



California Regional Water Quality Control Board Central Valley Region

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IRRIGATED LANDS REGULATORY PROGRAM

ANNUAL SAN JOAQUIN RIVER CHLORPYRIFOS AND DIAZINON TMDL REPORT

MEETING NOTES

28 March 2011– MEETING No. 2

(Revised on 27 April 2011)

Attendees: Chris Linneman, Chris Jimmerson, Dania Huggins, Daniel McClure, Jerry Bruns, Joseph McGahan, Melissa Turner, Michael Johnson, Parry Klassen, and Susan Fregien

Summary: Staff gave a brief description of the Basin Plan requirements to comply with the WQOs and load allocation. After a discussion of potential alternatives on how to approach compliance aspects in the next Annual SJR Chlorpyrifos-Diazinon TMDL Report (Annual SJR C-D TMDL Report), the Coalitions agreed to follow up with a proposal that will include:

- (1) Proposed time period for the reporting period and submittal of the Annual SJR C-D TMDL Report
- (2) Proposed format of the report, joint or individual Annual SJR C-D TMDL Report
- (3) Discussion of their monitoring strategy and how a complete analysis of compliance with WQO and load allocations will be conducted.

ITEMS DISCUSSED

- (1) Annual SJR C-D TMDL Report Staff review Status
- (2) Compliance with the WQOs and load allocation
- (3) Options for the Next Annual SJR C-D TMDL Report
- (4) Mass Balance analysis
- (5) Dormant Spray Monitoring
- (6) Action Items
- (7) Next TMDL mtg No. 3

(1) STATUS ON STAFF REVIEW

Purpose: To provide a status on the review of the Annual SJR C-D TMDL Report submitted to Staff on 1 November 2011.

Outcome: Review of the Annual SJR C-D TMDL Report was completed and coordinated by Irrigated Lands Regulatory Program (ILRP) and Pesticide TMDL Unit staff. Staff also explained that since the monthly tributary monitoring data evaluation was not included, the requirement to determine compliance with load allocations cannot be determined. A response letter will be completed through an EO letter that will include a

list of minimum requirements that will need to be addressed. The response letter will be prepared once the Coalitions present a final proposal (Item 6) including a:

- (1) Proposed time period for the reporting period and submittal of the Annual SJR C-D TMDL Report
- (2) Proposed format of the report, joint or individual Annual SJR C-D TMDL Report
- (3) Discussion of their monitoring strategy and how a complete analysis of compliance with WQOs and load allocations will be conducted.

(2) COMPLIANCE WITH THE WQO AND LOAD ALLOCATION

Purpose: To provide clarification on the WQO and load allocation requirements and describe what is expected for the next Annual SJR C-D TMDL Report.

Outcome: Staff explained that it is a requirement of the Basin Plan that if compliance with the WQOs and load allocation were not met, in the SJR and/or the Subareas, by 1 December 2010 the Coalitions would need to:

- a. Implement management practices (Ch IV, Section 1.a, page IV-36.02)
- b. Revise their current management plan strategy (Ch IV, Section 8, page IV-36.03)

If WQOs and load allocation exceedances occur after 1 December 2010 the Coalitions will be out of compliance and will need to follow up with a proposal on how they are going to revise their current management plan strategy to address current problems. It will not be assumed by Staff that exceedances found at the tributaries will cause exceedances of the WQOs or load allocations within the main stem of the SJR.

(3) OPTIONS FOR THE NEXT ANNUAL SJR C-D TMDL REPORT

Purpose: To determine what report format the Coalitions will propose in terms of:

- a. Continuing with a joint effort, which means a single report, or
- b. Preparing independent reports for each Coalition.

Outcome: Staff explained that in either case the Coalitions are expected to provide an integrated evaluation of the tributary and SJR water quality information. If Coalitions decide to prepare independent reports, it is likely that they will have to:

- a. Increase monitoring frequency at the SJR. This increased frequency must be associated with chlorpyrifos and diazinon use, and
- b. Demonstrate how assessment of the main stem will be done in separate reports.

Coalitions expressed that there may be some advantages to continue with a joint report. However, a more detailed discussion and evaluation was needed among the Coalitions before making a decision. A preliminary draft proposal is going to be presented to staff at the May 3rd, 2011 TMDL meeting.

(4) MASS BALANCE ANALYSIS

Purpose: To discuss how Mass Balance analysis will be reported in the next Annual SJR C-D TMDL Report.

Outcome: Incorporating a Mass Balance analysis of the tributaries was discussed at the meeting. The Coalitions explained that it will be difficult to do a mass balance on a material (mass) that does not stay in the system (SJR) and there are not enough sampling sites to do an accurate Mass Balance analysis. The basic premise of applying Mass Balance analysis to a physical system such as the SJR relies on accounting for all the material entering and leaving the system (SJR). It was explained that without having a clear understanding of the inputs into the system, this analysis cannot be done correctly. An example of the many discharges that Coalitions have not accounted for are all the discharges from pipes directly draining into the SJR.

For the 2010 monitoring period, Coalitions conducted a quick, back-of-the-envelope chlorpyrifos Mass Balance analysis. The predictions were off by as much as 8 times due to the nature of the monitoring design where samples were collected over two weeks in some cases, at limited time periods, and not according to a Lagrangian design which means that the same piece of water was not sampled from the top of the different watersheds down to the bottom compliance point. Therefore, the Coalitions do not think that Mass Balance analysis is complete enough to characterize the sources of chlorpyrifos and diazinon within the SJR. Given the complexity of the hydrology, Staff agreed that a complete Mass Balance analysis is not feasible. Given the above rationale and Coalitions' explanations it was decided that this alternative will not be included in the proposal.

(5) DORMANT SEASON MONITORING

Purpose: To discuss the level of representation in the current monitoring scheme of dormant season applications for diazinon and chlorpyrifos.

Outcome: The Coalitions explained that the current timing and frequency is representative of dormant spray applications, which usually occur in December and January. Additionally, it was explained to Staff that the dormant spray applications are no longer a common practice among growers during the dormant season.

(6) ACTION ITEMS

The following is a summary of the action items identified as part of the meeting outcome.

Regional Board

- a. Schedule TMDL Mtg No3. [Completed on 04/19/11](#)
- b. Send TMDL Agenda Mtg No3. [Completed on 04/19/11](#)
- c. Complete and send response letter to the Coalitions (Item 1). **Pending**

ESJWQC

- a. Coalitions will present a final proposal which will include:

1. Proposed time period for reporting period and submittal of the Annual SJR C-D TMDL Report and
 2. Proposed format of the report, joint or individual Annual SJR C-D TMDL Report
 3. Discussion of their monitoring strategy and how a complete analysis of compliance with WQOs and load allocations will be conducted.
- b. Coalitions will discuss the preliminary proposal at the May 3, 2011 TMDL Meeting.

(7) NEXT TMDL MEETING ==> Scheduled for **Tuesday, May 3rd, 2011 at 1300 pm.**