

10 January 2013

Mr. Parry Klassen
Executive Director
East San Joaquin Water Quality Coalition
1201 L Street
Modesto, CA 95954

Mr. Joseph C. McGahan
Watershed Coordinator
Westside San Joaquin River Watershed
Coalition
P.O. Box 2157
Los Banos, CA 93635

***SAN JOAQUIN RIVER DIAZINON AND CHLORPYRIFOS TOTAL MAXIMUM DAILY LOAD
MONITORING SCHEDULE***

The East San Joaquin Water Quality Coalition and the Westside San Joaquin River Watershed Coalition (the Coalitions) are implementing monitoring and reporting programs (R5-2012-0116 and R5-2008-0831, respectively) to comply with requirements for the San Joaquin River diazinon and chlorpyrifos Total Maximum Daily Load established by the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan). To determine compliance with diazinon and chlorpyrifos loading capacity in the San Joaquin River, the Coalitions are required to monitor for diazinon and chlorpyrifos at the six compliance points designated in the Basin Plan (page IV-36.03).

Effective immediately for 2013 and subsequent years, monitoring shall focus on periods of peak application and months when water quality objectives for diazinon and chlorpyrifos are commonly exceeded in the San Joaquin River or its tributaries. Based on the Central Valley Regional Water Quality Control Board staff evaluation of reported pesticide use and Coalitions' monitoring results (see attachment), the six water quality compliance points in the San Joaquin River shall be monitored once during winter storm season (January or February), and monthly in May, June, July, August and September of each year. Absent a storm in January or February, sampling shall be conducted at the end of February. A September monitoring event has been added due to chlorpyrifos exceedances observed in tributaries in recent years. Monthly tributary monitoring will continue based on each Coalition's approved monitoring plan. Additional requirements based on monitoring results and pesticide use may be made in subsequent years, if needed.

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

[Original signed by]

Pamela C. Creedon
Executive Officer

Enclosure: Diazinon and Chlorpyrifos TMDL Monitoring Schedule at San Joaquin River
Compliance Points Staff Memorandum

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

FROM: Jelena Hartman
Environmental Scientist
MONITORING AND IMPLEMENTATION UNIT
IRRIGATED LANDS REGULATORY PROGRAM

DATE: 10 January 2013

SUBJECT: DIAZINON AND CHLORPYRIFOS TOTAL MAXIMUM DAILY LOAD
MONITORING SCHEDULE AT SAN JOAQUIN RIVER COMPLIANCE POINTS

The East San Joaquin Water Quality Coalition and the Westside San Joaquin River Watershed Coalition (Coalitions) are implementing a monitoring and reporting program to assess compliance with the diazinon and chlorpyrifos Total Maximum Daily Load requirements for the San Joaquin River. According to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan), compliance with the diazinon and chlorpyrifos loading capacity and load allocation was required by 1 December 2010.

To determine compliance with the numeric water quality objectives and the loading capacity in the San Joaquin River, the Coalitions monitored six water quality compliance points designated in the Basin Plan (page IV-36.03) at least quarterly in the 2011 water year (three sites were monitored monthly). In the 2012 water year, a minimum of six monitoring events were required: one each in the fourth quarter of 2011 and the first quarter of 2012, and monthly monitoring from May through August, per the 27 March 2012 letter from the Central Valley Regional Water Quality Control Board Executive Officer.

The Department of Pesticide Regulation's Pesticide Use Reports (PUR) for Stanislaus, Merced and Madera counties from 2007 to 2010 indicate that chlorpyrifos applications in the lower San Joaquin River watershed are greatest in March, and from May through August; diazinon applications peak in January and December. Total amounts of diazinon and chlorpyrifos applied for agricultural purposes declined since 2007 (Figure 1). A decrease in the amount of chlorpyrifos used annually is mostly due to fewer applications during months of heaviest use - May and July, while use in fall and winter has been increasing (Figure 1).

Past monitoring results indicate that exceedances of chlorpyrifos water quality objective are most common in January and from April through September (Table 1). Diazinon exceedances are infrequent – in the last four years no exceedances have been reported in the ESJWQC region, and only two exceedances were observed in the tributaries in the Westside region.

Based on the PUR data and past monitoring results, a minimum of six monitoring events are recommended for the compliance sites in the San Joaquin River: once in January or February (winter storm season), and five monthly events from May through September to capture

discharges during peak pesticide applications in the irrigation season. Winter monitoring should focus on capturing a storm event, and sampling may have to be conducted in addition to scheduled monitoring in tributaries. Absent a storm in January and February, sampling should be at the end of February. Past monitoring results suggest that potential transport following fall and winter applications is more likely to be detected in February than in March (Table 1).

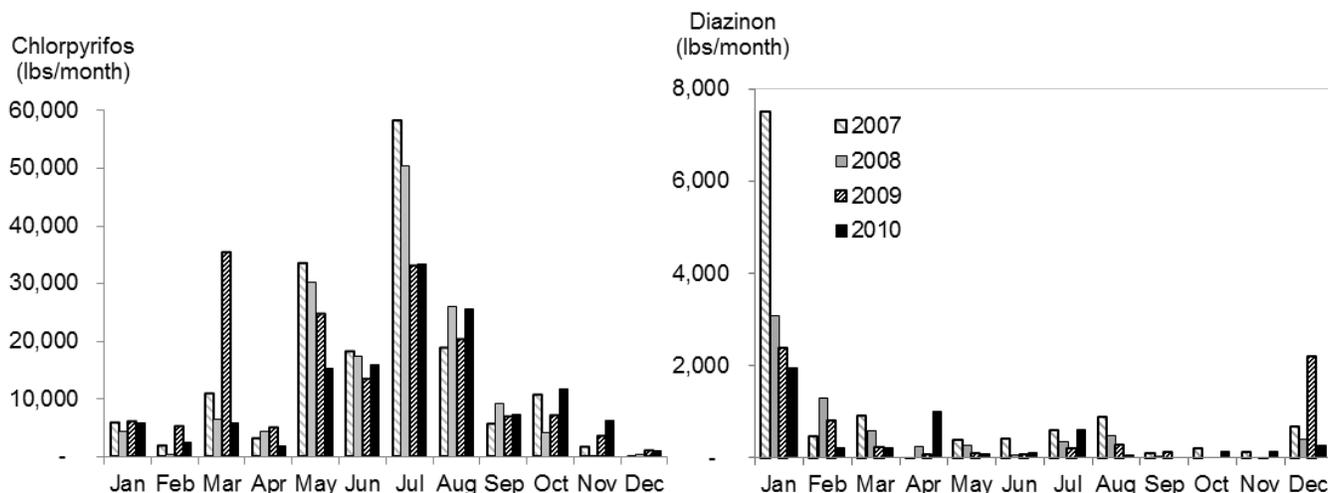


Figure 1. Total monthly amount of chlorpyrifos (left) and diazinon (right) applied in the lower San Joaquin River Watershed (Stanislaus, Merced and Madera counties) from 2007 to 2010.

Table 1. Tally of exceedances of chlorpyrifos water quality objective in tributaries, and diazinon and chlorpyrifos loading capacity in the San Joaquin River from 2007 through 2012 (data prior to 1 December 2010 do not contribute to determining compliance with the TMDL but provide a record of San Joaquin River water quality).

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>Chlorpyrifos exceedances - Westside Coalition and ESJWQC tributaries combined</i>												
2007		2	1	1	3	1	17	11	4			
2008	8	3		1	4	2	16	18	4	1	2	
2009		3			3	1	6	7	1	4		
2010	4		1	2	5	4	14	2	1			
2011		1		3	5	2		1	7	1		
2012			1	3	1		1	1	*	*	*	*
TOTAL	12	9	3	10	21	10	54	40	17	6	2	0
<i>Exceedances of Loading Capacity at compliance points in the San Joaquin River</i>												
2007								1				
2008							1	2	1			
2009							1			1		
2010					1		2		1			
2011	**											
2012	**											
TOTAL	0	0	0	0	1	0	4	3	2	1	0	0

*September-December 2012 results not yet reported for the Westside Coalition region

**No reported exceedances of the loading capacity for the year