

**Note: This document has been prepared by the
Central Valley Water Board's Prosecution Team**

ITEM: 9

SUBJECT: E&B Natural Resources Management, Gov't Lease, Poso Creek Oil Field, Kern County

BOARD ACTION: *Consideration of a Cleanup and Abatement Order (CAO)*

BACKGROUND: E&B Natural Resources Management (hereinafter Discharger) operates a petroleum production wastewater discharge facility at its Gov't Lease in the Poso Creek Oil Field (Gov't Lease). The Gov't Lease is not regulated by Waste Discharge Requirements (WDRs) for the discharge of petroleum production wastewaters to ponds. The Discharger has not submitted a Report of Waste Discharge for the current discharge.

On 25 March 2015, the Central Valley Water Board (CVWB) issued a Notice of Violation (NOV) to the Discharger that was the result of an inspection conducted on 11 December 2014. During the inspection, wastewater was being discharged to the ponds. The NOV alleged that the discharge was in violation of Section 13260 of the California Water Code for failure to submit a Report of Waste Discharge before discharging waste that could affect the quality of waters of the State. A sample of the wastewater could not be collected during the inspection due to a layer of oil on top of the wastewater in the pond.

ISSUES: The Discharger contends that a Cleanup and Abatement Order requiring monitoring and waste characterization at the Gov't Lease is not necessary because:

- Discharger contends that it has conducted extensive monitoring and waste characterization;
- the ponds are not used in the day to day wastewater treatment operations;
- the quality of wastewater generated during oil field operations meets Basin Plan Objectives and effluent limitations;
- there is limited use of groundwater in the vicinity and the nearest agricultural fields are located approximately three miles from the ponds and there does not appear to be any wells used for domestic purposes;
- three wells are located within a mile of the ponds, two of which are used in oil field operations and one for cattle ranching;
- the closest water well to the ponds, owned by Discharger, is located 475 feet west of the two largest Gov't Lease ponds and is assumed to be downgradient of the ponds based on regional groundwater flow;
- chemical analysis of a water sample from Discharger's

well shows relatively low concentrations of specific conductance, total dissolved solids, chloride and boron, and petroleum hydrocarbons, volatile organic compounds, and semi-volatile organic compounds were not detected in the sample;

- groundwater occurs at a depth of approximately 500 feet; and
- the burden of the reports including the costs does not bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

The CVWB's Prosecution Team, in response to the Discharger's comments found that:

- the wastewater was characterized and monitored using five water quality values (pH, electrical conductivity, chlorides, boron, and oil and grease), however data does not exist for the many constituents that may be found in the wastewater that could impair beneficial uses of waters of the State, such as: volatile organic compounds, semi-volatile organic compounds, heavy metals, and radionuclides;
- a letter from Bellaire Oil Company to the CVWB, dated 16 August 1996, indicated that if Bellaire wanted to continue to discharge under the a previous NPDES permit, "*significant changes in the water treatment facility would need to be undertaken,*" suggesting that the discharge was not meeting the requirements of the permit;
- changing explanations for the presence of wastewater in the ponds suggests that Discharger does not have control over what is discharged to the ponds and the water in the ponds could come from sources that are unknown to Discharger and, therefore, of unknown quality;
- Basin Plan Objectives for groundwater for waste constituents and radioactivity have not been addressed by Discharger;
- beneficial uses exist whether or not the water is currently being used for a particular benefit;
- site-specific groundwater flow direction may be different than the regional groundwater flow direction, so the assumption that Discharger's water supply well is downgradient from the ponds may not be valid;
- water supply well sample results may not represent the actual character of the groundwater;
- the method detection limits used for the volatile organic compound (VOC) analysis and the semi-volatile organic compound (SVOC) analysis are greater than the California Environmental Protection Agency's Maximum Contaminant Levels (MCLs) for certain constituents that would be

- detected by those analyses, preventing concentrations greater than the respective MCLs from being detected;
- the reported groundwater occurrence in Discharger's well may not be the first encountered groundwater beneath the lease;
 - the presence of clay in a soil column does not necessarily prevent migration of waste constituents;
 - the burden of the requirements of the investigative Order do bear a reasonable relationship to the benefits to be obtained by the Order;
 - a Cleanup and Abatement Order properly issues under Water Code section 13304 whenever a discharger's activities create or threaten to create a condition of pollution or nuisance; and
 - Discharger has discharged a waste that may affect waters of the State and has not submitted a Report of Waste Discharge containing sufficient information to characterize the discharge and evaluate its potential threat to water quality.

SUMMARY:

The Prosecution Team is not convinced that the Discharger has a good understanding of what fluids are going into its ponds, the quality of the wastewater(s) discharged, the hydrology and hydrogeologic characteristics underlying the lease, and the potential for impacts to the groundwater from long term wastewater disposal using percolation ponds. E&B has discharged a waste that may affect waters of the State. It is subject to a Cleanup and Abatement Order under California Water Code Section 13304. Cleanup and abatement orders are designed to protect, remediate, and even offer prospective relief ("threatens to cause or permit" and "threatens to create a condition of pollution or nuisance" ... "shall upon order of the regional board ...")(emphasis added). The Section 13267 investigation Order directed toward E&B is designed to evaluate the extent of contamination caused by oil field operations on the property since the late 1920s. E&B's Brief (pg. 3) describes former operations and operators, while not claiming that any contamination has occurred or that other parties should be named to the CAO. As the current owner, E&B is a properly named party to the CAO.

The Section 13267 investigation Order directed to E&B is limited in scope and does bear a relationship to the need for the report and the benefits to be obtained from the reports. The requested work requires E&B to determine the lateral and vertical extent of its discharges; this information is based on (a) the hydrogeology of the area and (b) E&B's discharges, neither of which are in the control of the Regional Water Board. The benefit to be obtained from the reports is to adequately respond to and ultimately

address any human health threat caused by E&B's activities. The Order specifically states that the Regional Board is willing to give reasonable accommodations for responses and investigation activities. Finally, the Regional Board cannot specify manner and method of compliance. So for E&B to say that the only method of compliance is to install a number of costly monitoring wells is not a directive of the Regional Board to spend that amount.

As stated above, E&B has discharged a waste that may affect waters of the State. Section 13260 of the California Water Code requires the submission of a Report of Waste Discharge containing information required by the Regional Board in enough detail to characterize the discharge and evaluate its potential threat to water quality. Regardless of whether the CAO is issued, the Section 13267 investigative order would require E&B to collect this information to prepare a Report of Waste Discharge for the waste discharge that has taken place.

RECOMMENDATION: The Prosecution Team recommends that the Board adopt the Cleanup and Abatement Order as proposed.

Mgmt. Review__CR____
Legal Review__JM____

4/5 June 2015