

ITEM: 20

SUBJECT: Status of Individual Groundwater Monitoring at Dairies

BOARD ACTION: *No Board action. Information Item Only.*

BACKGROUND: On 3 May 2007, Waste Discharge Requirements General Order No. R5-2007-0035 for Existing Milk Cow Dairies (General Order) was adopted. The General Order includes Monitoring and Reporting Program No. R5-2007-0035 (MRP) and requires Dischargers to install and sample groundwater monitoring wells based on an evaluation of the threat to water quality at each dairy. The expectation is that 100 to 200 dischargers would be requested to install groundwater monitoring wells per year. This monitoring is in addition to monitoring of water supply wells required by the General Order.

During the Board hearing at which the General Order was adopted, staff were directed to continue working with stakeholders to further evaluate groundwater monitoring alternatives at dairies. The purpose of this informational item is to update the Board on progress made with stakeholders toward an alternative groundwater monitoring program and the status of implementing individual groundwater monitoring at dairies in accordance with Attachment A of the MRP. Staff conducted five meetings with stakeholders between 30 January 2008 and 27 July 2009 to discuss alternatives to installing individual monitoring systems at each dairy.

Dr. Thomas Harter of the University of California at Davis submitted the only formally proposed alternative. The alternative consisted of regional monitoring and enforcement of management practices. While Dr. Harter's proposal had merit and presented portions of a program that could be incorporated into an acceptable alternative, key elements of the proposal made it unacceptable. The unacceptable elements included indemnification of individual landowners for groundwater contamination found in the monitoring well network. This proposal has not moved forward.

During the stakeholder meeting of 27 July 2009, a conceptual outline of a second potential alternative was discussed. The conceptual program would include monitoring of clusters of dairies to identify the types of dairy facilities and hydrogeologic conditions that pose a threat to groundwater quality. In addition, alternative methods to evaluate pond leakage (such as detailed water balance analyses) are being evaluated to identify if a method can be developed to assess leakage of liquids from existing wastewater ponds and the potential to impact groundwater quality. This conceptual approach is still in the formulative stages and an

alternative groundwater monitoring proposal has not been submitted for review. Staff will continue to work with stakeholders to develop an alternative to individual groundwater monitoring at each dairy.

With submittal of the 2008 annual reports that were due on 1 July 2009, the information required by the MRP to assess the threat to groundwater quality and needed to prioritize dairies for individual groundwater monitoring has been received. Staff is in the process of sending requests to install groundwater monitoring systems to the first group of dairies in accordance with Attachment A of the MRP.

Implementation of individual groundwater monitoring at dairies in accordance with Attachment A of the MRP will continue while working with stakeholders to develop an acceptable alternative. Upon implementation of an acceptable alternative groundwater monitoring program, implementation of individual groundwater monitoring in accordance with Attachment A will cease. Data obtained from individual groundwater monitoring systems will be useful to help evaluate any alternative monitoring program.

RECOMMENDATION: No recommendation, information item only.

Mgmt. Review _____
Legal Review _____ EGW _____

7/8 October 2009
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