

ITEM: 18

SUBJECT: Waste Discharge Requirements General Orders for Oil Field Discharges to Land within the Tulare Lake Basin

BOARD ACTION: *Consideration of New Waste Discharge Requirements General Orders*

BACKGROUND: The three proposed general orders were prepared to provide requirements for discharges of oilfield wastes to land in the Tulare Lake Basin. The general orders would regulate the discharge of produced wastewater to ponds, as dust control, and for construction activities. In addition, the general orders would regulate the use of solids generated at each facility as road mix within the production facility boundaries.

General Order One would apply to owners and/or operators (hereinafter referred to as “Dischargers”) of existing or new oil and gas production facilities that discharge produced wastewater that meets the maximum oil field discharge salinity limits for electrical conductivity, chloride, and boron contained in the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, Revised January 2015* (Basin Plan).

General Order Two would apply to Dischargers operating existing or new oil and gas production facilities that discharge produced wastewater that exceeds the maximum oil field discharge limits for electrical conductivity, chloride, and boron contained in the Basin Plan.

General Order Three would apply to Dischargers operating existing or new oil and gas production facilities that discharge produced wastewater that exceeds the maximum salinity limits of the Basin Plan and are located where first encountered groundwater is of poor quality or there is no first encountered groundwater, and the first encountered groundwater does not support beneficial uses as identified in Basin Plan as Municipal and Domestic Supply (MUN), or Agricultural Supply (AGR), or Industrial Service Supply (IND) or Industrial Process Supply (PRO).

General Orders One and Two require the discharge to be protective of beneficial uses and not to cause waste constituent concentrations to exceed water quality objectives. General Order Three contains provisions for the Discharger to obtain a Basin Plan amendment to remove designated beneficial uses from the groundwater in the vicinity of the facility, if appropriate.

All three general orders would require the Discharger to conduct hydrogeological investigations to characterize the groundwater quality in the area of each facility. Dischargers would also be required to characterize the wastewater effluent in ponds for oilfield constituents of concern and any identified chemicals used at that facility for petroleum production, petroleum processing, and facility maintenance. Each facility would be required to monitor groundwater, unless the Discharger can demonstrate that its waste discharge cannot affect water quality.

ISSUES: Comments on the Tentative General Orders were received from thirteen petroleum production companies and non-governmental organizations, including the Environmental Working Group and the Center for Biological Diversity. Full responses to the comments are included in the agenda package. Some major issues are described below:

1. The cost of compliance with the general orders is a concern that was included in the petroleum production companies' comments. They contend that the costs of installing a groundwater monitoring system, sampling the groundwater, and analyzing the samples are too high. The benefit derived from groundwater monitoring justifies the costs. The effects of waste discharge on water quality must be quantified if the discharge is to be meaningfully regulated.
2. The general orders contain a prohibition against discharge of produced wastewater from wells that have received a stimulation treatment such as hydraulic fracturing or acid matrix stimulation. A number of the petroleum companies commented that this prohibition will cause them to cease production from several wells. The prohibition was included in the general orders in accordance with a regulation promulgated by the California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR) found in California Code of Regulations, title 14, section 1761. The State Water Resources Control Board Office of Chief Counsel interprets this regulation as a strict prohibition on the discharge of produced wastewater from any well that has received a well stimulation treatment.
3. The Environmental Working Group and Center for Biological Diversity believe the ongoing discharges threaten water quality, human health and the environment. Both groups have concerns about whether chemicals added in oil field operations end up in produced wastewater. All three General Orders include requirements and monitoring to ensure that water quality is protected.
4. The Environmental Working Group and Center for Biological Diversity do not believe the General Orders adequately address the requirements of the California Environmental Quality Act (CEQA). The General Orders appropriately employ an existing facilities exemption for those facilities that were in operation prior to January 2015, some for many decades. New and expanding facilities are required to provide evidence of CEQA compliance prior to obtaining coverage under the General Orders.

RECOMMENDATION:

Staff recommends that the Board adopt the proposed Waste Discharge Requirements General Orders One, Two, and Three for Oil Field Discharges To Land as presented.

Mgmt. Review _____

Legal Review __SY__

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