
Central Valley Regional Water Quality Control Board

5 January 2015

Mr. Parry Klassen, Executive Director
East San Joaquin Water Quality Coalition
1201 L Street
Modesto, CA 95354

APPROVAL OF THE 2015 WATER YEAR MONITORING PLAN UPDATE – EAST SAN JOAQUIN WATER QUALITY COALITION

Thank you for the timely submittal of the Monitoring Plan Update for the 2015 water year within the East San Joaquin Water Quality Coalition (Coalition) Area. Staff reviewed the proposed monitoring plan for compliance with the Monitoring and Reporting Program (MRP) R5-2012-0116.

Staff determined that the Coalition's proposed schedule includes monitoring of constituents during application periods, or the time when constituents of concern affected water quality in the past, and that the proposed monitoring plan complies with the MRP requirements. Pesticides will continue to be monitored as described in the Coalition's 2008 approved Monitoring and Reporting Program Plan until the process for identifying pesticides that require monitoring (MRP, Section III.C.3) has been completed. The Coalition must ensure that at least two storm runoff events are monitored. As such, monitoring proposed for the 2015 water year will provide sufficient data to describe irrigated agriculture's impacts on surface water quality.

Based on the information in the submitted documents and the attached staff memorandum, I approve the Coalition's revised Monitoring Plan for the 2015 water year. Items identified in *Staff Recommendations* should be addressed in future Monitoring Plan Update (MPU) reports. The next MPU report is due by 1 August 2015.

If you have questions regarding this letter, please contact Susan Fregien at (916) 464-4813 or by email at Susan.Fregien@waterboards.ca.gov.

Original Signed By Adam Laputz for

Pamela C. Creedon
Executive Officer

Enclosure: Staff Review of Monitoring Plan Update

Cc: Michael Johnson, MLJ-LLC

Central Valley Regional Water Quality Control Board

TO: Joe Karkoski
Supervising WRCE, Program Manager
Irrigated Lands Regulatory Program

FROM: Susan Fregien
Senior Environmental Scientist
Monitoring and Implementation Unit
Irrigated Lands Regulatory Program

DATE: 19 December 2014

SUBJECT: EAST SAN JOAQUIN WATER QUALITY COALITION'S
MONITORING PLAN UPDATE FOR 2015 WATER YEAR

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) received a Monitoring Plan Update (MPU) report from the East San Joaquin Water Quality Coalition (Coalition) on 1 August 2014, as required by the Monitoring and Reporting Program (MRP) R5-2012-0116-R1. Staff and the Coalition held a meeting on 5 September to discuss and clarify language presented in the monitoring plan. On 23 September, the Coalition submitted a revised Monitoring Plan Update with additional information and evaluations. The Monitoring Plan Update report provides the proposed surface water monitoring schedule for the period 1 October 2014 through 30 September 2015 (2015 water year).

Staff reviewed the 2015 water year Monitoring Plan Update to determine compliance with requirements pursuant to the MRP. An overview of the main elements of the proposed monitoring plan is presented below, followed by staff recommendations.

Storm Runoff Monitoring

Per section III.C.1 in the MRP, sampling events must be scheduled to capture at least two storm runoff events per year and storm runoff monitoring criteria shall be identified. The Coalition defines the storm runoff monitoring criteria on page 1 of the MPU: "A storm monitoring event is defined as monitoring within three days of a rainfall event that exceeds 0.25 inches within 24 hours."

Monitoring Sites, Parameters, Schedule, and Frequency

The monitoring design for the 2015 water year includes six Core sites, 26 Represented sites, and three sites established for diazinon and chlorpyrifos TMDL compliance on the San Joaquin River. Per the MRP, the Coalition has identified a specific set of monitoring parameters for each site that is scheduled to be monitored (see MPU, Tables 1 and 2), selected appropriate monitoring periods, and included a discussion of the rationale to support the proposed schedule. Monitoring schedule and frequency for the 2015 water year relies mostly on previous monitoring results and pesticide use trends or reports to capture runoff data during times when the pollutant is most likely to be present.

Previous monitoring was based on a monthly frequency and, for the 2015 water year, the Coalition proposes to continue with the monthly frequency during the identified monitoring periods at each site. The following text discusses the monitoring parameters and schedule.

1. Core Site Monitoring

Monitoring will be conducted at one Core site in each of the six Coalition zones during the 2015 water year (MPU pages 4-29). Table 4 in the MPU lists the parameters to be monitored at Core sites in the 2015 water year: the monitoring will include field measurements, drinking water and general physical parameters, nutrients, pesticides, metals, and water column and sediment toxicity, meeting the requirements in the MRP. With the exception of metals, glyphosate, paraquat, and sediment toxicity (see below), all constituents will be monitored once per month at all core sites.

Pesticides - A process for selecting pesticides to be monitored and determining where monitoring is required is currently being developed with input from scientists and in coordination with the Department of Pesticide Regulation. Until the process for pesticide selection is developed, the Coalition proposes to monitor pesticides based on the 2008 Monitoring and Reporting Program pesticide list. Monthly monitoring is proposed for the pesticides listed in Table 4 in the MPU, with the exception of glyphosate and paraquat, which will be monitored during one storm and one irrigation event, as approved on 6 May 2011.

303(d) Constituents - Per the MRP, 303(d) listed constituents are to be monitored if irrigated agriculture is a contributing source and the Executive Officer requests that monitoring be performed. At this time, the Executive Officer has not requested monitoring of specific 303(d) constituents. 303(d) monitoring conducted under the previous MRP Order did not reveal water quality problems. The previously monitored constituents include Group A (Aldrin, Chlordane, Heptachlor, Heptachlor Epoxide, gamma-HCH, alpha-HCH, beta-HCH, delta-HCH, Endosulfan I, Endosulfan II, Toxaphene) and organochlorines (DDD, DDE, DDT, Dicofol, Dieldrin, Endrin, Methoxychlor).

Metals - To identify which metals need monitoring and during what period, the Coalition followed an evaluation process shown in Figure 2 of the MPU, which takes into account previous monitoring results and pesticide use information (MPU pages 8-29). Metals monitoring data from 2006 to 2014 is provided for each Core site. As required in the MRP, an evaluation of each metal at each site provides justification for a decision whether monitoring is needed. The evaluation considers previous monitoring data, 303(d) status, previous exceedances, management plan status, and whether the metal is applied by agriculture. Staff reviewed the Coalition's decision process and proposed monitoring schedule and concurs with the metals monitoring decisions.

2. Represented Site Monitoring

Tables 1 and 2 in the MPU identify all parameters proposed for WY 2015 monitoring at Represented sites.

The proposed monitoring at Represented sites (MPU pages 30-80) is based on: a) the management plans already in place at each represented site (labeled as Monitor Type 'M', Tables 1-2; also referred to as Special Project Monitoring, MPU p. 81-130); b) the evaluation of high-priority constituents (pesticides, metals, and toxicity) under an existing management plan at the core site in the respective Zone; and c) exceedances of the trigger limit for a constituent at the Core site that are evaluated and deemed to also pose a threat to water quality at the Represented site. If the constituent is already under a management plan in a subwatershed,

then a management plan monitoring design supersedes the schedule based on the Core site results. Below is a summary of how each of these elements was evaluated to identify Represented Site monitoring parameters.

- a) The evaluation of management plan monitoring took into account previous monitoring results and pesticide use reports for the high-priority constituents in Represented subwatersheds. The evidence considered in the evaluations of management plan monitoring is documented for pesticides and applied metals, and the MPU contains a justification for the proposed monitoring schedule.
- b) Monitoring in represented subwatersheds in a Zone is proposed for high-priority constituents under a management plan at the Core site in that Zone. A justification for no monitoring is provided for subwatersheds where previous monitoring results show that the constituent is not causing water quality problems in a represented subwatershed or PUR data show that use of a chemical is low or non-existent. Monitoring represented subwatersheds in the Zone is proposed for months when exceedances occurred at the Core site and/or when the constituent is most likely to be present based on use patterns.
- c) Monitoring at Represented sites is proposed for high-priority constituents (applied pesticide, applied metal, or toxicity) that exceeded the trigger limit at the Core site after an evaluation of the potential for similar risks or threats to water quality associated with that parameter at the sites represented by the Core site. The Coalition evaluated pesticide use information (including pounds of AI and trends in use through time), previous monitoring results, and cropping patterns to determine if similar risks are present. Staff conducted a detailed review of the evaluations and justifications for monitoring decisions in the MPU. Some changes were made based on comments provided by staff. Staff concurs with monitoring decisions provided in the MPU submitted on 23 September.

3. Management Plan Monitoring

The Coalition will continue with the strategy approved in the 2008 Management Plan (revised in 2010) until the Regional Board approves the 2014 Surface Water Quality Management Plan (SQMP). The SQMP is currently under staff review. Table 20 in the MPU provides the 2015 WY management plan monitoring schedule, which encompasses both Core and Represented sites.

4. TMDL Monitoring

Per the MRP, TMDL constituents require monitoring if irrigated agriculture is a contributing source. Applicable TMDLs within the Eastern San Joaquin River (SJR) Watershed include the SJR Deep Water Ship Channel dissolved oxygen, the SJR diazinon and chlorpyrifos, and the SJR salt, boron and selenium. The SJR diazinon and chlorpyrifos TMDL monitoring requirements will continue to be met through a joint monitoring and reporting program with the Westside SJR Coalition. Monitoring for the remaining TMDL constituents continues to be met utilizing existing monitoring data collected from Core and Represented monitoring sites.

To ensure compliance with the Diazinon and Chlorpyrifos Total Maximum Daily Load (TMDL) requirements, the Coalition will monitor three of the six compliance locations within the San Joaquin River (the other three sites are monitored by the Westside San Joaquin River Watershed Coalition). Samples will be collected once during winter storm season (January/February), and monthly from May through September. To assess compliance with load allocations, in addition to monthly monitoring at six Core sites, diazinon will be monitored at one and chlorpyrifos at 12 Represented sites.

STAFF RECOMMENDATIONS

I. Management Plan Monitoring at Represented Sites

The waste discharge requirements allow for utilizing the surface water quality prioritization process described in the Coalition's approved management plan strategy. Under the currently approved strategy, only high-priority constituents are monitored as part of management plan monitoring at Represented Sites. In future MPU reports, the management plan prioritization should also allow sufficient monitoring to assess water quality and effectiveness of management practices with respect to all constituents under a management plan and, when warranted, to verify completion of management plans.

The Coalition has proposed a revised strategy and timeline to address all constituents in their *2014 Surface Water Quality Management Plan*, which is currently under staff review. The proposed approach, which includes evaluation of lower priority constituents at represented sites, will be reviewed and addressed as part of the SQMP review and approval process. For the 2015 WY, staff recommends approval of the Coalition's current approach.

II. Monitoring Represented Sites Based on Core Site Water Quality Problems

Evaluations for represented monitoring based on the water quality problems identified at the Core sites currently include only high-priority constituents. In future MPU reports, when evaluating constituents of concern at Core sites to determine if monitoring may be required at a Represented site in the same Zone, all constituents should be considered and not limited to high priority constituents.

The Coalition has proposed a revised strategy to address all constituents in their *2014 Surface Water Quality Management Plan (SQMP)*, which is currently under staff review. The proposed approach, which includes evaluation of lower priority constituents at represented sites, will be reviewed and addressed as part of the SQMP review and approval process. For the 2015 WY, staff recommends approval of the Coalition's current approach.