PRECISION AG CONSULTING
179 Niblick Road #330 * Paso Robles, CA 93446 * 805-434-3331

Jeffrey S. Young, Chairman of the Board
Roger Briggs, Executive Officer
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Comments and Question Regarding
Central Coast Regional Water Quality Control Board's
Draft Agricultural Order 2011

Thank you for the opportunity to comment on the draft Ag Order No R3-2011-0006 regarding waste water discharge from agricultural lands. These comments are made in the spirit of cooperation with the hope that a better regulatory product will be developed if these points are considered.

As very brief background on Precision Ag Consulting (PAC), we are an agricultural consulting firm which specializes in irrigation management of various crops on the central coast, but primarily wine grapes. Lowell Zelinski, the owner, has a Ph.D. from UC Davis in Soil-Plant-Water relations and has been involved with irrigated agriculture in California his entire professional career, which began in 1980.

The development of the Tiered approach to waste water regulation is a substantial improvement over the previous draft order, but there are numerous unanswered questions regarding the placement of farming operations into the various tiers. My comments will be in the form of questions which I hope the Board and Staff will address.

1) The table of tier definitions (p. 16) appears to be in conflict with some of the text describing the tiers. For example: looking at the table, where would a small vegetable or strawberry grower (<1,000 acres) who does not use the pesticides labeled would fit and who is more than 1,000 feet from a 303d impaired water body would fit?

2) What is the justification for the apparently arbitrary distinctions of 1,000 acres and 1,000 feet relative to the order?

3) The Clean Water Act's 303d list of impaired water bodies gives reasons for the impairment. Do the reasons for listing of an impaired have any impact on the

determination of which tier a farm will be in? Meaning is the type of impairment relevant to tier determination? If it is not – should it be?

4) What happens to a farmers tier designation if a water body gets newly listed or delisted from the 303d list?

5) It appears that there is more than one 303d list, will the various lists be consolidated within the order so that there is less confusion regarding the aspect of the proposed order?

6) How are tributaries to impaired water bodies dealt with in the 1,000 foot distance test?

7) When considering the 1,000 foot distance to an impaired water body, what location on the farm and on the impaired water body is used? The closest distance or the centers or the main channel of a stream or the maximum extent of the stream bed.
    a. Is the 1,000 foot distance measured from the edge of the property in question or from the edge of the farmed part of the property?

8) Again, considering the 1,000 foot distance requirement, if a farm has discontinuous land holdings where on the farm do you measure from? Taking this to its logical conclusion, is it possible for one farm with various discontinuous properties to be in all three tiers?

9) Regarding the Notice of Intent requirement:
    a. It is stated that the information MUST be filed electronically, what if a farmer does not have access to an electronic means of filing the information?
    b. In the section on supplying the GPS coordinates of the farm, the instructions indicate that you are use the "centroid" of each ranch, how should the centroid be determined and what should a farmer do if they are unable to make that calculation?
    c. On the farm maps that are required to be submitted, the maps are required to locate and provide the names of water bodies – what if the water bodies have no names?
    d. If an entity, other than an individual, owns the property, how is that listed?
    e. The NOI allows for signing-up with Preservation Inc. for cooperative monitoring – it is currently known if they are going to be able to provide this service?
    f. The NOI form asks if the farmer is producing a commercial agricultural commodity. Some commodities take a number of years from planting to the first harvest. Are farms who are not currently selling a product exempt from the order until they are actually selling a commodity?
    g. I have many additional questions for this section – but these comments capture the flavor of my concerns

10) Has a realistic estimate of the amount of information that can be processed by staff been done?

a. And if this is more than staff can processes why is it being requested?

11) Regarding water quality education hours:
    a. If you already have the required 15 hours, will you need an additional 15 hours?
    b. If you do not have the required 15 hours, has staff determined when and how those education classes/events will be held?
    c. Is there a time frame for acquiring the 15 hours?
    d. Has a curriculum for the hours been developed?
    e. How is compliance with this requirement going to be monitored?
        i. Are there adequate staff resources to do the monitoring?
    f. What happens if a farmer is out of compliance with this requirement?
    g. Who will offer the educational hours?
        i. Have they been contacted and are they willing to do this?

12) Regarding the tone of the proposed order:
    a. Is there a particular reason that the staff tone is adversarial?
        i. If so – what are the reasons?
    b. Has consideration of incentives for achieving compliance been considered?

13) Though staff indicates that economics are not necessarily a consideration in development and promulgation of the regulations regarding the order does the board realize that 43% of farmers in region 3 are small farmers with annual gross incomes in the $10,000 a year or less range and net income most likely in the $1,000 per year range?
    a. Has the cost of compliance versus potential improvement in water quality for small farmers been evaluated?
    b. Is there a good justification for not having a lower limit on farms, either acreage or gross income, below which they are exempt from the order?
    c. If the cost of compliance will make it economically unjustifiable for small farmers to continue farming, it is very likely that larger farmers will take over those farmers. Large farms can do this because they can spread the fixed cost of compliance over more acres and it has a smaller impact on their bottom line. Does the board realize that this order will lead to an increase in the number of acres farmed by large farmers and decrease the number of small farms?

14) The introduction to the Ag Order indicates that thousands of people are or may be drinking water with polluted by nitrate. Does the incidence of methemoglobinemia on the central coast support this statement?

15) Regarding the Farm Plan requirement:
    a. A farm plan is required. What are the necessary elements of a farm plan?
    b. Is there a model farm plan upon which farmers can pattern their farm plans?
    c. Farm plans may include trade secret or proprietary information regarding farming operations. Keeping in mind that farming is a highly competitive

enterprise and the release of information in farm plans to the general public, and more especially to a farms competitors, may endanger the future viability of individual farms, what steps will be implemented to insure confidentiality of the information in a farm plan?

16) Why can farmers not collect their own groundwater quality samples? With basic guidelines developed by the board, farmers should be able to accomplish this requirement at much less cost to themselves.

17) Why should the board require the analysis and report of those constituents of groundwater quality that are not a concern for water quality? The only constituents that are truly needed are Nitrate, Sodium and Chloride.

18) Is the board mindful of the fact that the quality of groundwater under a particular parcel may or may not be related to the overlying landowner's use of the land? Impairments of groundwater quality from a particular parcel are based on both spatial and temporal factors over which the current farmer or landowner may have no influence or control.

19) Regarding nutrient budgets: the order requires that nutrient budgets be prepared for various crops depending on a farmers tier designation.
    a. Is the board aware that because of the limitation of nutrient uptake efficiency not equaling 100% – the ratio of Nitrogen applied to Nitrogen removed cannot equal one unless a nutrient deficiency and potential reductions in both yield and quality occurs?
    b. If a farm grows multiple crops both spatially and temporally on a particular parcel, is a nutrient budget required for each incidences of planting?
        i. Does staff have time to review the potentially 10,000's of nutrient budgets it is requesting.

20) Does the proposed ag order harmonize with other regulations for items such as food safety, farm labor health and air quality?

As the board can see there are many questions regarding the new proposed ag order and the above is only a partial list. Had the timing of the request for comments not coincided with Thanksgiving and the December holidays I know I would have more and I am confident so would many others.

Best of luck in the contemplation and development this order. It is a major undertaking which will require considerable deliberation and skill. Hopefully the farming community and the board staff can work together to develop workable regulations.

Sincerely

Dr. Lowell Zelinski

President,
Precision Ag Consulting.