

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER R5-2019-0025

AMENDING WASTE DISCHARGE REQUIREMENTS  
FOR OIL FIELD PRODUCED WATER RECLAMATION PROJECTS

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

1. The following entities are dischargers of oil field produced water (produced water or discharge) or suppliers of produced water for the irrigation of crops (herein collectively and individually referred to as “Dischargers” or “Permit Holders”) and are allowed to discharge according to the following Waste Discharge Requirements Orders (WDRs) adopted by the Central Valley Water Board:

<u>Permit Holder(s)</u>	<u>Order Number</u>
a. California Resources Production Corporation and North Kern Water Storage District	WDRs Order R5-2015-0127
b. Hathaway, LLC, Kern-Tulare Water District, and Jasmin Ranchos Mutual Water Company	WDRs Order 98-205
c. California Resources Production Corporation and Cawelo Water District	WDRs Order R5-2012-0059
d. Chevron USA, Inc., and Cawelo Water District	WDRs Order R5-2012-0058

2. In California’s Central Valley, produced water has been used to irrigate crops grown for human consumption for more than 30 years. The produced water is treated and blended with traditional water sources and is currently used to irrigate over 95,000 acres of cropland in California’s southern San Joaquin Valley, an area with limited precipitation. This practice has not been shown to be a threat to public health.
3. In the interest of minimizing the risk to public safety and maintaining consumer confidence in crops irrigated with produced water, the Central Valley Water Board began an investigation into the practice of using produced water to grow crops for human consumption (Food Safety Project). Since food safety is outside of the traditional expertise of the Central Valley Water Board, Board staff convened a Food Safety Expert Panel (Panel) that includes experts in public health, toxicology, epidemiology, environmental science, and agriculture that could lend their expertise to the Central Valley Water Board’s decision making.
4. As part of the Food Safety Project and with input from the Panel, the Central Valley Water Board in June 2017 entered into a Memorandum of Understanding Between the Board and Permit Holders [see Finding No. 1] Governing the Solicitation, Management and Review of Academic, Technical and/or Scientific Studies Related to the Irrigation of Food Crops with Oil Field Produced Water. Under the MOU, Central Valley Water Board staff, primarily through the Manager (Assistant Executive Officer in the Fresno Office), oversee and manage the technical work of consultants funded by the Permit Holders. The Permit Holders have chosen an Administrator, the General Manager of Cawelo Water District, to coordinate for the Permit Holders with the Central Valley Water Board’s Manager. Scopes

of work for three Tasks have been developed and implemented by the MOU participants. Task Three is the sampling of food crops for constituents of concern.

5. In 2017 and 2018, as a part of the Food Safety Project, under the Scope of Work for Task 3, crops grown with produced water were sampled and analyzed for a variety of oil production additives and naturally occurring constituents. The goal of the crop study portion of the Food Safety Project is to investigate whether constituents are accumulating in the crops in concentrations that may pose a threat to public health and/or present a condition of contamination. Under the MOU and Scope of Work for Task 3, crop samples are to be collected and analyzed for selected constituents by a third party with oversight from Central Valley Water Board staff. This is to ensure that the study results are not influenced by those generating or using the produced water.
6. Preliminary results of the sampling do not suggest that irrigating crops with produced water pose a threat to public health and/or condition of contamination. However, the ongoing crop sampling is being conducted to provide a robust data set for the final recommendations and conclusions of the study to be based on. It is important that crop sampling be conducted in a thorough, consistent, timely, and scientific manner to ensure accurate, defensible results. It is reasonable to implement measures to ensure, that the Permit Holders are adequately engaged and that the studies required by the MOU are carried out in an efficient manner.
7. The WDRs Orders listed in Finding No. 1 prohibit discharges regulated under those orders from causing nuisance or pollution. Contamination is a subset of pollution. Water Code section 13050 (k) states:

“Contamination” means an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. “Contamination” includes any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected.
8. Water Code section 13263 grants the Central Valley Water Board the authority to prescribe waste discharge requirements “as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge ... with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.”
9. This Order modifies existing WDRs Orders for the generators and users of produced water to ensure that necessary studies are conducted in a thorough, consistent, timely, and scientific manner and to ensure accurate, defensible results, and to confirm that ongoing discharge practices pose no threat to public health and the environment. The issuance of this Order is exempt from the provisions of the California Environmental Quality Act (CEQA) in accordance with California Code of Regulations, title 14, section 15301, which exempts the “operation, repair, maintenance, [and] permitting ... of existing public or private structures, facilities, mechanical equipment, or topographical features” from environmental review. This action may also be considered exempt because it requires “...basic data collection, research, experimental management, and resource evaluation

activities which do not result in a serious or major disturbance to an environmental resource,” (Cal. Code Regs., tit. 14, § 15306.) and is an action by a regulatory agency for the protection of the environment (Cal. Code Regs., tit. 14, § 15308.).

10. All the above, which is incorporated herein, were considered in establishing the following conditions of the discharge.
11. The Dischargers and interested agencies and persons have been notified of the intent to amend the WDRs Orders listed in Finding No. 1, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
12. All comments pertaining to the discharge were heard and considered in a public hearing.

IT IS HEREBY ORDERED that, pursuant to Water Code section 13263, the Waste Discharge Requirements Orders listed in Finding No. 1 above are amended to include the following Provision:

[Requirement No. sequentially consistent with existing Waste Discharge Requirements Orders listed in Finding No. 1]. The Discharger shall comply with the following:

- a. The Discharger shall be fully engaged in the Food Safety Project, as envisioned in the MOU signed in June 2017, and shall provide to the Manager and Administrator in a timely manner information that they may request to ensure the timely completion of the crop sampling under Task 3, including but not limited to, the following:
  - i. The Discharger shall, on an annual basis by 1 January, submit a list of all crops that are irrigated with produced water within its service area. The list shall include a description of the anticipated time of harvest for each crop.
  - ii. The Discharger shall provide notification to the Manager and Administrator at least two weeks prior to harvest of any and all crops that are or have been irrigated with water that could contain produced water. The notification shall include the type of crop and anticipated harvest date. The Discharger shall work with the Administrator and the crop owners to obtain access and ensure that representative samples of the crops can be obtained by the third-party sampler under Central Valley Water Board oversight.
- b. As directed by the Manager, the Discharger shall participate in Tasks 1, 2, and 3, as agreed upon in the MOU, including timely responses to inquiries by the Administrator and Manager.
- c. If one of the Dischargers listed in Finding No. 1 does not comply with any part of the above provisions, then the Manager at his discretion, may bring to the Central Valley Water Board for consideration an Order prohibiting the use of produced water for irrigation for that Discharger.

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 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](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or will be provided upon request.

I, PATRICK PULUPA, 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 on, 5 April 2019.

*Original Signed By*

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PATRICK PULUPA, Executive Officer