CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2014-0158
REQUIRING THE UNITED AUBURN INDIAN COMMUNITY
THUNDER VALLEY CASINO WASTEWATER TREATMENT PLANT
PLACER COUNTY

TO COMPLY WITH WASTE DISCHARGE REQUIREMENTS PRESCRIBED
IN ORDER R5-2010-0005 AND SUBSEQUENTLY ADOPTED ORDERS
(NPDES PERMIT NO. CA0084697)

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

1. The United Auburn Indian Community (hereafter Discharger), owns and operates the Thunder Valley Casino Wastewater Treatment Plant (hereafter Facility). On 28 January 2010, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2010-0005, prescribing waste discharge requirements for the Facility and accompanying Time Schedule Order R5-2010-0006 granting compliance time schedules and interim limits.

2. WDR Order R5-2010-0005 section IV.A.1.a contains Final Effluent Limitations which read, in part, as follows:

**Table 4. Final Effluent Limitations**

| Parameter | Units | Effluent Limitations | | | | |
|---|---|---|---|---|---|---|
| | | Average Monthly | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
| ***Priority Pollutants*** | | | | | | |
| Cadmium, Total Recoverable | µg/L | 0.05 | -- | 0.10 | -- | -- |
| Lead, Total Recoverable | µg/L | 0.05 | -- | 0.10 | -- | -- |
| Zinc, Total Recoverable | µg/L | 10 | -- | 20 | -- | -- |

3. Time Schedule Order R5-2010-0006, contained interim limitations for cadmium, lead, and zinc as follows:

| Parameter | Units | Maximum Daily Effluent Limitation |
|---|---|---|
| Cadmium, Total Recoverable | µg/L | 0.75 |
| Lead, Total Recoverable | µg/L | 3.4 |
| Zinc, Total Recoverable | µg/L | 277 |

**Need for Time Schedule Extension and Legal Basis**

4. On 26 October 2009, the Discharger submitted an infeasibility report requesting additional time to comply with the final effluent limitations for cadmium, lead, and zinc. TSO R5-2010-0006, included a time schedule requiring full compliance with the final effluent limitations for cadmium, lead, and zinc by 1 January 2015. The Discharger's submittals included: (a) documentation that diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream; (b) documentation of source control measures and/or pollution minimization measures efforts currently underway or completed; and (c) a proposal for additional or future source control measures, pollutant minimization actions, or waste treatment (i.e., Facility upgrades) with projected time schedules to achieve compliance with final effluent limitations.

5. On 28 January 2011, the Discharger submitted the Pollution Prevention Plan (PPP). Activities within the casino that generate wastewater include domestic uses in the hotel, toilet flushing, and restaurant activities. There are no industrial activities at the site and all cleaning products are routinely screened by Facility staff to minimize impacts to effluent quality and permit compliance. The average hardness for the source water for the site and Facility is very low at 9.4 mg/L as $CaCO_3$. The source water is also moderately to highly aggressive, with an average Langelier Saturation Index (LSI) of -1.53. The LSI indicates whether the water will precipitate, dissolve, or be in equilibrium with $CaCO_3$. Water with an LSI < 0 tends toward increased abilities to dissolve $CaCO_3$. Based on the results of the evaluation of the first three control measures, leaching of metals from the potable water distribution piping and appurtenances appears to be a significant source of cadmium, lead, and zinc in the effluent.

6. The Discharger has completed evaluation of three Control Measures: 1) source reduction, 2) wastewater metals precipitation, and 3) potable water distribution treatment. Source reduction sampling and analysis and source investigation were completed in 2012. The on-site fire station was identified as having higher effluent concentrations of cadmium, lead, and zinc when compared with other on-site sources. Wastewater metals precipitation evaluation in 2011 included bench testing, which indicated that precipitation of wastewater metals was ineffective. Potable water distribution treatment was completed in early 2012 and involved the dosing of a chemical to coat the piping to reduce leaching of metals. Stannous chloride was initially selected to coat the piping, however, it is no longer approved by the NSF (National Science Foundation). Other chemicals were researched including a trial of orthophosphate to mitigate the corrosive effects of the potable water source on distribution piping.

7. Control Measure 4) Hardness Adjustment is currently being evaluated and consists of two parts; 4a) involves the ongoing Blended Water Supply investigation and 4b) involves hardness adjustment with CBA-45, which was pilot tested in July and August 2013. The intent was to increase the hardness of the potable water by chemical addition to reduce corrosivity on piping and improve Facility performance. CBA-45 is a custom blended alkali which was applied at varying dosages into 55 gallon samples of source water and/or blended water. Test results indicate that pH increases significantly with dosage of CBA-45. With an effluent pH upper limit of 8.5, the modest gain in hardness achieved by bringing the water source close to that pH limit does not appear to be an effective means of hardness control, and increases the risk of exceeding the pH limit.

8. Control Measure 4a) Blended Water Supply evaluation started in January 2013 and is ongoing. This control measure tests a blended water supply of up to 15% well water with 85% Placer County Water Agency water. The Discharger monitors four locations for temperature, pH, EC and total hardness as $CaCO_3$, along with cadmium, lead, and zinc. For zinc and lead, the results indicate a downward trend in concentrations, indicating that an increase in source water hardness may have a beneficial

effect on leaching of zinc and lead in the water system. The results for cadmium were mixed and the Discharger reports that additional data will be collected.

9. In the most recent Progress Report, dated June 2014, the Discharger submitted an updated schedule for cadmium, lead, and zinc compliance with final effluent limitations. The Discharger has requested time to complete the study of the blended water supply, conduct a water effects ratio study if necessary, and, conduct a pilot test of the Effluent Polishing System and then design and construct the Effluent Polishing System if necessary.

**Mandatory Minimum Penalties**

10. California Water Code sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMPs) upon dischargers that violate certain effluent limitations. California Water Code section 13385(j)(3) exempts the discharge from mandatory minimum penalties "*where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300 or 13308, if all the* [specified] *requirements are met...for the purposes of this subdivision, the time schedule may not exceed five years in length...*".

11. Per the requirements of California Water Code section 13385(j)(3), the Central Valley Water Board finds that:

    a. This Order specifies the actions that the Discharger is required to take in order to correct the violations that would otherwise be subject to California Water Code sections 13385(h) and (i).

    b. To comply with final effluent limitations for cadmium, lead, and zinc, the Discharger proposed to complete a study on blending the water supply and to conduct a water effects ratio study if needed. If operational changes and the WER study do not result in compliance with the final effluent limitations for cadmium, lead, and zinc, the Discharger proposes to conduct pilot testing of an effluent polishing system and then design and construct the system, if needed and feasible.

    c. This Order establishes a time schedule to bring the waste discharge into compliance with the final effluent limitations that is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the final effluent limitations. The Central Valley Water Board finds, as described in previous findings in this Order, that the Discharger has demonstrated due diligence and is making diligent progress to bring the waste discharge into compliance with final effluent limitations.

12. Per the requirements of Water Code Section 13385(j)(3)(C)(ii)(I) for the purposes of treatment facility upgrade, the time schedule shall not exceed 10 years. Per the requirements of Water Code Section 13385(j)(3)(C)(ii)(II) following a public hearing, and upon a showing that the Discharger is making diligent progress toward bringing the waste discharge into compliance with the effluent limitations, the Central Valley Water Board may extend the time schedule for an additional five years beyond the initial five years, if the Discharger demonstrates that the additional time is necessary to comply with the effluent limitations.

13. Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of the final effluent limitations found in WDR Order R5-2010-0005, and in subsequently adopted orders, as follows:

    a. Cadmium, Lead, and Zinc: Previous TSO R5-2010-0006, provided protection from MMPs from **28 January 2010** until **5 December 2014**, for a period of 4 years, 11 months, and 7 days. This Order provides protection from MMPs from **5 December 2014** until **31 December 2016** (or **31 December 2017** if an effluent polishing system is constructed) for an additional period of 2 years and 26 days (or an additional period of 3 years and 26 days if an effluent polishing system is constructed).

14. In accordance with Water Code section 13385(j)(3), the total length of protection from MMPs for cadmium, lead, and zinc does not exceed ten years from the date the effluent limitations became applicable to the waste discharge.

15. The interim effluent limitations for cadmium, lead, and zinc established in the previous TSO R5-2010-0006 are based on the treatment plant performance and are carried forward in this Order as interim average monthly effluent limitations (AMELs). The interim maximum daily effluent limitations (MDELs) in this Order for these constituents were established in accordance with section 1.4, Table 2 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP), by multiplying the interim AMELs by the MDEL/AMEL multiplier.

16. The Central Valley Water Board finds that the Discharger can maintain compliance with the interim effluent limitations included in this Order. Interim effluent limitations are established when compliance with the final effluent limitations cannot be achieved by the existing Facility. Discharge of constituents in concentrations in excess of the final effluent limitations, but in compliance with the interim effluent limitations, can significantly degrade water quality and adversely affect the beneficial uses of the receiving stream on a long-term basis. The interim effluent limitations, however, establish enforceable ceiling concentrations until compliance with the final effluent limitations can be achieved.

17. If an interim effluent limitation contained in this Order is exceeded, then the Discharger is subject to MMPs for that particular exceedance as it will no longer meet the exemption in CWC 13385(j)(3). It is the intent of the Central Valley Water Board that a violation of an interim monthly effluent limitation subjects the Discharger to only one MMP for that monthly averaging period. In addition, a violation of an interim daily maximum effluent limit subjects the Discharger to one MMP for the day in which the sample was collected.

## Other Regulatory Requirements

18. Water Code section 13300 states: "*Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements*."

19. Water Code section 13267 states in part: *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.*

20. The Discharger owns and operates the wastewater treatment facility which is subject to this Order. The technical and monitoring reports required by this Order are necessary to determine compliance with the WDR Order R5-2010-0005, subsequently adopted orders, and with this Order.

21. 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. City Council of City 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, title 14, section 15321, subdivision (a)(2).

22. On 14 August 2014, the Central Valley Water Board notified the Discharger, and interested agencies and persons, of its intent to adopt a new Time Schedule Order for this discharge and provided them with an opportunity to submit their written views and recommendations. Pursuant to Water Code section 13167.5 for a time schedule order adopted pursuant to Water Code section 13300, comments were due 15 September 2014, which is at least a 30-day public notice and comment period. No comments were received by the Central Valley Water Board on the proposed time schedule order.

**IT IS HEREBY ORDERED THAT:**

Time Schedule Order R5-2010-0006 is rescinded, except for enforcement purposes, and pursuant to California Water Code Sections 13300 and 13267:

1. The Discharger shall comply with the following time schedule to ensure compliance with the final effluent limitations for cadmium, lead, and zinc contained in WDR Order R5-2010-0005, and subsequently adopted orders, as described in the above findings:

| Task | Compliance Date |
|---|---|
| Submit technical report containing the results of the Blended Water Supply Study | **1 April 2015** |
| Submit technical report containing the results of the Additional Investigation of Dosing Approaches with CBA-45 | **1 October 2015** |
| Submit updated Pollution Prevention Plan for cadmium, lead, and zinc | **1 January 2016** |
| Submit technical report containing the results of the Water Effects Ratio Study<br>and<br>Submit summary of Proposed Control Measures, if measures completed to date do not achieve compliance | **1 October 2016** |
| Full compliance with the cadmium, lead, and zinc final effluent limits.<br>or<br>Submit work plan for Pilot Testing of Effluent Polishing System | **1 January 2017** |
| Submit technical report containing the results of the Pilot Testing of the Effluent Polishing System with proposed treatment plant upgrade and projected time schedule | **1 April 2017** |
| Full Compliance with the cadmium, lead, and zinc final effluent limitations | **1 January 2018** |

2. The following interim effluent limitations shall be effective **immediately and until 1 January 2017** (or **1 January 2018** if treatment plant upgrade is needed) , or when the Discharger is able to come into compliance, whichever is sooner:

| Parameter | Units | Maximum Daily Effluent Limitation | Average Monthly Effluent Limitation |
|---|---|---|---|
| Cadmium, Total Recoverable | µg/L | 1.5 | 0.75 |
| Lead, Total Recoverable | µg/L | 6.8 | 3.4 |
| Zinc, Total Recoverable | µg/L | 567 | 277 |

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

   *"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

4. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified

professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain the professional's signature and/or stamp of the seal.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with the WDRs may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

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 Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

I, PAMELA C. CREEDON, 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 **5 December 2014**.

*Original signed by*

PAMELA C. CREEDON, Executive Officer