

ITEM: 22

SUBJECT: Hilmar Cheese Company and Reuse Area Owners, Hilmar Cheese Processing Plant Wastewater Treatment Facility, Merced County

BOARD ACTION: *Consideration of adoption of Waste Discharge Requirements and Time Schedule Order*

BACKGROUND: Hilmar Cheese Company, Inc., ([Hilmar Cheese](#)) operates a cheese processing plant ([hereafter Plant](#)) located north of the unincorporated community of Hilmar in Merced County. Wastewater from the Plant's treatment facility (WWTF) is discharged to land.

Waste Discharge Requirements (WDR) Order 97-206, adopted in 1997, currently regulates the discharge. Because of its elevated organic and salt content, the discharge created conditions of nuisance (flies and odors) and pollution in groundwater; therefore, the 1997 order set a new discharge limit for electrical conductivity (EC) of 900 $\mu\text{mhos/cm}$. The order required compliance with the new limit by 30 March 1999.

Hilmar Cheese did not comply with WDR Order 97-206 and meet the effluent limit for discharge to land of 900 $\mu\text{mhos/cm}$. Consequently, the Executive Officer issued Cleanup and Abatement Order (CAO) R5-2004-0772 directing Hilmar Cheese to replace affected water supplies, define the lateral and vertical extent of waste constituents in groundwater that exceed background water quality, and evaluate and effect appropriate remedial actions and cleanup activities. CAO R5-2004-0772 remains in effect and work is ongoing.

The Executive Officer also issued Administrative Civil Liability Complaint R5-2005-0501. The matter was considered by the Central Valley Water Board and on 16 March 2006, the Central Valley Water Board ratified a settlement agreement (Order R5-2006-0025).

The settlement agreement established "interim operating limits" until such time as the Central Valley Water Board adopts updated, revised waste discharge requirements. The proposed waste discharge requirements and time schedule order would supercede the interim operating conditions of the settlement agreement.

When the settlement agreement was ratified, it recognized Hilmar Cheese could not comply with the limits in WDR Order 97-206. The interim operating limits of the agreement required no less than 0.6 mgd of wastewater be fully treated by ultra filtration and reverse osmosis. This water was allowed to be discharged to several interconnected parcels called "secondary lands". The actual amount

of fully treated effluent from April 2006 through 2009 was about 1.1 mgd, more than the 0.6 mgd minimum specified in the settlement agreement.

The interim operating limits allowed continued discharge of partially treated water to be discharged to the “primary lands”. The settlement agreement limited the amount of wastewater that could be discharged to the primary lands to up to 1.2 mgd with and EC of up to 3,700 µmhos/cm (the actual amount discharged was significantly less averaging 0.7 mgd).

The proposed WDR Order would set effluent limits for the discharge to the secondary lands of 1,000 µmhos/cm for EC (monthly average) and 900 µmhos/cm (12-month rolling average); 50mg/l 5-day Biochemical Oxygen Demand; 85 mg/l chloride; and 20 mg/l total nitrogen. The limits would apply after the treatment but prior to discharge to the effluent storage ponds. The resulting water would be similar in mineral quality to groundwater. The proposed permit would allow the water to be distributed to about 1,200 acres of secondary land for irrigation.

The proposed WDR Order contains a groundwater limitation for Total Dissolved Solids (TDS) of 700 mg/L. This represents the anticipated average water quality in these areas given the various land uses (i.e., agriculture, dairies, feedlots).

The proposed WDR Order exempts the discharge from Title 27 requirements based on the following:

- None of the waste regulated by the proposed Order is hazardous waste nor required to be treated as hazardous waste.
- With treatment to remove organics and salinity, lined storage ponds, and application at agronomic rates, the discharge authorized by the proposed WDRs will not cause exceedance of applicable groundwater quality objectives and complies with the Antidegradation Policy.

Not all of the wastewater from the Plant will initially comply with the proposed effluent limits. Currently, the total flow of wastewater from the Plant is 1.9 mgd. Hilmar Cheese has indicated it can fully treat up to 1.4 mgd to the limits in the proposed Waste Discharge Requirement. That means 0.5 mgd will be only partially treated. The proposed time schedule order would limit the amount of wastewater that could be applied to the primary lands to 0.5 mgd with a maximum EC of 3,600 µmhos/cm.

Hilmar Cheese is requesting until May 2010 to evaluate additional treatment technology. If the existing treatment method is selected,

Hilmar Cheese has indicated it can fully treat all of its wastewater by 15 February 2011 (about eight months following the evaluation). Should the new treatment technology be selected, Hilmar Cheese has indicated it will need until 15 July 2011 to fully treat all of its wastewater (about 13 months following the evaluation). Should the Board deny Hilmar Cheese's request for additional time to evaluate different treatment methods, Hilmar Cheese could install additional RO/UF treatment units by September 2010.

Hilmar Cheese has requested to increase its flow limit to 2.5 mgd. The proposed WDRs would allow the flow limit to increase to 2.5 mgd, but only after Hilmar Cheese has demonstrated it is capable of fully treating 100 percent of its wastewater discharge.

ISSUES

Are the effluent limits in the proposed waste discharge requirements the appropriate limits?

The proposed Order would establish a groundwater limit for total dissolved solids of 700 mg/l - is this the appropriate groundwater limit?

Should the WDRs find that the discharge is exempt from the requirements of Title 27, CCR, Section 20005 et seq?

How much additional time should Hilmar Cheese be allowed to discharge partially treated wastewater to the primary lands?

RECOMMENDATION: Adopt the proposed waste discharge requirements and time schedule order.

Mgmt. Review _____
Legal Review ___ LTO _____

28/29 January 2010
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