California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2013-0030
(Amended on October 9, 2014)

**REQUIRING THE CITY OF TULELAKE
TO CEASE AND DESIST FROM DISCHARGING OR THREATENING
TO DISCHARGE EFFLUENT IN VIOLATION OF
WASTE DISCHARGE REQUIREMENTS FOR THE
CITY OF TULELAKE
WASTEWATER TREATMENT FACILITY**

NPDES NO. CA0023272
WDID NO. 1A84002OSIS

Siskiyou County



The Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds that:

1. The City of Tulelake (hereinafter Permittee[1]) owns the Tulelake Wastewater Treatment Facility (hereinafter Facility), a publicly owned treatment works (POTW). The Facility is designed to provide secondary wastewater treatment for an average dry weather flow of 0.16 million gallons per day (mgd) and consists of a collection system, comminutor and bar screen within the headworks, aerated treatment ponds, sand filters, chlorine disinfection, and dechlorination. Treated, disinfected, dechlorinated effluent is discharged to the Tulelake Irrigation District (TID) Drain No. 44-B-1, a tributary of the Tule Lake Sump, Tule Lake Refuge, and Lower Lost River.

2. The Facility was regulated by Waste Discharge Requirements (WDRs) and Monitoring and Reporting Program (MRP) Regional Water Board Order No. 99-62, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0023272, WDID No. 1A84002OSIS from August 26, 1999, through October 6, 2004, when Order No. 99-62 was superseded by the adoption of WDRs and MRP Order No. R1-2004-0075. The Permittee has also been regulated by Cease and Desist Order (CDO) No. R1-2004-0074, which was also adopted by the Regional Water Board on October 6, 2004.

3. Regional Water Board Order No. R1-2013-0029, WDRs and NPDES Permit No. CA0023272, WDID No. 1A84002OSIS (hereinafter, the Permit) was adopted by the Regional Water Board on June 13, 2013. Order No. R1-2013-0029 includes discharge prohibitions, effluent and receiving water limitations, and compliance provisions,

[1] For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Permittee herein.

including stricter final effluent limitations for biochemical oxygen demand ($BOD_5$), total suspended solids (TSS), total coliform, chlorine residual, cyanide, dichlorobromomethane, and bis(2-ethylhexyl)phthalate with new final effluent limitations for arsenic, copper, ammonia, carbonaceous biochemical oxygen demand (CBOD) and dissolved inorganic nitrogen (DIN).

4. The Regional Water Board adopted the *Water Quality Control Plan for the North Coast Region* (hereinafter Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The Basin Plan identifies present and potential beneficial uses for the Tule Lake Hydrologic Subarea, including the Tule Lake Refuge to which the TID Drain No. 44-B-1 is tributary.

5. The Permit implements narrative provisions of the Basin Plan by requiring the Permittee to monitor its effluent for constituents that may have reasonable potential to cause or contribute to an excursion above a water quality criterion or objective applicable to the receiving water, including $BOD_5$, TSS, chlorine residual, and ammonia, and establishes effluent limitations for these pollutants. The Basin Plan also includes a narrative toxicity objective that requires all waters to be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The Basin Plan objective is applicable because ammonia is toxic to aquatic life and must be controlled in order to prevent toxicity.

6. The Permit also implements provisions of the Lower Lost River Total Maximum Daily Loads (TMDLs) by requiring monitoring and establishing effluent limitations for dissolved inorganic nitrogen (DIN) and carbonaceous biochemical oxygen demand (CBOD), the constituents in the TMDLs with wasteload allocations (WLAs) applied to the Facility.

7. The Permit implements provisions of the California Toxics Rule (CTR) and the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) by requiring the Permittee to monitor its effluent for CTR constituents that may have reasonable potential to cause or contribute to an excursion above a water quality criterion or objective applicable to the receiving water. The SIP also required compliance with all final effluent limitations for CTR constituents by May 18, 2010.

8. The Permittee is violating or threatening to violate the following terms in the Permit:

**III. DISCHARGE PROHIBITIONS**

B. Creation of pollution, contamination, or nuisance, as defined by section 13050 of the California Water Code (Water Code) is prohibited.

D. The discharge or reclamation use of untreated or partially treated waste (receiving a lower level of treatment than described in section II.A of the Fact

Sheet) from anywhere within the collection, treatment, or disposal systems is prohibited, except as provided for in Attachment D, Standard Provision G (Bypass)

## IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

**Table 4. Technology-Based Effluent Limitations**

| Parameter | Units | Effluent Limitations | | |
|---|---|---|---|---|
| | | Average Weekly | Minimum Monthly Average | Average Monthly |
| Biochemical Oxygen Demand 5-day @ 20°C (BOD5) | mg/L | 65 | -- | 45 |
| | lbs/day | 87 | -- | 60 |
| | % Removal | -- | 65 | -- |
| Total Suspended Solids (TSS) | mg/L | -- | -- | 95 |
| | lbs/day | -- | -- | 127 |
| | % Removal | -- | 65 | -- |

**Table 5. Water Quality-Based Effluent Limitations**

| Parameter | Units | Effluent Limitations | | | | | |
|---|---|---|---|---|---|---|---|
| | | Annual Maximum | Average Monthly | Average Daily | Maximum Daily | Instant-aneous Minimum | Instant-aneous Maximum |
| Coliform Organisms (Total) | MPN/100mL | -- | 23 | -- | 240 | -- | -- |
| Chlorine Residual (Total) | µg/L | -- | 10 | -- | 20 | -- | -- |
| Arsenic, Total | µg/L | -- | 10 | -- | 20 | -- | -- |
| Copper, Total | µg/L | -- | 6.0 | -- | 12 | -- | -- |
| Cyanide, Total | µg/L | -- | 3.9 | -- | 9.4 | -- | -- |
| Dichlorobromo methane | µg/L | -- | 0.56 | -- | 1.6 | -- | -- |
| Bis(2-Ethylhexyl) phthalate | µg/L | -- | 1.8 | -- | 5.5 | -- | -- |
| Ammonia as N, Total | mg/L | -- | 0.6 | -- | 1.4 | -- | -- |
| Dissolved inorganic nitrogen (DIN) | Metric tons | 1.0 | -- | -- | -- | -- | -- |
| | kg | -- | -- | 2.7 | -- | -- | -- |
| Carbonaceous biochemical | Metric tons | 3.5 | -- | -- | -- | -- | -- |

**Table 5. Water Quality-Based Effluent Limitations**

| Parameter | Units | Effluent Limitations | | | | | |
|---|---|---|---|---|---|---|---|
| | | Annual Maximum | Average Monthly | Average Daily | Maximum Daily | Instant-aneous Minimum | Instant-aneous Maximum |
| oxygen demand (CBOD) | kg | -- | -- | 9.6 | -- | -- | -- |
| pH | s.u. | -- | -- | -- | -- | 7.0 | 9.0 |

i. **Acute Toxicity.** There shall be no acute toxicity in treated wastewater discharged to the TID Drain No. 44-B-1. The Permittee will be considered in compliance with this limitation when the survival of aquatic organisms in a 96-hour bioassay of undiluted effluent complies with the following:

**(a)** Minimum for any one bioassay: 70 percent survival
**(b)** Median for any three or more consecutive bioassays: at least 90 percent survival.

9. California Water Code § 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 preventative action."

10. CDO No. R1-2004-0074 was adopted by the Regional Water Board for violations of discharge prohibitions and numerous effluent limitation violations and required the Permittee to implement a long-term solution to achieve compliance with WDRs by completing a capital improvement project (CIP) by October 1, 2009. The Permittee did not met the time schedule requirements contained in CDO R1-2004-0074 for facilities planning, CEQA compliance, project design or construction. On October 17, 2008, the Permittee submitted a Wastewater Facilities Plan and filed a Notice of Determination for CEQA compliance on April 7, 2009.

11. On July 25, 2007, the Regional Water Board issued Administrative Civil Liability (ACL) Order No. R1-2007-0045 assessing a penalty of $495,000 for one hundred sixty-nine effluent limitation violations from January 1, 2000, through April 30, 2006. The violations were primarily related to insufficient operation and maintenance, treatment, and dechlorination. The ACL Order included another time schedule with dates extended beyond those required by the CDO, including new milestones, and conditionally offset $488,000 of the penalty to complete a compliance project as allowed under § 13385(l)(1) of the Water Code if the Permittee meets the task schedule requirements contained in the ACL Order and if the Executive Officer determines that the Permittee completes the compliance project satisfactorily. On

August 2, 2007, the Permittee paid $7,000 to the State Water Resources Control Board as required by the ACL Order.

12. As identified in progress reports, required pursuant to CDO No. R1-2004-0074 and ACL Order No. R1-2007-0045, financial constraint has been the primary reason for not completing a CIP to achieve full compliance with WDRs. The quarterly progress reports have provided documentation of the Permittee's slow progress toward compliance with the requirements to acquire funding for and complete a CIP project to achieve compliance with WDRs. The Permittee has selected a new agronomic reuse preferred alternative disposal project, which would eliminate discharges to surface waters by reusing wastewater on land to grow crops. The Permittee has prepared a California Environmental Quality Act (CEQA) document that covers the project. The Permittee's biggest challenge has been coming up with the financing to complete all aspects of the proposed project because the Permittee's Facility serves such a small population. However, the Permittee has recently established a conditional grant funding agreement with the State Water Resources Control Board's State Revolving Fund in the amount of $3,794,350 for planning, design, and construction of the CIP and on May 29, 2014, sent a letter to the Division of Financial Assistance requesting a $2,205,650 grant increase to a total grant of $6,000,000. On June 9, 2014 the Acting Deputy Director of the Division of Financial Assistance directed his staff to allocate the additional $2,205,650 of grant funds to the CIP and to proceed with amending the financing agreement.

13. The Permittee will be unable to comply with provisions of Order No. R1-2013-0029 including final effluent limitations identified in Finding 8, above, until the Permittee completes a capital improvement project that either includes treatment processes to reduce $BOD_5$, TSS, nutrients and priority pollutants or that eliminates discharges to surface waters. As described in Finding 12, above, the Permittee anticipates eliminating discharges to surface waters.

14. Pursuant to federal regulations at §122.44(d)(1)(i), title 40 of the Code of Federal Regulation (CFR), NPDES permit effluent limitations must control all pollutants which are or may be discharged at a level which will cause or have the reasonable potential to cause or contribute to an in-stream excursion above any State water quality standard, including any narrative criteria for water quality. Beneficial uses, together with their corresponding water quality objectives or promulgated water quality criteria, can be defined per federal regulations as water quality standards.

15. The Permittee meets the requirements of Water Code § 13385(j)(3), and therefore, during the term of this CDO, no MMPs will be assessed for future violations of effluent limitations contained in Order No. R1-2013-0029 for arsenic, copper, ammonia, DIN and CBOD because:

    a. The CDO is being issued after July 1, 2000, and specifies the actions the Permittee is required to take to correct the violations of Order No. R1-2013-0039 (Effluent Limitations IV.A.1), as set out in Finding 8, above.

b. The Permittee is unable to consistently comply with final effluent limitations for arsenic, copper, ammonia, DIN and CBOD that are in effect because (1) these are new or more stringent effluent limitations and (2) new or modified control measures will be needed for the Permittee to comply, and the new or modified control measures are dependent on the completion of studies and major capital improvement projects. Thus, the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

   On March 7, 2009, the Permittee submitted an Infeasibility Study report demonstrating that the Permittee is unable to comply with final effluent limitations for arsenic, copper, ammonia, DIN and CBOD. The Permittee also submitted a proposed compliance schedule for completion of a capital improvement project (CIP). The compliance schedule submitted by the Permittee proposed 2 years to complete a CIP that would require issuance of new WDRs and would achieve full compliance upon adoption.

c. Requirement 2 of this Order establishes a time schedule for bringing the Facility into compliance with the final effluent limitations for arsenic, copper, ammonia, DIN, and CBOD that is as short as possible. The compliance schedule requires completion of a CIP within two years of the adoption date of the new permit, Order No. R1-2013-0029, and includes a provision (Requirement 5) that allows the Permittee to request an extension of time, up to 5 years from the permit adoption date, if the Permittee demonstrates that additional time is necessary.

d. The compliance schedule in Requirement 2 requires the Permittee to submit a Pollution Prevention Plan pursuant to §13263.3 of the Water Code.

16. Accordingly, the Regional Water Board finds that MMPs for violations of effluent limitations for arsenic, copper, ammonia, DIN, and CBOD when discharging to TID Drain No. 44-B-1 do not apply, so long as the Permittee complies with the interim effluent limitations and compliance schedules included in this Order.

17. The compliance schedule established for arsenic, copper, ammonia, DIN, and CBOD in this Order is intended to be as short as possible. The compliance schedule accounts for the length of time required to complete environmental documents, design documents, and construction of the selected project. The compliance schedule allows for extensions of up to an additional 5 years, if, the Permittee demonstrates the need for additional time due to circumstances beyond the Permittee's control. The Regional Water Board may wish to revisit these assumptions as more information becomes available from the Permittee's evaluations.

18. This Order requires the Permittee to comply with performance based interim effluent limitations for arsenic, copper, ammonia, DIN, and CBOD. The SIP requires that interim limitations be based on past performance or limits in previous orders, whichever is more stringent. All interim limitations in this Order are performance-based. Interim limitations for arsenic, copper, and ammonia reflect a 95$^{th}$ percentile concentration of the lognormal effluent data distribution with a 95% confidence

interval. The interim limitation for DIN was developed using a regression to correlate ammonia and DIN (with an R-squared value of 0.997). The regression was used to calculate the effective DIN concentration at the 95th percentile concentration of the lognormal ammonia effluent data distribution with a 95% confidence interval. The interim limitation for CBOD was developed from a 95th percentile concentration of the lognormal BOD effluent data distribution with a 95% confidence interval because there is insufficient CBOD data to develop an interim limit. BOD is the sum of nitrogenous BOD and CBOD and is, therefore, always greater than or equal to the CBOD concentration. As a result, the use of BOD as a surrogate for CBOD in the development of an interim CBOD effluent limitation ensures that the limitation is based on performance while, concurrently, making the limitation more achievable. All of the interim limitations in this Order are intended to ensure that the Permittee maintains at least its existing performance while completing all tasks required by the compliance schedules.

19. Pursuant to Water Code § 13389 and title 14, California Code of Regulations, § 15321, this is an enforcement action for violations and threatened violations of waste discharge requirements and as such is exempt from the requirements of the California Environmental Quality Act (Public Resources Code § 21000-21177). Section 15321 of the CEQA Guidelines provides a categorical exemption for actions by regulatory agencies to enforce a permit, but does not exempt construction activities related to that enforcement. The Permittee is the lead agency for CEQA compliance for adoption and implementation of the CIP. In addition, this CDO action is exempt from CEQA pursuant to Water Code § 13389. That section exempts from the requirements of CEQA the Regional Water Board's adoption of waste discharge requirements. In *Pacific Water Conditioning Association v. City Council of the City of Riverside*, 73 Cal. App. 3d 546, 556 (1977), the court held that the CEQA exemption provided by 13389 also applies to CDOs that are enforcing NPDES permits. In addition, an environmental analysis is not required for this CDO action because there is no possibility that the activity in question may have a significant effect on the environment. (Cal. Code Regs., tit. 14, § 15061(b)(3).) The CDO extends deadlines to meet the effluent limitations in the existing WDRs/NPDES Permit, but this CDO action does not change currently existing baseline conditions. The CDO is intended to require the Permittee to achieve compliance with the NPDES requirements. It can, therefore, be seen with certainty that the adoption of the CDO does not have any possibility of having a significant adverse effect on water quality.

20. On June 13, 2013, after due notice to the Permittee and all other interested persons, the Regional Water Board conducted a public hearing and received evidence regarding this Order.

21. Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code §13320 and Title 23, California Code of Regulations, § 2050. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board,

any person affected by this Order may request the Regional Water Board to reconsider this Order. To be timely, such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Regional Water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If you choose to request reconsideration of this Order or file a petition with the State Water Board, be advised that you must comply with the Order while your request for reconsideration and/or petition is being considered.

22. On March 31, 2014, the Permittee submitted a request for a revised compliance schedule contained in this Order based on demonstration of making diligent progress toward completion of the capital improvement project. Such progress has been demonstrated to Regional Water Board staff through consistent biweekly meetings and the submission of the *Evaluation of Long-Term Disposal Options for City of Tulelake Wastewater Treatment Facility Technical Memorandum,* a Pre-Design Report and a Report of Waste Discharge for a new agronomic reuse preferred alternative disposal project.

THEREFORE, IT IS HEREBY ORDERED, that pursuant to Water Code §§ 13300 and 13301, the Permittee shall cease discharging waste contrary to the Basin Plan prohibitions and permit requirements and effluent limitations identified in Findings 5 through 8, above, and comply with the following requirements:

1. Cease and Desist Order No. R1-2004-0074 is rescinded except for enforcement purposes and is replaced by this Order.

2. The Permittee shall cease and desist from discharging and threatening to discharge waste to TID Drain No. 44-B-1 in violation of discharge prohibitions in Order No. R1-2013-0029 sections III.B and III.D and final effluent limitations in section IV.A.1 for $BOD_5$, TSS, arsenic, copper, cyanide, dichlorobromomethane, bis(2-ethylhexyl) phthalate, ammonia, DIN, CBOD, total coliform, at the earliest possible date in accordance with the following compliance schedule:

| Task | Task Description | Compliance Date |
|---|---|---|
| 1 | Submit to the Regional Water Board Executive Officer (hereinafter Executive Officer) a draft water balance, antidegradation analysis, and treatment plant flow analysis for the proposed new wastewater disposal system. | Task Complete[1] |
| 2 | Submit to the Executive Officer, semi-annual progress reports[2] that identify specific steps that have been taken toward identification and implementation of the capital improvement project (CIP) during the previous 6 months and describing the status of interim operations at the existing Facility. | April and October of each year, beginning October 31, 2013 through completion of construction of CIP |
| 3 | Complete the proposed interim compliance projects by reconstructing the oxidation ponds (including removal of accumulated sludge and optional reconstruction of the aeration system) and submit a final report. | October 31, 2016 |

| Task | Task Description | Compliance Date |
|---|---|---|
| 4 | Complete the CEQA process. Submit to the Executive Officer, documentation of certification of the final CEQA document and approval by the District Board of Directors. | Task Complete[3] |
| 5 | Submit for Executive Officer approval and implement a Pollution Prevention Plan (PPP) in accordance with Water Code § 13263.3 | January 31, 2015 |
| 6 | Submit a final Report of Waste Discharge including a final antidegradation analysis for the new wastewater treatment and disposal facility to the Executive Officer for approval. | Task Complete[4] |
| 7 | Submit to the Executive Officer, 70% design plans for the selected CIP. | January 31, 2015 |
| 8 | Complete final project design and advertise for construction bids for the CIP. Submit final specifications and design drawings and bid documents to the Executive Officer. | May 31, 2015 |
| 9 | Award construction contract for the CIP, commence construction and submit documentation to the Executive Officer. | July 31, 2015 |
| 10 | Complete construction of the CIP. | October 31, 2016 |
| 11 | Achieve full operation of the CIP in compliance with applicable WDRs, including effluent limitations and Basin Plan prohibitions and requirements. | January 31, 2017 |

Table Notes:
1. Task Completed on January 16, 2014
2. Semi-annual progress reports shall provide comprehensive updates on project milestones and shall include, but not be limited to, progress on project design, posting of Requests for Proposals, selection of consultants and contractors, bid award, efforts to obtain funding, submittal of grant applications, and progress toward construction of the selected CIP. The semi-annual progress reports should include technical and financial information that demonstrates that the projects are moving ahead in a timely manner and shall identify any problems encountered that may affect progress. The semi-annual progress reports shall describe all interim measures being implemented to maximize compliance with Order No. R1-2013-0029, including, but not limited to, outreach and education, special projects, O&M measures, user inspections, and monitoring.
3. Task Complete on June 17, 2009
4. Task Completed on July 2, 2014

3. The Permittee shall comply with the following interim effluent limitations for arsenic, copper, ammonia, DIN and CBOD in the interim period established by this Order for the Permittee to achieve compliance with final effluent limitations set forth in Order No. R1-2013-0029:

**Interim Effluent Limitations for Discharge Point 001**

| Parameter | Units | Annual Maximum | Average Daily | Maximum Daily Effluent Limitation |
|---|---|---|---|---|
| Arsenic, Total Recoverable | µg/L | --- | -- | 34.5 |
| Copper, Total Recoverable | µg/L | --- | -- | 26.1 |
| Ammonia, Total as N | mg/L | --- | -- | 35.0 |
| Dissolved Inorganic Nitrogen (DIN) | Metric tons | -- | -- | -- |
| | kg | -- | 38.2 | -- |
| Carbonaceous biochemical oxygen demand (CBOD) | Metric tons | -- | -- | -- |
| | kg | -- | 61.3 | -- |

4. In the interim period for the Permittee to achieve full compliance with Order No. R1-2013-0029, the Permittee shall operate and maintain, as efficiently as possible, all facilities and systems necessary to comply with all prohibitions, effluent limitations, and requirements identified in Order No. R1-2013-0029 or any future waste discharge requirements issued for the Facility.

5. To the extent that it does not affect the final compliance date in Requirement 2, above, if, for any reason, the Permittee is unable to perform any activity or submit any documentation in compliance with the deadlines set forth in Requirement 2 above, the Permittee may request, in writing, that the Regional Water Board grant an extension of the time, up to 5 years from the permit adoption date. The extension request shall include justification for the delay and be submitted 30 days prior to the deadline that the Permittee is requesting to extend. An extension that does not affect the final compliance date for achieving compliance within a five year time period from the permit adoption date may be granted by the Regional Water Board Executive Officer for good cause, in which case this Order will be accordingly revised in writing.

6. Pursuant to § 13385(j)(3)(C)(ii)(II), as currently drafted, following a public hearing, and upon a showing that the Permittee is making diligent progress toward bringing the waste discharge into compliance with the final effluent limitations in Waste Discharge Requirements Order No. R1-2013-0029, the Regional Water Board may extend the compliance schedule for an additional period not exceeding five years in length from the permit adoption date, if the Permittee demonstrates that the additional time is necessary to comply with the effluent limitations.

7. If the Executive Officer of the Regional Water Board finds that the Permittee fails to comply with the provisions of this Order, the Executive Officer may take all actions

authorized by law, including referring the matter to the Attorney General for judicial enforcement or issuing a complaint for administrative civil liability pursuant to Water Code §§13350 and 13385. The Regional Water Board reserves the right to take any enforcement actions authorized by law.

CERTIFICATION

I, Matthias St. John, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on October 9, 2014.

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Matthias St. John
Executive Officer

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