



County of Santa Cruz

HEALTH SERVICES AGENCY

701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060-4073
(831) 454-2022 FAX: (831) 454-3128 TDD: (831) 454-4123

ENVIRONMENTAL HEALTH

www.co.santa-cruz.ca.us/eh/ehhome.htm

January 3, 2011

Mr. Roger Briggs, Executive Officer
Regional Water Quality Control Board
895 Aerovista Place, Suite #101
San Luis Obispo, CA 939401-7906

Subject: Comments on November 19, 2010 Proposed Agricultural Order

Dear Mr. Briggs:

I am writing to comment on some elements of the proposed ag order. A lack of comments on many elements of the order should not be construed as endorsement, but deferral to others who are more knowledgeable on the topics I have not commented on.

Stormwater Runoff: The previous draft order distinguished between storm runoff and nonstorm runoff, but that distinction is not clear in the new proposed order. Table 1 of the staff report indicates that the order requires that "All dischargers must implement stormwater management practices to minimize stormwater runoff" immediately, but I could find little discussion of stormwater management in the actual order other than the requirement for management of runoff from non-cropped areas (p. 20, paragraphs 71 and 72) and requirements for monitoring.

Stormwater Monitoring: There is a requirement to complete stormwater sampling within 18 hours of a storm event. Given the extreme variability of water quality parameters during a storm event and the rapid improvement in water quality after peak flow, sampling within 18 hours would have limited utility in characterizing stormwater quality. It would be more appropriate to select a few key sites and use an auto-sampler or frequent sampling to characterize the water quality throughout a storm event, or to require that sampling be completed within no more than 3 hours of peak flow.

Groundwater Recharge: The order should not preclude the use of practices to capture and recharge stormwater for the benefit of increased groundwater storage. This approach is being pursued in the Pajaro Valley as a key element of a strategy to reduce groundwater overdraft and saltwater intrusion. The effect of the proposed order on such practices is unclear. Paragraph 34 of the draft order requires that retention basins be constructed and maintained to prevent the percolation of waste to groundwater that contributes to exceedences of water quality standards. A strict application of this provision could preclude the use of percolation ponds in areas where nitrate levels already exceed drinking water standards, even though the intent would be to manage the ponds in a way that nitrate in excess of drinking water standards would not percolate. Research conducted under the Harkins Slough percolation pond for the Pajaro Valley Water Management Agency has shown that

significant denitrification occurs in the bottom of the pond and the underlying strata. Again, it is critical that the Order not preclude the use of recharge practices that will benefit the groundwater basin.

Nitrate Hazard Index: I believe that the nitrate hazard index should include a factor for underlying soil and geology. Underlying conditions are critical for determining the potential for nitrate to be removed by denitrification or to percolate to groundwater. Aquifer susceptibility is discussed in Appendix G, but is not addressed in the Order.

Proximity to Impaired Water Bodies: I could not find any discussion of why 1000 feet from an impaired water body was used as a trigger for a higher level of risk. Why 1000 ft? That distance seems too excessive, but on the other hand it ignores operations along tributaries of impaired water bodies. I would suggest using a greatly reduced setback such as 100 ft. from the flood plain or bankfull flowline, but have that setback apply to any operations along impaired waterbodies and their perennial tributaries. Adequate protection of a waterbody can't be obtained without also addressing the significant tributaries whether or not they have been formally designated as impaired.

Definition of Tiers: I support a tiered approach, but with better definition of tiers, a greater range of approaches across the tiers, and more flexibility to move among tiers if onsite conditions can be demonstrated to pose lower or higher risk. The discussion of various tier options in Appendix D indicates a desire to not have too much complexity and to not focus too much on site conditions, but it seems that these types of factors are critical in determining risk, and to allowing a minimal level of oversight and regulatory burden for those operations that pose low risk. Paragraph 13 allows the Executive Officer to move an operation to a lower tier, but only if they show they meet the specific criteria for that tier. More general criteria should be included which would allow a discharger to demonstrate site or operational conditions which would allow them to be in a lower tier. Site factors which should be taken into consideration would be many of those listed in Appendix D, such as potential for irrigation runoff, presence of tile drains, and potential for percolation of nitrate and salts. Additionally, I would suggest that the tier should be based on a nitrate hazard index which includes site conditions, rather than just the type of crop grown.

Timetable for Compliance and Resources Available: Successful implementation of operational improvements needed to improve water quality will take time and substantial technical expertise. It does not appear that the expertise to assist growers with the wide range of Central Coast conditions is readily available at this time. It will take more time to develop appropriate practices and to develop the number of consultants and technical staff to assist growers with implementation. I would suggest that the timeline for compliance be extended to allow adequate time to develop the necessary resources.

Thank you for the opportunity to comment on this important topic.

Sincerely,



John A. Ricker
Water Resources Division Director