CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

3 November 2014

Ms. Nicole Bell
Kern River Watershed Coalition Authority
P.O. Box 151
Bakersfield, CA 93302

FINAL FARM EVALUATION TEMPLATE UNDER GENERAL ORDER R5-2013-0120

Waste Discharge Requirements for Growers within the Tulare Lake Basin Area that are Members of a Third-Party Group, General Order No. R5-2013-0120 (General Order) requires that all third-party members (Members) complete a farm evaluation describing management practices implemented to protect surface water and groundwater quality.

The enclosed Farm Evaluation template is based on the draft Farm Evaluation template circulated for public comment. Three comment letters were received representing Coalitions within the Tulare Lake Basin Area. Suggestions were considered, and modifications were made as deemed necessary to improve the template's clarity, while ensuring information will be collected consistently across the region. The enclosed Farm Evaluation template must be used to comply with the requirements of Section VII.B of the General Order.

If you have questions regarding this letter, please contact Patrick Barnes at (559) 444-2417, or by e-mail at Patrick.barnes@waterboards.ca.gov.

Clay L. Rodgers
for Pamela C. Creedon
Executive Officer

Enclosures: Template for Farm Evaluation

Farm Evaluation Survey

Overall Instructions

There are four, one page "parts" of the Farm Evaluation Survey to complete, and Farm Map that will help you identify parcel numbers, field IDs, and where you will mark the location of active and abandoned wells:

- Part A: General Farm Practices; complete once (1 page).
- Part B: Irrigation Well Information; complete *one page for each membership or farm.*
- Part C: Field Specific Evaluation; complete *one page for each field or management unit.*
- Part D: Farm Map(s); identify the location of wells listed in Part B and *keep on farm.*
- Part E: Sediment and Erosion Control Practices; complete *one page for each field or management unit.*

<u>You may need to make copies of Parts B, C, and E of the survey and complete separate surveys for each of your fields that are managed differently or have different crops.</u> See detailed instructions on the following pages.

If all parcels/fields listed have <u>the same practices</u>, fill out <u>one (1) survey</u> for all enrolled parcels and return to the Coalition.

If parcels/fields have <u>different practices</u>, <u>make copies of the survey*</u> and fill out one (1) survey for <u>each</u> parcel/field with different practices.

> **For example, if a member has 3 parcels enrolled with one crop grown (Parcel A, B, and C), and he manages Parcel A and B the same, he can fill out one survey for Parcels A and B. Another survey needs to be filled out for Parcel C to record the crops or practices that differ from A and B.*

Step by Step Instructions

The Farm Evaluation has 5 components:

Part A: General Farm Practices

Part B: Irrigation Well Information

Part C: Specific Field Evaluation

Part D: Farm Map(s)

Part E: Sediment & Erosion Control Practices

Step 1: Part A: answer Questions 1 – 4 for all enrolled parcels.

Step 2: Part B: Answer Questions 1 and 2 pertaining to irrigation well information. For Question 3, give each well a unique identifier (Well ID) and list that in column 1 of the table shown. Use the Well ID to link the well management practices to the wells identified on the map. Also identify the location of both active and abandoned wells on the map. Transfer that identifier to the Farm Map (Part D) and keep the map in your files (do not return to the Coalition). The map with well identifiers must be produced if you ever have a Regional Water Board compliance inspection.

Step 3: Part C, Question 1: Identify the Parcels and Fields that the survey addresses on the blank lines provided. Use the attached farm map(s) to help identify parcel numbers including Field IDs. This information corresponds to the map(s) in Part D. Fill in any missing information. Remember to fill out a survey for each of your enrolled parcels.

Step 4: Part C: Complete Question 1 (table). Answer Questions 2 – 4 for parcels that you identified at the top of the page. *If parcels or fields differ in their practices, you must make a copy of the page to answer questions for parcels/fields differently.*

Step 5: Part D: Draw/Develop a Farm Map describing your agricultural operation.

Step 6: Part E: Answer questions as you did in Part C in reference to parcels that you identified at the top of the page. *If parcels or fields differ in their practices you must make a copy of the page to answer questions for parcels/fields differently.*

Step 7: Review the Farm Map (Part D) of your enrolled parcels and make any necessary changes to parcel or field boundaries. For example, a parcel may be enrolled and assigned to a member; however the acreage enrolled is only part of the entire parcel. If you need to update the parcel boundaries, return a copy of the updated map to the Coalition with your Farm Evaluation so the information is linked to the correct piece of land.

Step 8: Sign the bottom of Part A to certify that all of the information provided is current and accurate. Return the signed Farm Evaluation to the Coalition (Part A – Part E) and Farm map(s) (Part D, if updated with new information).

Farm Evaluation
Part A – General Farm Practices

Member Name: _____ **Coalition Member ID#:** _____

1. **Pesticide Application Practices (check all that apply)**

   - ☐ County Permit Followed
   - ☐ Follow Label Restrictions
   - ☐ Sensitive Areas Mapped
   - ☐ Attend Trainings
   - ☐ End of Row Shutoff When Spraying
   - ☐ Avoid Surface Water When Spraying
   - ☐ Reapply Rinsate to Treated Field
   - ☐ Target Sensing Sprayer used
   - ☐ Use Drift Control Agents
   - ☐ Monitor Wind Conditions
   - ☐ Use Appropriate Buffer Zones
   - ☐ Use Vegetated Drain Ditches
   - ☐ Monitor Rain Forecasts
   - ☐ Use PCA Recommendations
   - ☐ Chemigation
   - ☐ No Pesticides Applied
   - ☐ Other _____
   - ☐ Other _____

2. **If you have one or more nutrient management plans, who helped prepare the plan?** (Check all that apply)

   - ☐ Certified Crop Advisor (CCA)
   - ☐ Pest Control Advisor (PCA)
   - ☐ Certified Technical Service Providers by NRCS
   - ☐ Professional Soil Scientist
   - ☐ Professional Agronomist
   - ☐ Independently Prepared by Member
   - ☐ UC Farm Advisor
   - ☐ None of the above

3. **Complete Part E on sediment and erosion control practices used on farm field(s).**

4. **Does your farm have the potential to discharge sediment to off-farm surface waters?**

   Circle One: Yes No

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel or represented Members properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for violations.

_____	_____	_____
Signature	***Printed Name***	***Date***

Farm Evaluation

Part B – Irrigation Well Information

If you have no irrigation wells, please check "No" for Questions 1 and 2

1. Do you have any irrigation wells on parcels associated with this Farm Evaluation? ☐ **Yes** ☐ **No**
2. Are you aware of any known abandoned irrigation wells associated with this Farm Evaluation? ☐ **Yes** ☐ **No**
3. For abandoned wells, mark the location of these wells on the attached map(s) or your own farm map with a unique Well ID of your choice and fill in the following table. For each well, be sure to fill in the table with the Well ID that corresponds to the map and put an "X" next to the practices that apply to the individual well. If the well has been abandoned, indicate the approximate year the well was abandoned (write "Unk" if the year is unknown) and mark how the well was abandoned:

Farm Well ID	Wellhead Protection						Abandoned Wells				Observation/Monitoring Well – Year Modified
	Cement Pad	Ground Sloped Away from Wellhead	Standing Water Avoided Around Wellhead	Good "Housekeeping" Practices*	Air Gap (for non-pressurized systems)	Backflow Preventive / Check Valve	If Abandoned, Year Abandoned	Destroyed – Certified by County	Destroyed by Licensed Professional	Destroyed - Unknown Method	

*Good housekeeping practices include keeping the area surrounding the wellhead clean of trash, debris and any empty containers.

Comments: _____

Part C – Field Specific Evaluation

Member Name: _____ **Coalition Member ID#:** _____

1. **Identify the Parcels and Fields that this survey addresses on the blank lines below.** ***Fill out a separate survey for parcels/fields with different practices. Vulnerability will be determined by the Coalition. If vulnerability is unknown at this time, do not check the boxes in Question 1.***
   - **SW** High Vulnerability is when a parcel is within an area covered by a Surface Water Management Plan.
   - **GW** High Vulnerability is areas having potential for groundwater contamination.

High Vulnerability SW	High Vulnerability GW	Crop	Field ID	Acres	Parcel (APN)
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____

2. **Irrigation Practices** ***(A secondary system could be used for crop germination, frost protection, crop cooling, etc.).***

Primary (check one)	Secondary (if applicable, check one)	Not Irrigated
☐ Drip	☐ Drip	☐ Fallow
☐ Micro Sprinkler	☐ Micro Sprinkler	☐ Dry Farming
☐ Sprinkler	☐ Sprinkler	
☐ Border Strip	☐ Border Strip	
☐ Furrow	☐ Furrow	
☐ Flood (Level Basin)	☐ Flood (Level Basin)	

3. **Irrigation Efficiency Practices (check all that apply)**

   ☐ Laser Leveling
   ☐ Use of ET in scheduling irrigations
   ☐ Water application scheduled to need
   ☐ Use of soil moisture probe (e.g. irrometer or tensiometer)
   ☐ Soil Moisture Neutron Probe
   ☐ Pressure Bomb or other plant moisture feedback device
   ☐ Other _____
   ☐ Other _____

4. **Nitrogen Management Methods to Minimize Leaching Past the Root Zone (check all that apply)**

   ☐ Cover Crops
   ☐ Split Fertilizer Applications
   ☐ Soil Testing
   ☐ Tissue/Petiole Testing
   ☐ Variable Rate Applications using GPS
   ☐ Foliar N Application
   ☐ Irrigation Water N Testing
   ☐ Fertigation
   ☐ Other _____
   ☐ Other _____
   ☐ Do not apply nitrogen

Part D – Farm Map

(Keep Onsite- For Inspection Purposes Only)

Draw/Develop a map in the space below describing your farm operation including information such as parcel layout, crops grown, and irrigation infrastructure (wells, pipes, ditches, surface water discharge points etc.). Update any well locations, field boundaries and surface water discharge points if they change in the future.

Legend
X – In-Use Well Locations
A – Known Abandoned Well Locations
O – Observation/Monitoring well
DP – Off Farm Surface Water Discharge Points (pipes, ditches, etc.)

Part E – Sediment & Erosion Control Practices

Member Name: _____ **Coalition Member ID#:** _____

1. **Identify the Parcels and Fields that this survey addresses on the blank lines below.** ***Fill out a separate survey for parcels/fields with different practices. Vulnerability will be determined by the Coalition. If vulnerability is unknown at this time, do not check the boxes in Question 1.***

High Vulnerability SW	GW	Crop	Field ID	Acres	Parcel (APN)
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____
☐	☐	_____	_____	_____	_____

2. Irrigation Practices for Managing Sediment and Erosion (check all that apply)

- ☐ No irrigation drainage due to field or soil conditions.
- ☐ In-furrow dams are used to increase infiltration and settling out of sediment prior to entering the tail ditch.
- ☐ The time between pesticide applications and the next irrigation is lengthened as much as possible to mitigate runoff of sediment bound pesticide residue.
- ☐ Shorter irrigation runs are used with checks to manage and capture flows.
- ☐ PAM (polyacrylamide) used in furrow and flood irrigated fields to help bind sediment and increase infiltration.
- ☐ Use drip or micro-irrigation to eliminate irrigation drainage.
- ☐ Use of flow dissipaters to minimize erosion at discharge point.
- ☐ Tailwater Return System.
- ☐ Catchment Basin.
- ☐ Other_____

3. Cultural Practices for Managing Sediment and Erosion (check all that apply)

- ☐ No storm drainage due to field or soil conditions.
- ☐ Storm water is captured using field borders.
- ☐ Vegetated ditches are used to remove sediment as well as water soluble pesticides, phosphate fertilizers and some forms of nitrogen.
- ☐ Vegetative filter strips and buffers are used to capture flows.
- ☐ Sediment basins / holding ponds are used to settle out sediment and hydrophobic pesticides such as pyrethroids from irrigation and storm runoff.
- ☐ Cover crops or native vegetation are used to reduce erosion.
- ☐ Hedgerows or trees are used to help stabilize soils and trap sediment movement.
- ☐ Soil water penetration has been increased through the use of amendments, deep ripping and/or aeration.
- ☐ Crop rows are graded, directed and at a length that will optimize the use of rain and irrigation water.
- ☐ Creek banks and stream banks have been stabilized.
- ☐ Subsurface pipelines are used to channel runoff water.
- ☐ Berms are constructed at low ends of fields to capture runoff and trap sediment.
- ☐ Minimum tillage incorporated to minimize erosion.
- ☐ Field is lower than surrounding terrain.
- ☐ Field is terraced or benched to reduce excessive slopes.
- ☐ Other_____