
Central Valley Regional Water Quality Control Board

8 April 2014

Mr. Mark McKean
Kings River Watershed Coalition Authority
P.O. Box 8259
Fresno, California 93747

PROPOSED 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. Members' Farm Evaluations must be completed and submitted to the Kings River Watershed Coalition Authority (Coalition) in accordance with Section VII.B of the General Order.

A Farm Evaluation template must be used to comply with the requirements of the General Order. The purposes of using a template are to collect information consistently across irrigated agricultural areas and commodities, and to minimize the costs for growers to provide that information. The Kings River Watershed Coalition Authority and commodity groups in the Tulare Lake Basin Area have worked with the East San Joaquin Water Quality Coalition to develop templates to satisfy the requirements of General Order R5-2012-0116-R1. However, the Central Valley Water Board recognizes that templates may require modifications for different geographic areas, and is hereby providing the Coalition and other interested parties with thirty days to comment on the proposed Farm Evaluation template.

Comments on the proposed Farm Evaluation template's applicability to the Kings River Watershed Coalition Authority area must be submitted by 8 May 2014 to be considered prior to the Executive Officer providing the final template to the Coalition. Comments may be submitted to dsholes@waterboards.ca.gov or hard copy to: Central Valley Regional Water Quality Control Board, Attn: David Sholes, 1685 E Street, Fresno, CA 93706. If you have questions regarding this letter, please contact David Sholes at (559) 445-6279, or by e-mail at dsholes@waterboards.ca.gov.

Original signed by Clay L Rodgers, for

Pamela C. Creedon
Executive Officer

Enclosures: Proposed Farm Evaluation Templates

Proposed Template for Farm Evaluation Survey

Overall Instructions

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

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

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

If all parcels/fields listed have the same practices, fill out one (1) survey for all enrolled parcels and return. Check the corresponding box(es) on the far left column to indicate the field(s) covered by the answers.

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

When copies are made, check the box next to the parcel(s) and Field ID(s) that the survey responses apply to.

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:** Whole Farm Evaluation
- Part B:** Specific Field Evaluation
- Part C:** Irrigation Well Information
- Part D:** Sediment & Erosion Control Practices
- Part E: Farm Map(s)**

Step 1: Part A: answer Questions 1 – 3 for all enrolled parcels.

Step 2: Part B, question 1: check the parcels that the survey applies to by putting a check in the left hand box. Use the attached farm map(s) to help identify parcel numbers including Field IDs. This information corresponds to the map(s) in Part E. Fill in any missing information. Remember to fill out a survey for each of your enrolled parcels.

Step 3: Part B: Answer questions 2 – 4 for parcels that **you identified** at the top of the page by checking the box next to the parcel. *If parcels or fields differ in their practices, you must make a copy of the page to answer questions for parcels/fields differently.*

Step 4: Part C: Answer Questions 1 and 2 pertaining to irrigation well information. Give each well a unique identifier (Well ID) and list that in column 1. 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 E) 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 5: Part D: Answer questions as you did in Part B in reference to parcels that **you identify** at the top of the page by checking the box next to the parcel. *If parcels or fields differ in their practices you must make a copy of the page to answer questions for parcels/fields differently. Make sure you check off which parcels your answers apply to.*

Step 6: Review the Farm Map of your enrolled parcels (those that were checked in **Step 2**) and make any necessary changes to the 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 to the Coalition the signed Farm Evaluation (Part A – Part D) and map(s) (Part E, if updated with parcel / field ID information).

Part A – Whole Farm Evaluation

Member Name: _____ Coalition Member ID#: _____

1. Pesticide Application Practices (check all that apply)

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

2. Who do you have help develop your crop nutrient application plan? (Check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Certified Crop Advisor (CCA) | <input type="checkbox"/> Independently Prepared by Member |
| <input type="checkbox"/> Pest Control Advisor (PCA) | <input type="checkbox"/> UC Farm Advisor |
| <input type="checkbox"/> Certified Technical Service Providers by NRCS | <input type="checkbox"/> None of the above |
| <input type="checkbox"/> Professional Soil Scientist | |
| <input type="checkbox"/> Professional Agronomist | |

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

(Circle one) Yes No

4. Complete Part D on sediment and erosion control practices used on farm field(s).

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

Part B – Field Specific Evaluation

Member Name: _____ Coalition Member ID#: _____

1. Identify the Parcels and Fields that this survey applies to by checking the box in the first column below. **Fill out a separate survey for parcels/fields with different practices.**

- 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.
See enclosed material for more information on vulnerability.

	High Vulnerability		Parcel (APN)	Field ID	Acres	Crop
	SW	GW				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____

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

Primary (check one)

- Drip
- Micro Sprinkler
- Furrow
- Sprinkler
- Border Strip
- Flood

Secondary (if applicable, check one)

- Drip
- Micro Sprinkler
- Furrow
- Sprinkler
- Border Strip
- Flood

3. Irrigation Efficiency Practices (check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Laser Leveling | <input type="checkbox"/> Soil Moisture Neutron Probe |
| <input type="checkbox"/> Use of E _T in scheduling irrigations | <input type="checkbox"/> Pressure Bomb |
| <input type="checkbox"/> Water application scheduled to need | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Use of moisture probe | <input type="checkbox"/> Other _____ |

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

- | | |
|---|---|
| <input type="checkbox"/> Cover Crops | <input type="checkbox"/> Irrigation Water N Testing |
| <input type="checkbox"/> Split Fertilizer Applications | <input type="checkbox"/> Fertigation |
| <input type="checkbox"/> Soil Testing | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Tissue/Petiole Testing | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Variable Rate Applications using GPS | |
| <input type="checkbox"/> Foliar N Application | |

Part D – Sediment and Erosion Control Practices

Member Name: _____ Coalition Member ID#: _____

1. Identify the Parcels and Fields that this survey applies to by checking the box in the first column below. Fill out a separate survey for parcels/fields with different practices.

	High Vulnerability		Parcel (APN)	Field ID	Acres	Crop
	SW	GW				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____

2. Irrigation Practices for Managing Sediment and Erosion

- 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 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.
- No irrigation drainage due to field or soil conditions.

3. Cultural Practices for Managing Sediment and Erosion

- 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.
- No storm drainage due to field or soil conditions.

Part E – Farm Map

(Keep Onsite- For Inspection Purposes Only)

Update map with well locations and surface water discharge points.

Legend

X – In Use Well Locations

A – Known Abandoned Well Locations

DP – Off Farm Surface Water Discharge Points