

ITEM: 15

SUBJECT: Update Regarding the Regulation of Food Processing Waste Discharges to Land

BOARD ACTION: *Information Item*

BACKGROUND: Solid and liquid wastes from food processing industries (including canneries; meat, fruit and vegetable packers; cheese manufacturers; and wineries) contain significant quantities of organic matter, nutrients and salts. In the Central Valley Region, the vast majority of these processors (at least 520 facilities) treat and dispose of their waste by discharging to land. The historical focus of Regional Water Board regulation was to ensure that wastes were applied to fields at reasonable rates to avoid creating nuisance conditions.

In late 2004, staff reviewed the groundwater monitoring data from the food processing sites that had been required to install groundwater monitoring wells. The data demonstrated that natural attenuation under historic loading practices was insufficient to protect water quality in all cases, and that the industry guidelines, as well as the waste discharge requirements adopted by the Regional Water Board, were allowing food processing discharges to take place in a manner that conflicts with existing State policies.

ISSUES: At the Regional Water Board's 28 January 2005 meeting, staff presented the informational item *Regulation of Food Processing Waste Discharges to Land*. An extensive staff report was prepared and distributed to more than 300 known interested persons. The staff report may be found at http://www.waterboards.ca.gov/centralvalley/available_documents/index.html#anchor618298.

The staff report describes the water quality impacts associated with the disposal of food processing waste; the Central Valley Region's past regulatory focus; the sunset of waivers and the impact of the Regional Water Board's Consistency Initiative; problems from our past regulatory methods; case studies of four facilities that are polluting groundwater; and an estimate of the extent of groundwater pollution from food processors in the region. Finally, the staff report provides a long-term vision for the proper regulation of food processing waste discharges. As part of that discussion, the report contains examples of three dischargers that have invested in the treatment and control upgrades necessary to manage their waste in a manner that protects water quality.

A key component of the Informational Item was staff's review of the effectiveness of existing waste discharge requirements in protecting water quality from the discharges of food processing waste. Of the 212 facilities regulated under individual WDRs, 105 facilities were required

to monitor the groundwater. Staff's review found that the discharge of waste from 90% of these monitored sites had either confirmed or suspected impacts to groundwater, and therefore concluded that an adjustment in the regulatory approach was overdue.

The staff report states that proper regulation of each food processor under individual WDRs should be based on site-specific conditions and existing regulations, plans and policies, but in general should entail the following phased steps:

1. Reviewing, and if necessary updating, individual facilities' Monitoring and Reporting Programs to the level of detail need to determine whether they are complying with all aspects of their waste discharge requirements, including the Groundwater Limitations. In general, this means determining whether a facility is unreasonably impacting water quality through the installation and sampling of groundwater monitoring wells.
2. If groundwater degradation is either threatened or documented, requiring (through issuance of revised WDRs or an enforcement order) that the discharger (a) comply with the Regional Water Board's Basin Plan by meeting water quality objectives and protecting beneficial uses and (b) comply with State Water Board Resolution No. 68-16 (the Antidegradation Policy), which requires, in part, the implementation of best practicable treatment or control measures to limit the amount of degradation. If the discharger is unable to modify the discharge such that it does not unreasonably degrade or pollute groundwater, then the site should be regulated under Title 27 California Code of Regulations, Division 2, Subdivision 1.
3. If groundwater has been unreasonably degraded or polluted, issuing a Cleanup and Abatement Order that requires the discharger to remediate the groundwater consistent with Water Code Section 13304 and State Water Board Resolution No. 92-49 (the Cleanup Policy).

Since the January 2005 informational item, staff have:

- Provided verbal and written testimony at the Senate Committee on Agriculture's February 2005 informational hearing regarding the impacts of the Regional Water Board's regulation of food processing waste.
- Met with the California League of Food Processors in April 2005 to discuss revising the CLFP's *Manual of Good Practice for Land Application of Food Process/Rinse Water* to better reflect existing regulations and policies and to emphasize certain practices which, if

implemented at a site, will effectively protect water quality.

- Provided verbal and written testimony at the State Water Board's July 2005 *Workshop to Receive Comment on Practices for the Management and Disposal of Food Processing and Winery Waste Through Land Application and Other Means*.
- Continued to work with the Wine Institute and the State Water Board staff to follow-up on the peer review of the Wine Institute's *Land Application of Winery Stillage and Non-Stillage Process Water Study Results and Proposed Guidelines*.
- Prepared a tentative Waiver of Waste Discharge Requirements for the discharge of solid food processing waste in Stanislaus County.
- Reviewed the January 2006 Office of Chief Counsel's *Food Processing Questions and Answers* document.
- Provided verbal and written testimony at the joint State Water Board/Central Valley Regional Water Board January 2006 *Public Workshop on Salinity Issues in the Central Valley*.
- In conjunction with regulating all other entities which discharge waste to land, continued our regulatory oversight of food processors which discharge to land.

The past discharge of food processing waste to land has unreasonably degraded water quality at many sites, and therefore it is necessary for the Regional Board to adjust its regulatory focus (including systematic enforcement) and for dischargers to improve their treatment and disposal practices. It is appropriate to regulate food processing waste discharges in a manner consistent with existing State plans, policies and regulations such that the Regional Water Board fulfills its mandate to protect water quality. Staff is continuing to seek the cooperation of, and to work with, industry representatives to seek the necessary level of effectiveness.

RECOMMENDATION

This item is being presented for the Board's information, and provides an opportunity for discussion. No action will be taken.

Mgmt. Review _____
Legal Review _____

16/17 March 2006 Board Meeting
Central Valley Regional Water Quality Control Board
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