharger’s coverage under the Recycled Water General Order.
29. Attachment F – Fact Sheet, Section VI. RATIONALE FOR PROVISIONS. Add Section VI.B.3.d as shown below:
- d. Pyrethroid Management Plan.** On 8 June 2017, the Central Valley Water Board adopted Resolution R5-2017-0057, which adopted the Basin Plan Amendment (BPA) for the Control of Pyrethroid Pesticide Discharges. Per the Basin Plan, Section 4.2.2.4.12, if concentrations of pyrethroids are found to exceed the acute and/or chronic pyrethroid triggers (Table 4-2 of the Basin Plan), the Discharger must submit a draft pyrethroid management plan for approval by the Executive Officer within one year from the date that an exceedance is identified by either the Discharger or Central Valley Water Board staff.
30. Attachment F – Fact Sheet, Section VI. RATIONALE FOR PROVISIONS. Add Section VI.B.5.b as shown below:
- b. Sludge/Biosolids Treatment or Discharge Specifications.** Sludge in this Order means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screening material generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the wastewater treatment plant. Biosolids refer to sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agricultural, silvicultural, horticultural, and land reclamation activities as specified under 40 C.F.R. part 503. This Order does not regulate offsite use or disposal of biosolids, which are regulated instead under 40 C.F.R. part 503; administered by U.S. EPA. The Sludge/Biosolids Treatment or Discharge Specifications in this Order implement the California Water Code to ensure sludge/biosolids are properly handled onsite to prevent nuisance, protect public health, and protect groundwater quality.

31. Attachment F – Fact Sheet, Section VI. RATIONALE FOR PROVISIONS. Remove the second paragraph from Section VI.B.7.a as shown below:

a. Title 22 or Equivalent Disinfection Requirements

The Discharger is required to meet Title 22 or equivalent disinfection requirements. In 2016, the Discharger conducted a full-scale free chlorine disinfection study to determine if the Facility could achieve the Title 22 tertiary recycled water disinfection requirements using a free chlorine disinfection approach and a shorter contact time in the Facility's chlorine contact basin. The results of the study led to a recommendation to utilize a minimum free chlorine contact time of 60 mg-min/L. The most recent Title 22 Engineering Report (January 2018) submitted to the Division of Drinking Water (DDW) contains the conditional approval letter from DDW dated 13 May 2016 allowing the Facility to utilize a minimum free chlorine residual contact time of 60 mg-min/L. The May 2016 Conditional Approval also requires the discharger to always maintain a minimum free chlorine residual of 1 mg/L in the chlorine contact basin effluent and a minimum modal contact time of 32 minutes.

32. Attachment F – Fact Sheet, Section VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS. Modify Section VII.B.2 and add VII.B.6 as shown below:

2. Effluent monitoring frequencies and sample types for BOD<sub>5</sub> (three times per week), BOD<sub>5</sub> percent reduction (once per month), TSS (three times per week), TSS percent reduction (once per month), pH (continuous), ammonia nitrogen, total (as N) (once per week), chlorine, total residual (continuous), chlorpyrifos (1/year), diazinon (1/year), dibromochloromethane (DBCM) (once per month), dichlorobromomethane (DCBM) (once per month), bromoform (once per month), chloroform (once per month), barium (once per month), electrical conductivity @ 25°celcius (once per week), lead (once per month), methylmercury (once per quarter), mercury, total (once per quarter), nitrate, total (as N) (once per month), nitrite, total (as N) (once per month), nitrate plus nitrite, total (as N) (once per month), temperature (continuous), turbidity (continuous), and total coliform organisms (3/week) have been established for this Order to determine compliance with effluent limitations for these parameters.

6. Effluent monitoring frequencies and sample types when the cooling ponds are in use for dissolved oxygen (twice per month), pH (5/week), and temperature (5/week) have been established for this Order.

33. Attachment F – Fact Sheet, Section VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS. Add Sections VII.E.1, VII.E.2, and VII.E.3 as shown below:



## **E. Other Monitoring Requirements**

### **1. Biosolids Monitoring**

Biosolids monitoring is required to ensure compliance with the pretreatment requirements contained in 40 C.F.R. part 403 and implemented in section VI.C.5.b. of this Order. Biosolids monitoring is required per U.S. EPA guidance to evaluate the effectiveness of the pretreatment program.

### **2. Title 22 Recycled Water Monitoring**

Title 22 disinfected tertiary recycled water production monitoring and reporting are required to ensure compliance with the Recycling Specifications in Section IV.B of the WDRs and the accepted Title 22 Engineering report.

### **3. Pyrethroid Pesticides Monitoring**

On 8 June 2017, the Central Valley Water Board adopted Resolution R5-2017-0057, which adopted the Basin Plan Amendment (BPA) for the Control of Pyrethroid Pesticide Discharges. Pyrethroid pesticides and toxicity monitoring has been included in this Order in accordance with the Pyrethroids Pesticides BPA, which is required for POTWs with design average dry weather flow greater than or equal to 1 million gallons per day.

34. Attachment F – Fact Sheet, Section VIII. PUBLIC PARTICIPATION. Modify Section VIII.G as shown below:

#### **G. Additional Information**

Requests for additional information or questions regarding this order should be directed to Matt Richter at 916-464-4745 or [matthew.richter@waterboards.ca.gov](mailto:matthew.richter@waterboards.ca.gov).

## **End of Amendments**

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, section 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final falls on a Saturday, Sunday, or state holiday (including mandatory furlough days), the petition must be received by the State Water Board by 5:00 p.m. on the next business day.

[Links to the laws and regulations applicable to filing petitions](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

([http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)) may be found on the Internet or will be provided upon request.

ORDER R5-2023-XXXX  
AMENDING ORDER R5-2022-0004  
CITY OF LATHROP

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I, PATRICK PULUPA, 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 XX June 2023.

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PATRICK PULUPA, Executive Officer