

San Joaquin County and Delta Water Quality Coalition

San Joaquin County Resource Conservation District
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January 17, 2014

VIA EMAIL TO Chris Jimmerson - Chris.Jimmerson@waterboards.ca.gov

Pamela Creedon
Executive Officer
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Re: Comments on San Joaquin County and Delta Area tentative WDR General Order

Dear Ms. Creedon,

The San Joaquin County and Delta Water Quality Coalition (SJC & DWQC) appreciates the opportunity to provide these comments on the tentative San Joaquin County and Delta Area Waste Discharge Requirements General Order.

A. The frequency of the reporting and attendance obligations in the tentative order are unduly burdensome and costly to growers and the third party.

Farm Evaluations

The tentative order requires every member to submit an initial detailed Farm Evaluation. (Tentative Order, VII.B., p. 26.) Members in high vulnerability area must continue to submit annually while other members submit every five years. (Tentative Order, VII.B., p. 26.) After three years, the Executive Officer may reduce the frequency of required reporting. (Tentative Order, VII.B., p. 26.)

Working with growers to obtain 100% compliance with this requirement from 2015-2018 is going to monopolize the resources of the Coalition, unnecessarily. Permanent Crops represent **half of the irrigated acreage** in our area. According to the USDA 2007 Census of Agriculture, San Joaquin County had **187,613 acres of orchards** and **104,893 acres of grapes**. These numbers have increased since 2007. There is also substantial alfalfa acreage in our area, which is a 5-7 year crop. Annual Farm Evaluation reports are going to show virtually identical information for permanent crops and alfalfa. Yet, they will take away precious resources and time from growers and the third party. The third party expects to have to hire full time staff to handle this task.

A more reasonable approach would be to allow the third party to divide its membership into five groups and require 20% of members to complete a Farm Evaluation report at least once every 5 years. This would enable the third party to dedicate less than one full time staff person to this task and have a consistent work flow from year to year. Given the high percentage of permanent and semi-permanent plantings in our region, the Regional Board would continue to get virtually the same information that it will receive with annual reporting. The burden of the annual reporting requirement is simply not justified by the minimal benefit gained from requiring it.

We suggest that Section VII. B of the tentative order (following the opening paragraph) be replaced with the following:

By April 15, 2015, the third party shall divide its Membership list into five groups and notify each group of their reporting deadline for the Farm Evaluation. The third party shall include, to the extent feasible, all members in High Vulnerability Areas in the first three reporting groups. 20% of Members must submit a Farm Evaluation by June 15, 2015, 20% by June 15, 2016, 20% by June 15, 2017, 20% by June 15, 2018 and 20% by June 15, 2019. Each member must update their Farm Evaluation at least one every five years on the schedule set by the third party.

Nitrogen Management Plan and Summary Reports

The tentative order requires members to prepare a Nitrogen Management Plan (before the crop year) and a Summary Report (after the crop year). This duplicative requirement is unduly burdensome such that the cost of the duplication is not justified by the minimal benefit. Members should be required to learn about nitrogen budgeting. Our coalition fully supports this education and outreach effort but it is simply not achieved through a paperwork exercise. A single summary report, rather than a plan and a report in the same year, is enough reporting.

Outreach Events

The tentative order modifies the language of the first sentence of Section IV.B.4 to create an ambiguity regarding whether the member is required to attend one outreach event, or multiple events, each year. The order should be revised to use the prior language which clarified the obligation is to attend only one event per year.

We also still maintain that an annual event attendance requirement is overly burdensome and unreasonable. Advances in management practices do not happen so rapidly that there is enough new information to present annually in a meaningful outreach event. This is also very expensive for the third party and members. Attendance at an event every other year would be more reasonable and useful.

Small Farming Operations

The tentative order removes the distinction and varying reporting requirements for "small farming operations." SJC & DWQC fully supports this change as it will streamline administration of the new order and help keep costs down. Thank you.

B. It is Unnecessary and Counterproductive to Ask the Resource Conservation District to Facilitate Enforcement

The Coalition has been particularly successful in helping farmers meet the requirements of the Irrigated Lands Regulatory Program because it is operated by the local Resource Conservation District (RCD) which is viewed by farmers as a non-threatening, neutral party. This encourages farmers to join the Coalition which boasts one of the highest member participation rates in the state and to be open about their practices, permitting the Coalition to implement programs that are more effective at protecting water quality. To our knowledge, the Coalition is the only one in the state operated by a RCD.

The tentative order, however, would significantly alter the relationship between farmers and the Coalition by requiring the Coalition and the RCD to act as an informant to facilitate Regional Board enforcement. The tentative order requires the third party to identify annually members who have (1) failed to implement improved water quality management practices within the timeframe specified by an applicable SQMP/GQMP; (2) failed to respond to an information request from the third party associated with any applicable SQMP/GQMP or other provisions of the WDRs Order; (3) failed to participate as requested in third party-studies for which the third party is the lead; (4) failed to provide confirmation of participation in an outreach event; or (5) otherwise failed to maintain good standing of their membership in the third-party group. (Tentative Order, p. 22.)

The Coalition and RCD cannot be as effective in their role in this program if farmers view them as part of the Regional Board's enforcement team. This is particularly so if the Coalition is required to identify all members not in "good standing," an unclear phrase that is not defined in the tentative.

We previously requested that the Board remove the above requirement that the third party report lack of "good standing" for individual members and include, instead, an alternative requirement that required the Coalition to report members in good standing and those dropped for good cause which effectively would give the Regional Board the information it needed to identify growers for enforcement action, without requiring the RCD to be part of that identification process. The Coalition's request was granted, resulting in different language in prior version (August 2013) of this order.

Unfortunately, the prior compromise language was discarded in this new version of the tentative order due to a desire for uniformity. This desire for uniformity must be tempered by the reality of having the RCD as the implementing agency for the third party under the order.

We urge staff and the board to reconsider this issue and return to the prior agreed upon compromise language which required the third party to report to the Regional Board a list of members in good standing as well as a list of Members who were dropped for good cause (such as change in ownership). Specifically, the language in Section IV. C. 9 should read:

Members who have (1) failed to implement improved water quality management practices within the timeframe specified by an applicable SQMP/GQMP; (2) failed to respond to an information request from the third-party associated with any applicable SQMP/GQMP or other provisions of this Order; (3) failed to participate as requested in third-party studies for which the third-party is the lead; (4) failed to provide confirmation of participation in an outreach event (per section IV.B.4 of this Order); or (5) failed to submit required fees to the third-party shall be dropped from membership if the failure is not resolved within six months of notification by the third-party. The third-party shall report to the Board annually a list of current Members in good standing, as well as those Members that were dropped for good cause, if known to the third-party, and not one of the aforementioned failures (e.g., no longer irrigate the land; no longer own the property).

Similarly, we request that the Board remove the requirement that the third party identify growers who have had their membership revoked and members whose membership is pending revocation. (See Tentative Order, Section VIII.B., p. 31.) The third party's requirement to provide a membership list will permit the Board to determine which growers have had their membership revoked by comparing the current year's list to that of the previous year. The additional requirement that the third party expressly identify these growers for the Board will harm the third party's reputation among growers and members. The limited benefit this requirement provides does not justify its costs.

C. Unique Circumstances

The tentative order recognizes that there are unique circumstances in our region that will need to be addressed, including characterization of groundwater underlying the Delta and treatment of unusable groundwater in other parts of the defined regulated area. We appreciate the Regional Board's recognition of these unique geographic attributes and the willingness to customize the regulation to address them.

D. Information Sheet

Exhibit A to this letter contains a list of specific edits and comments to the Information Sheet Attachment.

E. Monitoring and Reporting

Exhibit B to this letter contains a list of specific edits and comments to the MRP Attachment.

F. Nitrogen Crop Need v. “Consumption”

The tentative changes the term “crop need” with respect to nitrogen, to “crop consumption.” See Information Sheet Section XIV. C. These are two different things and the distinction is going to be important in implementation of the order. Applied nitrogen cannot equal crop consumption due to a variety of factors (such as plant needs, cover crop needs, inability to use applied nitrogen due to chemical or biological conditions), therefore the amount of nitrogen that a crop may “need” is more than the amount the harvested crop will consume. This issue must be addressed in defining best nitrogen management practices.

G. Increased Geographic Area in the New Order

The new order proposes to expand significantly the existing Coalition area boundaries to the east. The RCD that operates the SJC&DWQC does not anticipate that it will apply to be the third party for the expanded area covered by this new order to the east. Thus, the language in section IV of the information sheet should be modified accordingly.

H. “Exceedances” must account for source water

As written, the Monitoring and Reporting Program utilizes “exceedances” from water testing results to determine when additional monitoring requirements or management plans are triggered. (See e.g., Attachment B, Section III.) Water testing locations are designed to capture water discharged from irrigated fields. In many instances in our Coalition, discharge water will have an “exceedance” only because the source water diverted and applied to the farm started with the same “exceedance.” In these cases, resources are wasted by allowing the “exceedance” in the discharge water to trigger additional regulatory requirements because the “exceedance” was not caused by farming. We respectfully request that Attachment B be modified to clarify that when an “exceedance” in test results can be traced to source waters, rather than the activity of irrigated agriculture in the watershed area being tested, the test result will not be deemed an “exceedance” for purposes of triggering additional testing or management plan requirements.

I. Use of Department of Pesticide Regulation Groundwater Protection Areas

The tentative order references DPR Groundwater Protection Areas in several places as a source of information relevant to designation of high vulnerability areas for groundwater. (See e.g., Tentative Order, pp. 4, 14.) While we agree that some information compiled by DPR may be useful in the Groundwater Assessment Report and monitoring plan design, significant care must be taken when using DPR data to generically characterize groundwater in an area as highly vulnerable or at risk of a discharge of waste from irrigated agriculture. DPR groundwater protection areas are designed for a specific constituent and are based on how that constituent travels through the soil and reacts with the soils types. To use these areas with a broad

interpretation that any constituent applied in this area would have the potential to impact groundwater is inaccurate and unscientific. Just because this area might be susceptible to contamination by a certain constituent does not extrapolate into it being vulnerable to fertilizers or nitrates.

With this in mind, we respectfully request that the second paragraph in Section IV-A-4 (on page 14 of Attachment B) be revised. As written, the order states that if the GAR is not submitted by the third party by the required deadline, the Executive Officer will designate default high/low vulnerability area using:

1) those area that have been identified by the State Water Board as Hydrogeologically Vulnerable Areas, 2) California Department of Pesticide Regulation groundwater protection areas, and 3) areas with exceedances of water quality objectives for which irrigated agriculture waste discharges may cause or contribute to the exceedance.

As written, this language suggests that the Executive Officer would use DPR Groundwater Protection Areas as a form of default "high vulnerability" area for purposes of the WDR. This would be unscientific and unreasonable. While our Coalition has no intention of missing the required deadline for submittal of the GAR, missing a deadline should not be an excuse to set "high vulnerability" in an unscientific manner. If the Executive Officer is required to determine "high vulnerability" areas for purposes of the WDR, the Executive Officer should be required to use all relevant information to make that determination in a scientifically justified manner, just as the third party would do. The DPR groundwater protection areas should not be allowed as an automatic default.

J. Method for development of water quality trigger limits and establishing water quality testing methods

Our Coalition is concerned about how water quality trigger limits are set and testing methods determined in the tentative order. As stated in this order, water quality triggers for those pesticides that do not have a criteria already established will need to be developed by the Regional Board staff with "stakeholder input." (See Attachment B page 26 section VII.) This language is too vague because it could be interpreted to mean that stakeholders are merely given an opportunity to review and comment on the proposed trigger limits. The stakeholder input should be in the form of a technical committee comprised of stakeholder representatives with appropriate expertise and scientific background. We respectfully request that Attachment B be revised to reflect the use of such a committee to set water quality trigger limits.

K. CEQA Compliance

We do not agree that the regulatory program included in the tentative order, or its estimated costs, is sufficiently within the range of the alternatives previously analyzed in the Programmatic EIR. To properly comply with CEQA, the Regional Board should prepare a supplemental EIR for this specific tentative order and should revise its costs estimates.

L. Water Code sections 13141 and 13241

Pages 11-12 of the tentative order discuss cost estimates as required by the Water Code. We continue to believe that these cost estimates are unreliable. A good portion of the increased cost of the new regulations will be the increased individual reporting that the third party must summarize and analyze for the Regional Board. The templates for this reporting, as well as the instructions as to how frequently these reports must be completed and compiled, was not available when the cost study was performed and could not have been accounted for in that study. In short, the prior cost study is wholly unreliable. The Regional Board should update the cost study with the specific requirements of the current tentative order before proceeding.

M. Other

Section references in the text that should be double checked. For example, section VI, paragraph 5 (page 23) cross-references Finding 53. It appears this may be incorrect. The tentative order also includes several footnote references in the text, but the footnotes themselves are missing. This is the case for footnotes 5, 6, 15, 18, 22, 24, 25, 26, and 29.

N. Over-Arching Policy Concerns

The tentative order should not assume that all water that leaves the crop root zone is a discharge or threatened discharge to groundwater that can and should be regulated.

On page 2, paragraph 5, of the tentative WDR it states, “This Order is not intended to regulate the water quality of soil pore liquid within the root zone.” The scope of the intended regulation of water quality that leaves the root zone, but does not reach saturated groundwater, is unclear and may be read by some to imply regulation of any water that leaves the root zone. Molecules of water moving past the root zone are not “waters of the state” subject to the permitting authority of the Regional Board unless water leaving the root zone could impact the water quality of groundwater (in the saturated zone). The concept that all water that leaves the root zone becomes groundwater and carries all the constituents that were applied to the field with it to the groundwater basin is inherently wrong. How water travel through the soil strata is determined by a myriad of factors that include but are not limited to soil types, soil layers (e.g., clay layers and hardpan layers), soil density, rainfall, percolation and plant uptake. Also, many factors determine which constituents actually travel to the groundwater basin; factors such as microbial activity, half-life of active ingredients, and plant uptake.

Paragraph 8 correctly states that the order regulates lands “from which there are discharge of waste that could affect the quality of any waters of the state.” We suggest that similar language be added to Paragraph 5 to remove any implication that (1) the Regional Board intends to regulate water as it moves past the root zone when there is not a threat to waters of the state, or (2) that movement of water below the root zone is a de facto discharge of waste “which it is not.

The tentative order should not assume that “best management practices” can be clearly identified at the onset of the program.

Throughout the order there is an underlying assumption that the Regional Board and third parties will be able to identify the precise conditions in the groundwater basin and the management practices that are and are not protective of groundwater quality. The order needs to recognize that this is not an exact science, but will be an on-going cooperative effort to learn and improve. It is more likely that we will learn that "best practicable treatment and control" is not a precise set of operational criteria for farming operations, but rather continued cooperative research to learn more.

The cost of complying with the new order must be controlled or we will lose members and the program will fail

In many of our comments you will see a common theme ó with minor modifications to the order the Regional Board can obtain the same information relevant to its water quality goals at a lower cost. The reason for these comments is simple. If the cost of this program on a per acre-basis doubles or triples we will lose too many members and this Coalition will no longer operate. We do not want the program to fail.

Thank you again for the opportunity to comment on the tentative order.

Sincerely,



Mike Wackman
San Joaquin County & Delta Water Quality Coalition

cc: San Joaquin County Resource Conservation District Board of Directors

EXHIBIT A: Specific Comments on Information Sheet Attachment A

Page 5. There is a reference to Figure 5 but Figure 5 is not included in the Information Sheet.

Page 13. *E. coli* should be italicized, i.e., *E. coli*.

Page 14. Table 3.

- The column heading of the third column is “Range of Detected Levels.” The entries in the column are often ND which does not make sense. A detected level cannot be a non-detected concentration. The Toxicity section does complicate the column heading. A suggested column heading is “Range of Observed Results.”
- The trigger limit for HCH is 0.0039 µg/L, not 0.95 µg/L as indicated in the table.
- Under the Toxicity section of the table, the row that describes *Selenastrum* indicates an endpoint of survival. The endpoint is growth and the range does not range from 0-100%.
- Under the Metals section of the table, the row for Lead is not specified as to dissolved or total. Arsenic, listed above, is only measured as total so clarification is not necessary. But both the total and dissolved fractions are measured for lead, so the fraction needs to be specified. Also, the superscripts (3) are incorrect. The trigger limits for the dissolved fraction of copper and lead are based on hardness. The trigger limits for total copper and lead are numeric values that are independent of any parameter such as hardness. The trigger limit for copper, total is fixed at 1300 µg/L.
- Footnote 4 does not appear to be relevant to entries in the table.
- Under the Nutrients and Salts section of the table, the trigger limit of ammonia is listed as variable with a footnote that should be 5 because the trigger limit is based on pH and temperature.
- Electrical Conductivity should be Specific Conductance.
- Under the Other section of the table, the trigger limit for dissolved oxygen is stated to be >5 or >7 mg/L. The trigger limit is <5 or <7 mg/L.
- The first footnote states that ND = Not detected at measurable levels. The more appropriate footnote is simply ND = Not detected. However, although it may have been missed, there appears to be no footnote 1 in the body of the table.

Page 15, Table 4. The table should include the 6th high priority site, Drain at Woodbridge Rd. The text in the following paragraph should also reflect the addition of the 6th high priority site.

Page 15. There is a statement that “The Coalition conducted approximately 166 individual outreach...” The correct number is 173.

Page 22. In the next to last paragraph, there is a reference to “see section IV.B.21 of the Order.” The last section in the Order is section 20, which references management practices. It is unclear what is being referenced here.

EXHIBIT B: Specific Comments on MRP Attachment B

There are a number of minor typographical and grammatical corrections that need to be made prior to the release of the public draft. For example, there is inconsistent use of capitals in the use of “Section” and “section,” “Site” and “site,” etc. These are not included in the comments that follow.

Specific comments

P3. Section III A 1. There is a statement that “When a water quality objective or trigger limit at a monitored Core site is exceeded, the parameter associated with the exceedance must be monitored for a third consecutive year.” Does this apply to TMDL constituents or does a single exceedance of a TMDL constituent trigger a Management Plan eliminating the need for the third year of monitoring?

P3. In the next to last sentence the term “Core” should be replaced with “Represented.”

P4. Section III A 2. There is a statement that “Any applicable surface water quality management plan (SQMP) actions associated with the Core site must take place in these watershed areas (represented drainages without monitoring sites).” The statement should be qualified to state that “unless there is evidence that the constituent of concern is not present in the waterway (e.g., through the use of Pesticide Use Reports, previous monitoring).”

P5. Table 1. There is an asterisk in the table title that does not have a table footnote.

P6. Section III C 1 b. The reference in the parentheses to Section VIII should be Section VII.

Page 6. Section III C 2. The first sentence of the second paragraph states, “For metals,” The sentence should read “For metals applied by agriculture,”

Page 6. Section III C 3. The third sentence of the paragraph states, “The pesticides identified as ‘to be determined’ (TBD) on Table 2 shall be identified as part of a process that includes input from qualified scientists and coordination with the Department of Pesticide Regulation.” The stakeholders involved in the process of determining pesticides the Coalition will monitor should include representatives of the Coalition.

Page 7. Table 2. Table 2 lists constituents to be monitored. As part of the metals list, both total and dissolved phase analyses are required for cadmium, copper, lead, nickel, and zinc. There is no need to analyze for the total fraction of these metals. The dissolved phase is the bioavailable phase and is the phase on which a determination of an exceedance is made. Analyzing for the total phase adds cost to the analyses for no increase in information.

P9. Section III C 4 a. There is a statement that “If within the first 96 hours of the....” The statement implies that the test duration is greater than 96 hours, but the test duration for the three required tests is 96 hours. Eliminate the term “first.”

Page 10. Section III C 4 b. In the third paragraph there is a statement that “Sediment samples that show significant toxicity to *Hyaella azteca* at the end of an acceptable test and that exhibit < 80% organism

survival compared to the control will require pesticide analysis of the same sample in an effort to determine the potential cause of toxicity.” The handling of the sediment used for toxicity testing and the preservation requirements/hold time of the sediment used for chemical analyses preclude the use of the same sample for both analyses. The statement should read “Sediment samples that show significant toxicity to *Hyaella azteca* at the end of an acceptable test and that exhibit < 80% organism survival compared to the control will require pesticide analysis of a *sample collected at the same time and location* in an effort to determine the potential cause of toxicity.”

Page 10. Section III C 4 b. In the same paragraph there is a reference to a “practical reporting limit.” Is the term supposed to be “practical quantification limit”? We are unable to find any usage of the term practical reporting limit in the literature and recommend that the term be changed to “practical quantification limit” to avoid confusion.

Page 10. Section III C 5. There is a statement that “The studies shall be representative of the effects of changes in management practices for the parameters of concern.” It is not clear what this statement means. Studies are not representative of anything. If the goal is to develop studies that evaluate the effects of the change in management practices on water quality, the statement should be reworded.

Page 12. Section IV. At the end of the first paragraph there is a statement that “The third- party must collect sufficient data to describe irrigated agricultural impacts on groundwater quality and to determine whether existing or newly implemented management practices comply with the groundwater receiving water limitations of the Order.” Practices cannot comply with receiving water limitations. The sentence should be reworded to state “The third- party must collect sufficient data to describe irrigated agricultural impacts on groundwater quality and to determine whether *existing or newly implemented management practices will result in discharges that will comply with the groundwater receiving water limitations of the Order.*”

Page 12. Section IV. Remove the term “overall” from items 2 and 3 as the term is unnecessary in the context of the statements.

Page 13. Section IV A 2. Change the language from “alkalinity and acidity” to “alkalinity or acidity.”

Page 14. Section IV A 5. The last bullet point makes reference to “relative toxicity.” It is not clear what relative toxicity means and the term should be dropped.

Page 19. Table 3. The table indicates “Nitrate as nitrogen” is the constituent to monitor. Although there is generally very little nitrite in groundwater, the constituent should be “Nitrate as nitrogen, or Nitrate+Nitrite as nitrogen.”

Page 23. Report Component 17. There is a statement that “The summary of nitrogen management data must include a quality assessment of the collected information by township....” For clarity, the statement should read “The summary of nitrogen management data must include *an assessment of the quality of the collected information* by township”

Page 23. Report Component 18. There is no footnote 12 so the numbering jumps from 11 to 13. Also, though there is a citation to footnote 13, there is no footnote 13 in the document.