

ITEM: 7

SUBJECT: Status Report on Oil Field Regulatory Program Activities–
Informational Item Only

BOARD ACTION: None: Informational item only.

BACKGROUND: The Central Valley Water Board's Oil Field Program oversees oil field waste disposal activities. These activities have consisted primarily of land discharges of produced water and enforcement actions related to spills. Staff work regularly with the Division of Oil, Gas, and Geothermal Resources (DOGGR) on addressing spills and provides comments on issues related to oilfield waste injection wells for which the DOGGR has primary permitting authority. Recently, concerns regarding hydraulic fracturing and the December 2013 expiration of the waiver of waste discharge requirements for oil well drilling mud sumps has heightened awareness of this program.

Historically, drilling mud and cuttings have been disposed of in a sump adjacent to the well in accordance with Resolution R5-2008-0182 (General Waiver). Staff has identified potential impacts to groundwater from additives to the drilling mud, particularly potassium chloride. The General Waiver expires in December 2013 and Staff is not proposing that wastes from oilfield drilling activities be included in readoption of this waiver.

Produced water, which accounts for about 95% of the fluids produced during oil well production (the other 5% is oil), was historically disposed of by discharge to dry stream channels or unlined surface impoundments (sumps). With the advent of the basin plans, surface disposal was restricted to produced waters that met specified salinity limits. There are currently about 85 WDRs regulating the discharge of produced water to approximately 475 sumps and 14 known unregulated sites. Most of these orders are old and are not consistent with current policies and regulations. Staff is in the process of revising the outdated WDRs and working with dischargers to terminate the discharges where not appropriate. Staff is also working on identifying any other unregulated discharges and will either terminate the discharge where not appropriate or issue WDRs. The Division of Oil, Gas, and Geothermal Resources (DOGGR) estimates there are about 400 unregulated sumps. Staff is working with DOGGR to identify the unregulated sumps.

Recently, there has been increased interest in well stimulation activities, such as hydraulic fracturing. These activities have

been performed for decades on oil wells within the Central Valley, but recent increases in these activities in other parts of the United States have been accompanied by reports of environmental impacts. Staff's primary concern is the discharge to land of these materials either because of flow-back during stimulation activities at the well or the improper discharge of spent or left over fluids. Because the geology of California is different than other parts of the United States where environmental impacts are thought to have occurred, the migration of fluids from zones being stimulated is thought to be less of a threat. The discharge of well stimulation fluids is not allowed under the General Waiver for drilling muds and cuttings because these are post drilling activities performed after the drilling muds have been removed from the borehole or well.

Staff is compiling information about oil wells drilled in the region since the beginning of 2012. This information is being assembled to provide a better picture of what activities are occurring and where. This information will allow Staff to evaluate current practices and better evaluate the potential impacts to groundwater quality. This will allow Staff to prioritize our actions to address the greatest threats first.

Staff is working with the State Water Board and the DOGGR on how to implement Senate Bill 4 (SB4). One of the issues being discussed is the monitoring of domestic and irrigation water supply wells.

RECOMMENDATION: Unless directed otherwise by the Board, staff is not proposing any specific action for this agenda item. Rather, Staff will continue to gather information on the threat to water quality posed by oil fields wastes, to identify and regulate discharges that pose a threat to water quality, and to work with the State Water Board and other responsible agencies to evaluate State regulatory efforts and develop adequate regulations where greater regulatory oversight is needed.