

ITEM: 21

SUBJECT: California Resources Production Corporation and North Kern Water Storage District, Oil Field Produced Water Reclamation Project, Kern County

BOARD ACTION: *Consideration of new Waste Discharge Requirements*

BACKGROUND: The California Resources Production Corporation (CRC) generates oil field produced water (produced water) from about 850 oil production wells in the Kern Front Oil Field. The North Kern Water Storage District (District) manages groundwater storage underlying the District, and uses imported surface water (Kern River) and pumped groundwater for irrigation. The District and CRC are proposing to use treated produced water from CRC's Kern Front Oil Field leases for crop irrigation and groundwater recharge purposes within the District.

The project will provide an average of 58 acre feet per day (ac-ft/day) or about 21,200 acre feet per year (ac-ft/yr) of produced water to the District to blend with their other water supplies. The project includes a 2.5 mile, 24-inch pipeline to deliver produced water to the District, the use of several existing canals for blending and delivery of the produced water for irrigation, and five spreading basins for groundwater recharge.

Under the tentative WDRs, CRC and the District implement the following treatment or control measures to minimize the potential for the discharges to degrade groundwater:

- Treatment of produced water to lower oil and grease concentrations in order to ensure that oil and grease are not present in the water that will be blended and used for irrigation and discharged to the spreading basins.
- Real-time monitoring of oil and grease concentrations in the treatment process to either divert out-of-specification produced water to other discharge methods (such as underground injection) or to recirculate the out-of-specification produced water for further treatment.
- Blending of produced water supplies so that the blended concentrations are protective of designated beneficial uses of the underlying aquifers.
- Use of water management practices and monitoring at the irrigation and groundwater recharge points of discharge to ensure that groundwater, surface water, and crops are protected.

ISSUES: Comments were received from CRC. Revisions were made to address some of the comments. Full responses to comments are included in the Response to Comments in the agenda package. A short summary of CRC's comments and Staff's responses follow:

1. CRC would prefer that the terms "wastes" and "wastewater" not be used in connection with their produced water, due to the fact that this water is beneficially reused. CRC also points out that the crude oil removed and

contained in tanks is not a “waste”.

Response: The Board recognizes that produced water is a critical part of the Central Valley’s water portfolio, particularly during times of extreme water scarcity. However, the terms “waste” and/or “wastewater” come from statutory and regulatory terminology in the Water Code, the California Code of Regulations (Titles 22, 23, and 27), and the Tulare Lake Basin Plan. To address CRC’s concerns, Board staff have left the wording as “treated oil field produced water”, but have abbreviated the term to “produced water” where appropriate.

The last sentence of Finding 60 of the proposed WDRs was modified to replace the words “these wastes” with “oil contained in the tanks.”

2. CRC states that the proposed WDRs misinterpret Senate Bill (SB) 4. CRC specifically states that Discharge Prohibitions A.4 and A.5 along with Provision E.13 should be modified to remove what it perceives as misinterpretation of SB-4.

Response: As detailed in the Response to Comments, the Board strives for consistency with the California Department of Conservation’s Division of Oil, Gas & Geothermal Resources’ (DOGGR) interpretation of their regulations. Board staff have made minor revisions to the WDRs in an attempt to address the concerns of CRC while maintaining consistency with DOGGR’s interpretation of the SB-4 regulations. Should DOGGR’s interpretation change, the WDRs could be amended accordingly.

RECOMMENDATION Adopt the proposed WDRs.

Mgmt. Review _____
Legal Review PEP
10/11 December 2015
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