

Central Coast Regional Water Quality Control Board

April 17, 2013

Claire Wineman
President
Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties
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VIA ELECTRONIC MAIL ONLY

Dear Ms. Wineman:

AGRICULTURAL REGULATORY PROGRAM: COMMENTS REGARDING COOPERATIVE GROUNDWATER MONITORING PROGRAM FOR IRRIGATED LANDS IN SOUTHERN REGION 3

Central Coast Regional Water Quality Control Board (Central Coast Water Board) staff reviewed the Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties' March 15, 2013 proposal titled "*Cooperative Groundwater Monitoring Program for Irrigated Lands in Southern Region 3*"¹ (Proposal). The stated purpose of this Proposal is to develop an effective groundwater monitoring program in the area of the participating dischargers and minimize costs. The Proposal presents a program to satisfy *Order No. R3-2012-0011, Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands* (Agricultural Order) and Part 2.A.6 of the associated Monitoring and Reporting Program No. R3-2012-0011-01, -02, and -03 (MRP) for participating growers in southern San Luis Obispo and northern to mid Santa Barbara Counties. We appreciate your organization's effort to prepare and submit the Proposal.

Staff reviewed the Proposal and finds that it is incomplete and does not meet the minimum requirements of the Agricultural Order and MRP. As submitted, the Proposal lacks specific details for actual groundwater sampling (location, timeframe, and technical rationale). Consequently, I cannot approve the proposed cooperative groundwater monitoring program. Staff's comments are provided in this letter. In order for me to consider approval of the proposed cooperative groundwater monitoring program, please **submit a complete program Proposal and cover letter that describes how the revisions respond to these comments by May 31, 2013.**

REQUIREMENTS FOR COOPERATIVE GROUNDWATER MONITORING

The Agricultural Order and MRP were adopted on March 15, 2012 and provided growers with the option to conduct cooperative groundwater monitoring or individual groundwater monitoring. For growers who chose to comply with cooperative groundwater monitoring requirements, the

¹http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/groundwater/2_coopsouthern.pdf

Agricultural Order and MRP provided for 12 months to submit a cooperative groundwater monitoring program for Executive Officer approval. At a minimum, the program must include sufficient monitoring to characterize the groundwater in the local area of the participating growers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. If the cooperative program proposes decreasing the number and type of domestic wells sampled compared to the individual monitoring requirements, adequate technical rationale (i.e., hydrogeological, duplicative screen interval location, etc.) is required as justification. This hydrogeological characterization and justification may be time and cost prohibitive and will require additional technical review and agreement to approve – especially given the broadly described scale and scope of the Proposal. The Central Coast Water Board and the State Water Resources Control Board (State Water Board) have continued to reiterate the importance and urgency of groundwater monitoring - especially domestic drinking water sources, given the severity of water quality conditions and ongoing threat to public health in agricultural areas of the Central Coast Region.

The Proposal was submitted in response to the option provided in the MRP for growers to participate in a cooperative groundwater monitoring program to minimize costs associated with conducting the groundwater monitoring requirements set forth in the MRP. In general, the groundwater monitoring and reporting requirements in the MRP were issued pursuant to California Water Code section 13267 and 13269 and the cooperative groundwater monitoring program must be designed to support the development and implementation of the Agricultural Order, including, but not limited to, verifying the adequacy and effectiveness of the Order's conditions. The monitoring and reports are also required to evaluate effects of discharges of waste from irrigated agricultural operations and individual farms/ranches on waters of the state and to determine compliance with the Order. The groundwater monitoring and reporting requirements are necessary so that the Central Coast Water Board can directly address the highest priority and most significant impact to water quality from irrigated agricultural runoff, widespread nitrate pollution in groundwater supplying drinking water (including unregulated domestic drinking water wells in rural areas), evaluate groundwater conditions in agricultural areas, identify areas at greatest risk for waste discharge and nitrogen loading and exceedance of drinking water standards, and identify priority areas for nutrient management.

Adequate monitoring, which characterizes groundwater quality of the uppermost aquifer and groundwater used for domestic drinking water purposes, is critical to both comply with the Agricultural Order and to resolve the severe water quality conditions in agricultural areas of the Central Coast region and significant threat to human health. The need for comprehensive groundwater monitoring is underscored by the UC Davis Nitrate Report, *Addressing Nitrate in California's Drinking Water*²; which documents that the nitrate loading to groundwater is double the amount staff estimated in developing the Agricultural Order, and that domestic wells are at great risk of contamination. Also, the State Water Board provided recommendations³ to the

² Harter, T., J. R. Lund, J. Darby, G. E. Fogg, R. Howitt, K. K. Jessoe, G. S. Pettygrove, J. F. Quinn, J. H. Viers, D. B. Boyle, H. E. Canada, N. DeLaMora, K. N. Dzurella, A. Fryjoff-Hung, A. D. Hollander, K. L. Honeycutt, M. W. Jenkins, V. B. Jensen, A. M. King, G. Kourakos, D. Liptzin, E. M. Lopez, M. M. Mayzelle, A. McNally, J. Medellin-Azuara, and T. S. Rosenstock. 2012. *Addressing Nitrate in California's Drinking Water with a Focus on Tulare Lake Basin and Salinas Valley Groundwater*. Report for the State Water Resources Control Board Report to the Legislature. Center for Watershed Sciences, University of California, Davis. 78 p. <http://groundwaternitrate.ucdavis.edu>.

³ Recommendations Addressing Nitrate in Groundwater, State Water Resources Control Board, Report to the Legislature, February 2013.
http://www.waterboards.ca.gov/water_issues/programs/nitrate_project/docs/nitrate_rpt.pdf

legislature based on the UC Davis Nitrate Report. These recommendations state that “A groundwater monitoring and assessment program is a critical element in effectively managing groundwater quality,” and “The Water Boards will define and identify nitrate high-risk areas in order to prioritize regulatory oversight and assistance efforts in these areas.” Groundwater monitoring programs required by the Central Coast Water Board are a critical part of this statewide effort.

In addition, the Third District Court of Appeal recently issued its decision regarding a challenge to the Central Valley Regional Water Quality Control Board waste discharge requirements for dairies (*Asociación de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Board* (2012) 210 Cal.App.4th 1255 (AGUA)). The AGUA decision emphasizes the need for adequate groundwater monitoring based on the findings in the Order, the existing water quality conditions, and to ensure compliance with the State Water Board’s Anti-Degradation Policy (Resolution No. 68-16).

Governor Brown also signed Assembly Bill 685 on September 25, 2012, establishing a state policy that every Californian has a human right to safe, clean, affordable and accessible drinking water. The bill directed relevant state agencies to advance the implementation of this policy when those agencies make administrative decisions pertinent to the use of water for human consumption, cooking, and sanitary purposes.

BACKGROUND

On January 22, 2013, staff met with representatives of the Grower-Shipper Association, Western Growers, Monterey County Farm Bureau, and consultants and other proponents to discuss the requirements and status of your efforts to develop a cooperative groundwater monitoring program. During this meeting, staff provided comments regarding the preliminary draft of the *Northern Central Coast Cooperative Groundwater Program* submitted by the Grower-Shipper Association of Central California, Western Growers, and the Monterey, San Benito, Santa Clara, and Santa Cruz County Farm Bureaus. Staff emphasized that the proposals for cooperative groundwater monitoring programs must include information for the following specific areas: 1) timeframe for sampling and initial groundwater data reporting - especially related to priority drinking water sources, 2) details regarding actual sampling plan, including program scope and technical rationale for sampling locations, 3) assurances of long-term commitment given multi-year timeframe for implementation and potential costs, and 4) program administration to manage participation, fee payment, access to monitoring sites, water quality monitoring data and electronic submittals to GeoTracker, and any other items necessary to ensure long-term success. At the meeting, staff offered to informally review and discuss a preliminary draft proposal from your organization.

In a follow-up email on January 25, 2013, staff provided further comments that the proposal must, at a minimum, include details for implementation to begin assessing domestic drinking water and the uppermost aquifer for at least one groundwater subbasin within approximately three months of approval with data submitted to the Central Coast Water Board within approximately six months. Staff indicated that this would provide an opportunity to begin monitoring priority areas and yield early lessons learned with a limited subset of sampling, and demonstrate a good faith effort - while giving growers time and flexibility to fully implement the program over the longer term.

In a follow-up phone conversation on February 13, 2013, staff reviewed the program requirements and expectations discussed at the January 23, 2013 meeting. Staff again offered the opportunity to informally review and discuss a draft of the proposal.

At the March 15, 2013 Central Coast Water Board Meeting, Board Members discussed the cooperative groundwater monitoring proposals and you presented information regarding the cooperative groundwater monitoring program. Consistent with previous discussions with agricultural representatives, at the meeting staff identified several potential issues affecting the adequacy of the proposals, including the following:

- Definition of geographic boundaries of the program area;
- Specificity of numbers and locations of monitoring points;
- Technical justification for proposed sampling design;
- Timeframe for implementation;
- Urgency for evaluating domestic drinking water;
- Success of long-term Implementation (organizational structure of third-party, commitment of participants, financial assurance);
- Existing grower concern: Well location confidentiality and handling of water quality data.

DESCRIPTION OF THE COOPERATIVE GROUNDWATER PROGRAM FOR IRRIGATED LANDS IN SOUTHERN REGION 3

The Proposal identifies three likely Department of Water Resources (DWR) Groundwater Basins and five other possible DWR Basins to be included in the cooperative groundwater monitoring program. The cooperative groundwater monitoring program includes the use of an adapted randomized grid-based method to determine the number and distribution of groundwater samples to be collected. The final shape of the “grid” polygons and number of wells sampled will be adjusted based on various factors, and is anticipated to be approximately one well per 10 square-miles. The monitoring program will coordinate between samples currently being collected for other regional studies, and where data gaps are identified new sample locations will be proposed. The program will attempt to sample a well representing the “shallow strata” of the aquifer in each polygon. Participants in the cooperative groundwater monitoring program will be surveyed to identify the use of groundwater for drinking purposes; and participants must agree to take individual steps to evaluate groundwater used for drinking on participating farms for the parameters in Table 3 of the MRP. Groundwater samples will be collected once every three (3) years. The program includes an implementation timeline with the first round of sampling to be completed between June 1, 2013 and September 30, 2013, and initial program reports to the Central Coast Water Board between November 15, 2013 and March 1, 2014. The program includes a second round of sampling to be completed between June 1, 2016 and September 30, 2016, with program reports to the Central Coast Water Board between November 15, 2016 and March 14, 2017.

SPECIFIC COMMENTS

In accordance with the Agricultural Order, our highest priority involves characterizing the groundwater quality of the uppermost aquifer, and evaluating groundwater used for domestic drinking water purposes. In order for me to approve, the cooperative groundwater monitoring program proposals, they must include a specific and timely plan for evaluating groundwater used for domestic drinking water supply and characterizing the groundwater quality of the uppermost aquifer in the local area of participating growers.

Staff reviewed the Proposal using specific evaluation criteria developed to compare the Proposal against the minimum requirements and ensure a consistent and thorough evaluation of all cooperative groundwater monitoring program proposals submitted to the Central Coast Water Board (see Attachment).

As indicated above, the Proposal is incomplete and does not meet the minimum requirements of the Agricultural Order and MRP. The proposal lacks specific details and timeframe for implementation concerning the specific tasks, necessary monitoring activities and required water quality evaluation and characterization activities that must be implemented in order to achieve satisfactory compliance with the minimum requirements. In particular, the Proposal does not provide details regarding the well selection, and does not provide sufficient technical rationale for the one well per 10 square-mile sampling design. The Proposal states that this approach is based on the U.S. Geological Survey – Groundwater Ambient Monitoring and Assessment Program (GAMA) methodology. However, the intent of the GAMA Program is to conduct a statewide ambient groundwater monitoring assessment; the same methods are not sufficient for evaluating groundwater quality at the scale of the program area and given the local hydrogeology and groundwater impacts due to nitrate. Furthermore, the monitoring methods are not sufficient to meet the requirements in the MRP: to support the development and implementation of the Agricultural Order, including, verifying the adequacy and effectiveness of the Order's conditions; to characterize groundwater quality of the uppermost aquifer and groundwater used for domestic drinking water purposes; identify areas at greatest risk for waste discharge and nitrogen loading and exceedance of drinking water standards; and identify priority areas for nutrient management.

In addition, the Proposal is not specific regarding the extent to which domestic drinking water wells will be evaluated in the program area, and the specific timeframe for associated monitoring and reporting. Regarding reporting, the Proposal indicates that groundwater quality data will be reported by polygon and that individual well locations will not be reported. This does not comply with the requirements of the Agricultural Order and MRP. Individual data must be reported to the Central Coast Water Board.

Staff has several areas of comments regarding deficiencies in the Proposal which are outlined below. For the proposal to be considered for my approval, additional information and revisions are required. Please revise the Proposal to include all of the information described below.

1. **Participating Growers**

Provide identification of all participating growers, according to the following specifications and timeframe:

- a. Provide participating grower information in Microsoft Access or Excel format, including: AW#, Ranch Name and GeoTracker Global ID for each participating grower; physical mailing address, and email address. Information provided must be accurate and consistent with that reported in the electronic-Notice of Intent (eNOI);
- b. **Timeframe – Current list of participants due in the completed Proposal by May 31, 2013; Updated list that represents enough growers to generate fees to implement the program due on September 1, 2013 (per revisions to the MRP which would allow growers to switch from individual to cooperative groundwater monitoring), and quarterly thereafter to include new enrollees.**

2. **Program Boundary**

Provide digital Geographic Information Systems (GIS) map delineating program area boundaries, according to the following specifications and timeframe:

- a. Boundary displayed as polygon in GIS vector data format;
- b. Using NAD 83 datum;
- c. Accuracy to 1;24,000 scale;
- d. **Timeframe - due in the completed Proposal by May 31, 2013;** Updates may be provided by September 1, 2013 to include additional participating growers.

3. **Technical Basis for Program - Aquifer Description and Existing Data**

The purpose of this section is to describe each aquifer system to be monitored as the basis and supporting rationale for selecting specific wells and screened intervals proposed for monitoring (Section 5 – Sampling Plan, below). The Proposal generally describes that the program area consists of Quaternary Alluvium overlaying Careaga Sand, and that some of the basins have confined areas while others do not. In addition, the Proposal states that the program is focusing on sampling wells representing the shallow strata of the aquifer.

As discussed above, additional detail is necessary to justify the one well per 10 square-mile sampling design. It is not clear that this sampling density will provide a representative characterization of groundwater quality given the variability of the hydrogeology of the program area. Note that the hydrogeologic characterization information required here already exists in the literature and therefore does not require additional investigation. Also, many existing data gaps are already known — including the lack of water quality data for most domestic wells and shallow agricultural wells, and the aquifer zones from which these wells draw. Water quality from deeper aquifer zones, where municipal public supply wells draw, is well established. Municipal public supply well water quality information is already available for interpretation by qualified, experienced, groundwater professionals. As stated above, this information is necessary if the cooperative program proposes decreasing the number and type of domestic wells sampled compared to the individual monitoring requirements.

An acceptable program must include a basic description of each monitored basin's hydrogeology within the program area, according to the following specifications and timeframe:

- a. Provide a general description of aquifer(s) in program area, including depth to groundwater and groundwater flow direction(s), in layered aquifer systems, provide identification of uppermost aquifer, general description of aquifer material laterally and with depth, description of degree of heterogeneity/homogeneity of aquifer material throughout each monitored basin in the program area, provide generalized depths for changes in stratigraphy that affect groundwater flow (i.e., channels, aquitards, etc.);
- b. Provide hydrogeologic cross-section(s) for each basin/subbasin in the program area with map showing location of cross-section;
- c. The Proposal identifies several existing studies regarding groundwater quality in the program area. However, it is not clear of the extent to which the program will rely on existing data and whether or not the existing data provides information regarding groundwater used for domestic drinking water and groundwater quality of the uppermost aquifer. Also, describe if existing data is sufficient to represent program area given extent of program area boundaries and complexity of aquifer characteristics;

- d. Given available existing data, identify data gaps. Describe if and how program will fill identified data gaps;
- e. Include specific references for a. – d. above, as appropriate;
- f. Please note that this task requires specific knowledge and expertise and should be conducted by a qualified professional Engineer or Geologist, or similarly qualified professional with knowledge of the program area. This person's name(s) and contact information should be included with the submittal to facilitate communication with staff;
- g. **Timeframe - due in the completed Proposal by May 31, 2013.**

4. Groundwater Used for Domestic Drinking Water

Describe domestic drinking water use in each basin within the program area, according to the following specifications and timeframe below. This is among the highest priorities for the Central Coast Water Board. The Proposal generally indicates that participants in the cooperative groundwater monitoring program will be surveyed to identify the use of groundwater for drinking purposes; and that participants must agree to take individual steps to evaluate groundwater used for drinking on participating farms for the parameters in Table 3 of the MRP. It is unclear if all participating farms will individually sample all wells on the farm that are used for domestic drinking water, or if domestic drinking water will be evaluated using alternative wells to provide a representative evaluation. In addition, the Proposal also describes that the program will report on the results of enrollment regarding the use of groundwater for drinking water purposes – it is not clear what this entails and if this reporting will be adequate to describe the domestic drinking water use in each basin within the program area.

The Proposal must adequately address domestic drinking water. All rural areas not served by a municipal or community water supply system are dependent on domestic wells. These users include rural homeowners, clusters of homes, farm labor communities, etc. To address domestic well polluted drinking water exposure, the program must include the following:

- a. Provide a description of where groundwater in the program area is used for domestic drinking water, the approximate number and location of domestic wells that exist in each groundwater basin within the program area and the approximate number and location of residences that rely on domestic wells in the program area;
- b. As noted above, there are very little existing data regarding nitrate concentrations in domestic wells. As a result, the program must include extensive sampling of these wells, and because of the threat to human health, this sampling must be an early implementation component for the program. Any use of existing data from domestic wells must be justified in terms of assuring protection of public health. All domestic drinking water wells in the program area must be sampled unless an acceptable technical rationale is provided for sampling a representative subset in specific areas. Domestic wells should be prioritized for sampling based on known contamination, high risk areas (nitrate loading, location of wells, potential for nitrate leaching, etc.), and the number of residents at risk;
- c. Provide a list of domestic drinking water wells that will be sampled, along with location information for these wells in conformance with the details provided in Section 5 – Sampling Plan (below);
- d. Include specific references for a. – c. above, as appropriate;
- e. Please note that this task requires specific knowledge and expertise and should be conducted by a qualified professional Engineer or Geologist, or similarly qualified professional with knowledge of the program area; This person's name(s) and contact

- information should be included, if different from the previous section, with the submittal to facilitate communication with staff;
- f. The implementation timeline in the Proposal indicates groundwater sampling will occur between June 1, 2013 and September 30, 2016. Clarify specifically when the sampling of domestic drinking water wells will occur and provide a detailed time schedule for program implementation and submittal of deliverables to Central Coast Water Board;
 - g. **Timeframe - due in the completed Proposal by May 31, 2013; Sampling of domestic drinking water wells must be initiated by September 1, 2013 and completed by September 1, 2014.**

5. **Sampling Plan**

Considering the high priority and importance of evaluating domestic drinking water supplies, at the very minimum, the Proposal must include details to expedite the sampling of a subset of the highest priority domestic drinking water wells. In addition, the Proposal must include a specific plan for sampling of domestic drinking water wells and wells that will characterize the uppermost aquifer according to the following specifications and timeframe below. In some cases, it is possible that a well can provide information regarding both domestic drinking water and the uppermost aquifer, if it is of the appropriate depth and screened interval.

- a. Identify wells that will be sampled to evaluate groundwater used for domestic drinking water and the uppermost aquifer. Well locations and sampling density must provide representative evaluation of groundwater in each basin within the program area, given the heterogeneity and complexity of the aquifer(s). Provide technical justification for wells selected. Provide a matrix identifying whether wells are domestic, agricultural, or other, and which monitoring component (i.e., domestic well, uppermost aquifer, both, or other) each well is targeted to monitor;
- b. As stated above, the Proposal must include sampling of drinking water supply wells on each participating farm/ranch (if a domestic well exists) unless an acceptable technical rationale is provided for sampling a representative subset. The actual number and density of domestic drinking water supply wells to be sampled must be based on the hydrogeologic conditions of the local area;
- c. Describe the well type (domestic drinking water, agricultural, or other), latitude/longitude of well location (GeoTracker GEO_XY), well construction information (depth, screened interval, describe if well logs are available);
- d. Include a map of proposed wells to be sampled. Identify wells to be sampled to evaluate domestic drinking water, uppermost aquifer, or other. If different aquifer zones are proposed for monitoring, provide a map for each zone. Provide map in digital GIS vector data format using NAD 83 datum with accuracy to 1;24,000 scale;
- e. Groundwater analyses must be consistent with Table 3 in the MRP;
- f. Provide a detailed time schedule for program implementation and submittal of deliverables to Central Coast Water Board. This schedule will be used to determine if implementation is proceeding in a timely manner, as proposed and approved. As stated above, sampling of domestic drinking water wells is a high priority and must be initiated by September 1, 2013 and completed by September 1, 2014;
- g. **Timeframe - due in the completed Proposal by May 31, 2013.**

6. Reporting

The following deliverables must be submitted to the Central Coast Water Board, according to the following specifications and timeframe below.

- a. Submit one hard copy and an electronic format copy of the revised Proposal including any supporting documents, such as digital maps described above. A reference list and digital copies of all references relied upon must also be provided (in PDF or with a link to Internet location). **Timeframe – Completed Proposal due by May 31, 2013;**
- b. The Proposal indicates that groundwater quality data will be reported by polygon. In addition, the Proposal indicates that individual well locations will not be reported. This does not comply with the requirements of the Agricultural Order and MRP. New data must be uploaded to GeoTracker in proper format as unique data points (including well location, well type, well depth, well-screen interval, as described above). **Timeframe – Within 30 days of sampling;**
- c. Results of analysis of existing data and new sampling must be presented in a Final Report that describes groundwater quality in comparison to drinking water standards, with specific evaluation of groundwater used for domestic drinking water and groundwater in the uppermost aquifer. Submit one hard copy and an electronic format copy of the Final Report including any supporting documents. A reference list and digital copies of all references relied upon must also be provided (in PDF or with a link to Internet location). **Timeframe - Draft Final Report by December 15, 2014; Final Report by March 15, 2015;**
- d. Submit quarterly progress reports that describe progress (status of wells sampled, data uploaded to GeoTracker, and preliminary results) compared to the approved time schedule, and any issues encountered that may delay implementation. **Timeframe – Quarterly; Submit first progress report within 3 months of approval;**
- e. Confidentiality and Public Disclosure of Data – The Central Coast Water Board attorney will respond separately to specific concerns regarding the public accessibility and disclosure of water quality and well location data. In general, the Central Coast Water Board must be able to use the data, make the data accessible to the public and cannot sign a non-confidentiality or non-disclosure agreement;
- f. Third Party Implementation – reporting as detailed in Section 7 below.

7. Third Party Implementation

The Proposal indicates that the Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties will take responsibility for administering and implementing the cooperative groundwater monitoring program, and does generally describe the role of the third-party and program participants. The organizational structure and the specific roles of the third-party must be clearly defined such that Central Coast Water Board has assurance that implementation will be timely and successful in the short- and long-term.

Furthermore, given the long timeframe and broad scale and scope of the groundwater monitoring program, the Proposal must estimate the approximate cost to administer and implement the program and provide assurance that there is sufficient funding available to fully implement the program should it be approved. The Proposal must address third-party implementation according to the following specifications and timeframe below.

The Proposal must include a statement that the third-party organization implementing the cooperative groundwater monitoring program will commit to all of the following activities and aspects of the cooperative groundwater monitoring program, including, but not limited to:

- a. Tracking and reporting names and contact information of all participating growers;
- b. Collecting of fees necessary to implement the program (and follow-up with growers who do not pay fees);
- c. Managing all communication and notification to participating growers and the Central Coast Water Board, including informing participating growers of the program and status of implementation;
- d. Sampling in compliance with MRP and the approved cooperative groundwater monitoring program (gaining access to sampling sites, collecting, tracking and transmitting samples to labs, etc.);
- e. Managing water quality monitoring data and electronic submittals to Geotracker;
- f. Managing contracts for technical work;
- g. Interpreting data;
- h. Submitting reports to the Central Coast Water Board;
- i. **Timeframe - due in the completed Proposal by May 31, 2013.** An update may be provided by September 1, 2013.

In addition, the Proposal submitted by May 31, 2013, must include the following language in a. - g. below, specifically as written (where it says "INSERT"; text in brackets should be replaced with text as instructed below):

- a. The [INSERT Third-party organization name] will insure that there is sufficient financial support to implement the program by including the approximate cost to implement the program and identification of the resources available (e.g., the fees and number of participating growers to generate the funds necessary to meet the budgeted costs, grants) to fully implement all technical and administrative aspects of the program;
- b. The [INSERT Third-party organization name] will insure sampling is conducted by dates established in cooperative monitoring program, sampling schedule (see [INSERT reference to proper section in proposal]);
- c. The [INSERT Third-party organization name] will insure data and reports are submitted to the Central Coast Water Board in format specified and by dates established in cooperative monitoring program (see [INSERT reference to proper sections in proposal with data submittal and reporting dates, and data and reporting formats described]);
- d. The [INSERT Third-party organization name] will insure all participating growers are providing any required information and are taking necessary steps to address any obstacles, or issues that arise to implementing the cooperative monitoring program, e.g., failure to pay fees;
- e. The [INSERT Third-party organization name] will insure that any activities conducted on behalf of the third-party by other groups meet the terms and requirements of the program. [INSERT Third-party organization name] is responsible for any activities conducted on its behalf;
- f. The [INSERT Third-party organization name] will establish and conduct governance, including, but not limited to:
 - i. As a legally defined entity (i.e., non-profit corporation; local or state government; Joint Powers Authority) or have a binding agreement among multiple entities that clearly describes the mechanisms in place to ensure accountability to participating growers;

- ii. With a governing structure that includes a governing board of directors composed in whole or in part of participating growers, and that provides participating growers with a mechanism to direct or influence the governance of the third-party through appropriate by-laws;
 - iii. With appropriate authorization from participating growers to access individual grower eNOI information in GeoTracker (e.g., AW#, current contact information);
 - iv. The [INSERT Third-party organization name] will describe and provide evidence for i-iii, above;
- g. The [INSERT Third-party organization name] will provide the following information and reports to the **Central Coast Water Board and participating growers**, on the dates specified:
- i. **By September 1, 2013**, the documentation of its organizational or management structure and its by-laws or operating procedures. The documentation shall identify persons responsible for ensuring that the program is implemented as approved. [INSERT Third-party organization name] must also provide to the Central Coast Water Board, confirmation that this information was provided to participating growers;
 - ii. **By September 1, 2013, and quarterly, thereafter**, the list of participating growers, and quarterly, thereafter, the list of new enrollees, as follows:
 - a. Provide participating grower information in Microsoft Access or Excel format, including: AW#, Ranch Name and GeoTracker Global ID for each participating grower; physical mailing address, and email address. Information provided must be accurate and consistent with that reported in the electronic-Notice of Intent (eNOI);
 - b. [INSERT Third-party organization name] must also provide to the Central Coast Water Board, confirmation that this information was provided to participating growers;
 - iii. **On September 1, 2013, in Draft Final Report by December 15, 2014, and Final Report by March 15, 2015**, annual summaries of expenditures of fees and revenue. [INSERT Third-party organization name] must also provide to the Central Coast Water Board, confirmation that this information was provided to participating growers;
 - iv. **By September 1, 2013 and annually**, thereafter, notification to participating growers of the following, and provide confirmation to the Central Coast Water Board of such notification to participating growers:
 - a. participating growers, as enrolled growers in the Agricultural Order, are individually responsible for the successful implementation of the program and that this individual responsibility has two consequences if the cooperative monitoring program is not successfully implemented: 1) The Central Coast Water Board or Executive Officer will require individual dischargers to conduct individual monitoring per the requirements of the Agricultural Order. 2) The Central Coast Water Board may take enforcement action against individual dischargers. The failure of a third-party group to successfully implement an approved program cannot be used as an excuse for lack of individual discharger compliance;

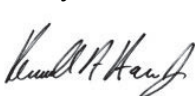
- v. **Quarterly, beginning within 3 months of approval**, if the third-party group is unable to implement any aspect of the program that could result in a violation of the program's monitoring or reporting requirements, notification describing the inability to implement and the possible violations. [INSERT Third-party organization name] must also provide to the Central Coast Water Board, confirmation that this information was provided to participating growers;
- vi. **Quarterly, beginning within 3 months of approval**, notification to participating growers of any changes to the program approved by the Executive Officer or the Central Coast Water Board and confirmation to the Central Coast Water Board that this notification was provided to participating growers.

CONCLUSION

Pursuant to the Agricultural Order and MRP, the Central Coast Water Board requires growers who chose cooperative groundwater monitoring to submit a cooperative groundwater monitoring program proposal for Executive Officer approval. Staff finds that the program submitted is incomplete and does not meet the minimum requirements of the Agricultural Order and MRP. The program does not include adequate detail or technical rationale to evaluate whether the program includes sufficient monitoring to characterize the groundwater quality of the uppermost aquifer and evaluate groundwater used for domestic drinking water purposes. In addition, aggregate reporting of water quality data at the polygon level without reporting individual well location data does not comply with the requirements of the Agricultural Order and MRP. Also, the Proposal lacks any detail regarding cost and resources to implement the program, and does not provide adequate information regarding the specific roles and responsibilities of the third-party administering and implementing the program. As written, the program is not approvable given its lack of information and the importance and urgency of groundwater monitoring - especially domestic drinking water sources and the severity of water quality conditions and ongoing threat to public health in agricultural areas of the Central Coast Region. Consequently, I cannot approve the program. In order for me to consider approval of the proposed cooperative groundwater monitoring program, please **submit a complete Proposal and cover letter that describes how the revisions respond to the comments provided in this letter by May 31, 2013.**

If you have any questions, please contact Angela Schroeter at (805) 542-4644 or at aschroeter@waterboards.ca.gov, or Lisa McCann at (805) 549-3132 or at lmccann@waterboards.ca.gov.

Sincerely,

 Digitally signed by Kenneth A Harris Jr
DN: cn=Kenneth A Harris Jr, o=CCRWQCB,
ou=Interim Executive Officer,
email=kharris@waterboards.ca.gov, c=US
Date: 2013.04.17 12:27:34 -07'00'

Kenneth A. Harris Jr.
Interim Executive Officer

ENCLOSURES:

Cooperative Groundwater Monitoring Proposal Evaluation Criteria

cc:

Ms. Abby Taylor-Silva
Vice President, Policy and Communications
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COOPERATIVE GROUNDWATER MONITORING PROPOSAL EVALUATION

NAME: XXX

SUBMITTED BY: XXX

DATE SUBMITTED: XXX

DATE REVIEWED: XXX

| | | YES | PLANNED Specific | PLANNED General |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------|-----------------|
| 1 | Are boundaries of proposal area well defined (e.g., geographic, groundwater basin, or watershed boundaries)? | | | |
| 2 | Are participating growers identified (AW # and Ranch Name)? | | | |
| 3 | Are the groundwater aquifers in the local area of the participating growers adequately described (existing studies, aquifer description)? | | | |
| 4 | Does the proposal provide details regarding hydrogeology of the proposal area to substantiate and justify monitoring approach? | | | |
| 4a | Does the proposal include details related to sampling locations? | | | |
| 4b | Does the proposal include details related to sample depths? | | | |
| 4c | Does the proposal include details related to sample density? | | | |
| 4d | Are the sampling locations and density appropriate given the hydrogeologic characteristics (e.g. aerial and depth-related heterogeneity, continuity, complexity) of the program area? | | | |
| 5 | Does the proposal generally prioritize the identification and evaluation of groundwater representative of that used for domestic drinking water purposes to ensure safe drinking water? | | | |
| 6 | Does the proposal include monitoring to identify and evaluate groundwater representative of that used for domestic drinking water purposes? | | | |
| 6a | If yes, will monitoring of groundwater used for domestic drinking water occur in the first 3-6 months of implementation? | | | |
| 6b | If monitoring of groundwater used for domestic drinking water is not planned for the first 3-6 months of implementation, will it occur in the first 12 months of implementation? | | | |
| 6c | Are drinking water monitoring locations clearly identified? | | | |
| 6d | If drinking water monitoring locations are not clearly identified, is there a method for prioritizing areas? | | | |
| 7 | Does the proposal include evaluating the groundwater quality representative of the uppermost aquifer? | | | |
| 7a | If yes, are monitoring locations in the uppermost aquifer clearly identified? | | | |
| 8 | Does the proposal include sampling and analyses consistent with Table 3 of the MRP? | | | |
| 9 | Does the proposal report individual groundwater quality data electronically to GeoTracker? | | | |
| 10 | Does the proposal report individual well location data electronically to GeoTracker? | | | |
| 11 | Does the proposal make data accessible to the public (with exception of ½ mile radius well location protection in the Order)? | | | |
| 12 | Does the proposal include a clear and reasonable time schedule for implementation (initiate sampling and reporting)? | | | |
| 13 | If the proposal includes the use of a third-party, is the third-party identified? | | | |
| 13a | If the proposal includes the use of a third-party, are the roles and responsibilities of the third-party to administer and implement the proposal clearly identified (e.g. administration, fee collection, gain access to sites, implementation, reporting, follow-up with participants, long-term agreement)? | | | |
| 13b | If the proposal includes the use of a third-party, are the roles and responsibilities of the participating growers clearly identified (e.g. pay fees, provide access, long-term agreement)? | | | |
| 14 | Does this proposal clearly describe that the financial resources are available to fully implement the proposal (e.g. estimated cost of program, estimated number of participants, potential fee structure)? | | | |
| 15 | Does the proposal clearly describe long-term commitment of third-party and participants, given multi-year timeframe for implementation and potential costs? | | | |
| 15a | Does the proposal identify contingencies to address uncertainties about cooperative group's ability to fully implement proposal in the long term? | | | |