

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

Office
73-720 Fred Waring Dr. #100
Palm Desert, CA 92260

WaterBoards.ca.gov/Coloradoriver/

PROPOSED ORDER R7-2020-0019-1



Order Information

| | |
|--------------------------|--|
| Dischargers: | Imperial Irrigation District |
| Facility: | El Centro Generating Station |
| Address: | 485 East Villa Road, El Centro, CA 92243 |
| County: | Imperial County |
| WDID: | 7A130128003 |
| Related Order(s): | R7-2020-0006 (NPDES No. CA0104248) |

I, PAULA RASMUSSEN, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on July 9, 2020, and amended on August 31, 2023.

Original Signed By

PAULA RASMUSSEN
Executive Officer

Contents

| | |
|---|---|
| Proposed ORDER R7-2020-0019-1 | 1 |
| Findings | 1 |
| Need for Time Schedule and Legal Basis..... | 3 |
| Mandatory Minimum Penalties..... | 5 |
| CEQA and Public Participation | 5 |
| IT IS HEREBY ORDERED | 5 |
| A. Interim Effluent Limitations..... | 5 |
| B. Interim Milestone Requirements..... | 6 |
| C. General Provisions..... | 7 |

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

PROPOSED ORDER R7-2020-0019-1

TIME SCHEDULE ORDER
REQUIRING COMPLIANCE WITH ORDER R7-2020-0006 (NPDES NO. CA0104248)
FOR
IMPERIAL IRRIGATION DISTRICT, OWNER/OPERATOR
EL CENTRO GENERATING STATION
IMPERIAL COUNTY

The California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board) hereby makes the following

Findings:

1. The Imperial Irrigation District (Discharger) owns and operates the El Centro Generating Station (Facility), a gas and oil-fired power plant located at 485 East Villa Road, El Centro, CA 92243, in Imperial County.
2. The Facility is a steam electric generating facility that provides immediate and base load electrical power to serve the Imperial Valley. Electricity is produced utilizing three steam turbine generators and three gas turbine generators, with a total of four generating units. The total capacity of the Facility is 347 megawatts, and power generating units are primarily natural gas-fired.
3. All power generating units are cooled using water circulated through unit-specific cooling towers. The Facility utilizes three cooling towers, five fuel storage tanks, and six raw water storage/settling basins. Colorado River water via the Dogwood Canal is used to provide water for cooling and other Facility operations. The Facility's water/wastewater treatment components consist of a lift station, a coarse screen, a bar screen, an aerated lagoon system with four cells, a chlorine disinfection, and a dechlorination system.
4. The Facility has a potential to discharge a maximum of 0.995 million gallons per day (MGD) of industrial cooling water (i.e., commingled cooling tower blowdown, reverse osmosis reject water, and evaporative cooling water) to Central Drain No. 5, which flows to the Alamo River and then into the Salton Sea, a water of the United States.
5. On June 26, 2014, the Colorado River Basin Water Board adopted Waste Discharge Requirements (WDRs) Order R7-2014-0005, NPDES No. CA0104248 (2014 WDRs) to regulate discharges of industrial wastewater from the Facility. The 2014 WDRs did not include numeric effluent limitations for lead or thallium.

6. On January 16, 2020, the Colorado River Basin Water Board adopted WDRs Order R7-2020-0006, NPDES No. CA0104248 (2020 WDRs) to replace the 2014 WDRs and to continue to regulate discharges of industrial wastewater from the Facility. The 2020 WDRs include effluent limitations for copper, lead, selenium, thallium, and zinc delineated in Table 4 of Section IV.A.1, Effluent Limitations and reproduced in relevant part below:

Table 1. 2020 WDRs Effluent Limitations

| Parameter | Units ¹ | Average Monthly | Maximum Daily |
|-----------------------------|--------------------|-----------------|---------------|
| Copper, Total Recoverable | µg/L | 17.5 | 42.9 |
| Copper, Total Recoverable | lbs/day | 0.145 | 0.356 |
| Lead, Total Recoverable | µg/L | 11.8 | 23.7 |
| Lead, Total Recoverable | lbs/day | 0.098 | 0.197 |
| Selenium, Total Recoverable | µg/L | 3.6 | 9.2 |
| Selenium, Total Recoverable | lbs/day | 0.299 | 0.076 |
| Thallium, Total Recoverable | µg/L | 6.3 | 12.6 |
| Thallium, Total Recoverable | lbs/day | 0.05 | 0.11 |
| Zinc, Total Recoverable | µg/L | 123.3 | 327.8 |
| Zinc, Total Recoverable | lbs/day | 1.02 | 2.72 |

7. The final effluent limitations specified in the 2020 WDRs for copper, lead, selenium, thallium, and zinc are based on implementation of the California Toxics Rule (CTR). The effluent limitations for lead and thallium are new limitations that were not prescribed in the 2014 WDRs. The effluent limitations for copper, selenium, and zinc are more stringent than those previously required under the 2014 WDRs.
8. On March 12, 2020, the Discharger requested a Time Schedule Order (TSO) from the Colorado River Basin Water Board to allow sufficient time to bring the Facility into compliance with the lead, thallium, copper, selenium, and zinc effluent limitations in the 2020 WDRs.
9. On April 28, 2020, the Colorado River Basin Water Board received a letter from the Discharger clarifying its request for a TSO, which included a more detailed

¹ The mass-based effluent limitations are based on a design capacity of 0.995 MGD.

implementation plan for achieving compliance with the final effluent limitations in the 2020 WDRs.

10. On May 5, 2023, the Discharger reported that they would not be able to meet interim milestones 4 and 5 and requested additional time. The Discharger encountered unanticipated events that threaten the ability to meet the referenced the milestones. The first event is the lead agency responsible for the CEQA study changed from Imperial County to the Discharger. The CEQA process adds four to six months for public review, comment period, and adoption which the Discharger did not include in the original timeline for the TSO in 2020. The second event is the consideration of the Yucca IID steam unit being retired, which will increase the energy production requirement at the El Centro Generating Station. The increased energy production requires a redesign of the control strategy and compliance project for the new operations.

The Discharger requested the milestone deadline to “Obtain construction approval of project”, originally set at 8/31/2023 be extended seven months to 3/31/2024. The second milestone, “Complete the Pollution Prevention Plan and construction of the project”, originally had a deadline of 12/31/2024. This deadline will now be extended two months to 3/1/2025. The final milestone, which includes coming into full compliance with Order R7-2020-0006, will not be extended, that deadline will remain at 4/1/2025.

Need for Time Schedule and Legal Basis

11. Water Code section 13300 provides: “Whenever a regional [water] 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 [water] board...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.”
12. In accordance with Water Code section 13385(j)(3)(A), this time schedule order (TSO) is issued after July 1, 2000, pursuant to Water Code section 13300 and specifies actions the Discharger is required to take to correct actual or threatened violations of the effluent limitations for copper, lead, selenium, thallium, and zinc in the 2020 WDRs.
13. In accordance with Water Code section 13385(j)(3)(B), the Colorado River Basin Water Board finds that, based upon results of effluent monitoring, the Discharger is or will be unable to consistently comply with the new effluent limitations for copper, lead, selenium, thallium, and zinc established in the 2020 WDRs. These limitations are based on new requirements that became applicable after the effective date of the 2020 WDRs and after July 1, 2000, for which new or modified control measures are necessary in order to comply with the limitations, and new or modified control measures cannot not be designed, installed, and put into operation within 30 calendar days.

14. The 2020 WDRs include more stringent average monthly effluent limitations for copper, selenium, and zinc. Additionally, there are new effluent limitations for lead and thallium. The Discharger has indicated that it cannot design, install, and put into operation new or modified control measures for these pollutants within 30 calendar days.
15. The Discharger proposes to develop a pollutant minimization/prevention plan, pursuant to which the Discharger will conduct feasibility analyses to assess potential solutions to decrease concentrations of copper, lead, selenium, thallium, and zinc in the Facility's effluent. These potential solutions include, but are not limited to: advanced water treatment(s) such as biological treatment or conventional treatment; zero discharge options such as improvements to existing infrastructure, basin expansion, and/or evaporation ponds; and a potential agreement with the City of El Centro to accept the Facility's wastewater. Once the feasibility analyses are completed and selection of a preferred compliance pathway is made, the project to implement the selected solution will need to be designed and constructed. Accordingly, the Discharger has proposed the time schedule listed in Table 3 for achieving compliance by April 1, 2025 with the final effluent limitations for copper, lead, selenium, thallium, and zinc in the 2020 WDRs.
16. In accordance with Water Code section 13385(j)(3)(C), this TSO establishes a time schedule of no more than five years for bringing the waste discharge into compliance with the final effluent limitations for copper, lead, selenium, thallium, and zinc in the 2020 WDRs. The time schedule 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 necessary to comply with the effluent limitations.
17. In accordance with Water Code section 13385(j)(3)(D), the Colorado River Basin Water Board requires the Discharger to prepare a pollution prevention plan under Water Code section 13263.3 in a timely manner. A pollution prevention plan is necessary for lead, thallium, copper, selenium and zinc in order to effectively reduce the effluent concentrations by source control measures.
18. Because the time schedule to complete the actions in this TSO exceeds one year, this TSO includes interim effluent limitations and interim requirements and dates for their achievement. The interim average monthly and maximum daily effluent limitations for copper, lead, selenium, thallium, and zinc are based on plant performance data, reference data from representative wastewater treatment facilities, California drinking water guidelines, and best professional judgment.
19. Pursuant to Water Code section 13267, this TSO requires the Discharger to submit regular progress reports to the Colorado River Basin Water Board. The technical and monitoring reports required by this TSO are necessary to demonstrate compliance with the WDRs and time schedule in this Order. The burden, including

costs, of the reports bears a reasonable relationship to the need for that information and the benefits to be obtained from that information.

Mandatory Minimum Penalties

20. Water Code section 13385, subdivisions (h) and (i) require the Colorado River Basin Water Board to impose mandatory minimum penalties (MMPs) on dischargers for violations of certain effluent limitations. Water Code section 13385(j)(3) exempts certain discharges from MMPs where the waste discharge complies with a TSO issued pursuant to section 13300 and other requirements are met.
21. Compliance with this TSO exempts the Discharger from MMPs until April 1, 2025 for violations of the final effluent limitations for lead, thallium, copper, selenium and zinc found in the 2020 WDRs.
22. Compliance with the time schedule in this TSO includes compliance with the interim effluent limitations in Table 2 for copper, lead, selenium, thallium, and zinc. If an interim effluent limitation contained in this TSO is exceeded, then the Discharger is subject to MMPs for that particular exceedance, as it will no longer meet the exemption in Water Code section 13385(j)(3).

CEQA and Public Participation

23. Issuance of this TSO 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 an NPDES permit for an existing source is statutorily exempt and this TSO only serves to implement an NPDES permit. This TSO is also exempt from CEQA pursuant to California Code of Regulations, title 14, section 15321.
24. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to adopt a TSO for the discharge and has provided them with an opportunity to for a public meeting and to submit comments.
25. The Colorado River Basin Water Board, in public meeting, heard and considered all comments pertaining to this TSO.

IT IS HEREBY ORDERED pursuant to Water Code sections 13300 and 13267 and to ensure compliance with Order R7-2020-0006, the Discharger shall comply with the following:

A. Interim Effluent Limitations

1. The Discharger shall comply with the following interim effluent limitations, effective immediately:

Table 2. Interim Limitations

| Parameter | Units | Average Monthly | Maximum Daily |
|---|-------|-------------------|------------------|
| Copper ² , Total Recoverable | µg/L | 200 | 200 |
| Lead, Total Recoverable | µg/L | 14 ³ | --- ⁴ |
| Selenium ³ , Total Recoverable | µg/L | 20 | 20 |
| Thallium, Total Recoverable | µg/L | 10.5 ³ | --- ⁴ |
| Zinc, Total Recoverable | µg/L | 310 ³ | --- ⁴ |

2. The interim effluent limitations listed in Table 2 for copper, lead, selenium, thallium, and zinc shall be effective upon adoption of this TSO and apply in lieu of the corresponding final effluent limitations in Order R7-2020-0006.
3. The interim effluent limitations in Table 2 are effective until April 1, 2025, or until the Discharger is able to come into compliance with the final effluent limitations in Order R7-2020-0006, whichever is sooner.
4. The Discharger shall achieve full compliance with the final effluent limitations in Order R7-2020-0006 no later than April 1, 2025.

B. Interim Milestone Requirements

1. The Discharger shall take specific actions as indicated in the following time schedule in order to achieve compliance with the final effluent limitations for lead, thallium, copper, selenium, and zinc contained in Order R7-2020-0006.

Table 3. Milestones

| Task | Deadline |
|--|------------|
| Develop a Pollutant Prevention Plan including Feasibility Study to research potential remedies | 11/01/2020 |

² Based on the interim limit set in Cease and Desist Order R7-2011-0044.

³ Based on the 95th percentile value of reported concentrations in the effluent in the 2014 WDRs monitoring requirements.

⁴ The final effluent limitation included in Order R7-2020-0006 is applicable.

| Task | Deadline |
|---|---------------------------------------|
| Complete Feasibility Study and select a project for final remedy | 12/31/2021 |
| Complete project design | 12/31/2022 |
| Obtain construction approval for project | 8/31/2023 <u>3/31/2024</u> |
| Complete the Pollution Prevention Plan and construction of the project | 12/31/2024 <u>3/1/2025</u> |
| Full implementation of control strategy to comply with lead, thallium, copper, selenium and zinc effluent limitations | 4/1/2025 |

2. Quarterly progress reports are due on February 1, May 1, August 1, and November 1 of each year. Quarterly progress reports shall include a description of work completed pursuant to this TSO and if appropriate, photographic documentation. The first progress report under this TSO shall be received at the Colorado River Basin Water Board by November 1, 2020 and will cover the third quarter of 2020.

C. General Provisions

1. All other provisions of Order R7-2020-0008 not in conflict with this TSO remain in effect.
2. 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 California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans, describe the conduct of investigations and studies, or 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 a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
3. Any person signing a document submitted under this TSO shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons

who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

4. The Colorado River Basin Water Board may reopen this TSO at its discretion or at the request of the Discharger, if warranted. Lack of progress towards compliance with the requirements in the TSO may be cause for the Colorado River Basin Water Board to modify the conditions in this TSO.
5. The Colorado River Basin Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this TSO or the 2020 WDRs may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to sections 13268, 13350, and 13385, or referral to the California Attorney General for recovery of judicial civil liability.

Any person aggrieved by this Regional Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30th day after the date of this Order; if the 30th day 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 statutes and regulations applicable to filing petitions are available on the State Water Board’s website and can be provided upon request.