

## East San Joaquin Water Quality Coalition

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May 25, 2005

TO: Melissa Morris  
Irrigated Lands Conditional Waiver Program  
Central Valley Regional Water Quality Control Board  
11020 Sun Center Drive, #200  
Sacramento, CA 95670-6114

FROM: Parry Klassen  
Wayne Zipser  
Michael Johnson

Re: Response to comments received May 23, 2005 concerning ESJWQC AMR

Thank you for your review and comments on the Annual Monitoring Report submitted by the ESJWQC. We can respond to your comments and provide you with some additional information. Perhaps the best way to do this is to respond to your comments point by point.

### Field Data Sheets:

R.B. Comment: Within field data sheets, please include a description of the instruments used to measure water quality and flow as well the date of calibration for each instrument used. This information is very important in assessing the quality of the data collected.

ESJWQC Response: *The instruments used to collect the field data are provided in Table 9a of the AMR. We did not provide the dates of the calibration of the instruments. We will confirm with the laboratory that the calibrations took place the day before, or the day of sampling, and provide documentation of the instrument calibration.*

R.B Final Comment: Table 9a meets the requirements. It was previously overlooked. Thank you for bringing it to my attention.

Comment: *Flow measurements should be recorded in or converted to Cubic Feet per Second (CFS).*

Response: In the future, all flow measurements will be converted to cfs.

### Toxicity Analysis:

Comment: *Ensure that sediment toxicity analysis sampling and frequency is consistent with your MRPP (bi-monthly during irrigation season).*

Response: Sediment sampling is planned for May, July, and September during the upcoming irrigation season. Sampling in May occurred on May 17, 2005. We will confirm with the laboratory that sediment samples were collected and tested.

Comment: Please include the raw data from the laboratory including the replicate results.

Response: Raw data from the toxicity laboratory for those tests that indicated toxicity was present will be provided ASAP including duplicate samples.

Comment: General water chemistry analysis conducted for the toxicity analysis should also be included for each sample.

Response: Initial water chemistry data for the three irrigation season events are pasted just below. We can provide you with the raw data sheets which contain the daily data for temperature, pH, DO, and conductivity. An example of those data for a single test from the July 31, 2004 sampling date is pasted below as well.

Sample ID	Sample Date	Temp. (°C)	pH	D.O. (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Conductivity (µS/cm)	Total Ammonia (mg/L N)
01-ARDCL-007	07/31/04	5.7	8.30	12.7	223	435	1,880	0.37
01-MRSFD-013	07/31/04	3.3	8.52	10.8	29	50	49.6	<0.01
01-DSAGR-019*	07/31/04	4.0	8.38	12.1	117	105	337	<0.01
01-DSAGR-020	07/31/04	3.2	8.13	11.5	118	115	316	<0.01
01-DCAGR-036	07/31/04	3.8	8.01	11.3	122	350	321	0.03

\* Intra-laboratory duplicate toxicity sample.

Sample ID	Sample Date	Temp. (°C)	pH	D.O. (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Conductivity (µS/cm)	Total Ammonia (mg/L N)
02-ARDCL-001	08/31/04	6.0	8.16	8.5	215	257	964	<0.01
02-MRSFD-008	08/31/04	6.5	8.66	8.5	20	42	43.0	<0.01
02-DSAGR-015	08/31/04	7.0	8.19	8.4	171	87	409	<0.01
02-DCAGR-022	08/31/04	6.8	8.19	9.6	109	138	300	<0.01
02-MRSFD-030	09/07/04	8.9	8.25	9.3	17	20	35.0	<0.01

Sample ID	Sample Date	Temp. (°C)	pH	D.O. (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Conductivity (µS/cm)	Total Ammonia (mg/L N)
03-ARDCL-001	09/29/04	14.7	9.20	10.6	249	254	1035	< 0.01
03-MRSFD-007	09/29/04	13.2	8.23	9.9	19	24	43.2	< 0.01
03-DSAGR-013	09/29/04	1.4	7.83	9.8	124	177	694	14.1
03-DCAGR-019	09/29/04	2.9	8.29	9.7	119	118	472	0.14

## 96 Hour Acute *Ceriodaphnia dubia* Toxicity Test Data

Client: STV PA Project #: 9466  
 Test ID #: 10652 Test Material: 01-PSA GR-19  
 Date: 8-1-04 Control/Dilution Water: 80:20  
 Feeding T<sub>p</sub>: Time: 14:00 Initials: WD Feeding T<sub>as</sub>: Time: 9:00 Initials: WK

Treatment	Temp (°C)	pH		D.O. (mg/L)		Conductivity (µS/cm)	# Live Animals				Sign-Off
		New	Old	New	Old		A	B	C	D	
Control	20.8	8.28		6.9		120.4	5	5	5	5	Date/Time: 1800 8-1-04
100%	20.8	7.97		7.1		315	5	5	5	5	Initials: WK WD
Control	20.2		7.96		9.3		5	5	5	5	Date/Time: 1145 8-2-04
100%	20.2		8.12		9.2		5	5	5	5	Initials: WD WD
Control	20.3	8.47		7.9	8.3	238	5	5	5	5	Date/Time: 1630 8-3-04
100%	20.3	8.22		9.6	8.0	305	5	5	5	5	Initials: WK DL
Control	20.5		7.81		7.7		5	5	5	5	Date/Time: 1145 8-4-04
100%	20.5		8.16		6.9		5	5	5	5	Initials: WK WD
Control	20.4		7.99		8.2	224	5	5	5	4	Date/Time: 1700 8-5-04
100%	20.4		8.20		8.9	319	5	5	5	5	Initials: DC

Comment: *Continue to ensure that appropriate follow-up is conducted and in a timely manner when the toxicity threshold is witnessed.*

Response: Our initial responses have been to collect a persistence sample, and to conduct a TIE when the trigger was exceeded. The coalition response to toxicity has been identical to the new flow chart being discussed in the Technical Issues Committee. For longer-term follow-up, we continue to work with the Counties in the coalition region to obtain Pesticide Use Reports. We are currently plotting those data on our GIS to determine what pesticides and where those pesticides were applied.

Comment: *Continue to ensure that communication reports are submitted in timely manner.*

Response: Communication reports will be submitted immediately after receipt of data from the laboratories.

Total Coliform Analysis:

Comment: *Please submit the 09/29/04 total coliform analysis summary results.*

Response: The summary results for *E. coli* were included as Table 17 of the AMR and are pasted below. To fit the table on the page, it has been broken into two pieces, but the entire table is below. If there is another form for the results, please let us know the format you feel is appropriate.

**Table 17. *E. coli* for Event #3 (September 29, 2004). See Table 10 for Abbreviations.**

SampleNumber	SiteCode	SampleDate	Matrix	SampleType	Run	PrepDate
502283	03-ARDCL-002	09/30/2008	Liquid	E	80554	09/30/2008
502286	03-DCAGR-020	09/30/2008	Liquid	E	80554	09/30/2008
502285	03-DSAGR-014	09/30/2008	Liquid	E	80554	09/30/2008
502284	03-MRSFD-008	09/30/2008	Liquid	E	80554	09/30/2008

AnalysisDate	Analyte	Results	Units	Method	DLR	PQL	DIL	Flag
09/30/2008	E. coli (3x5 MTF)	240	MPN/100mLs	SM 9221-B/F	2	2	1	
09/30/2008	E. coli (3x5 MTF)	500	MPN/100mLs	SM 9221-B/F	2	2	1	
09/30/2008	E. coli (3x5 MTF)	170	MPN/100mLs	SM 9221-B/F	2	2	1	
09/30/2008	E. coli (3x5 MTF)	13	MPN/100mLs	SM 9221-B/F	2	2	1	

Comment: *Please include all raw data from the laboratory including laboratory control sample analysis.*

Response: Raw data from the laboratory will be requested and submitted as soon as it is delivered.

Comment: *Ensure that necessary field and laboratory QC are conducted, and clearly indicated in the AMR, as outlined in Table B-7 on page 37 of the ESJWQC QAPP (amended August 30, 2004).*

Response: QC samples were collected with the frequency outlined in the QAPP, in fact, the coalition probably exceeded the specified frequency. The QC results are found in Tables 21-26, and 33-36 of the AMR. The coalition will continue to perform QC sampling and analysis at a frequency equal to or greater than that specified in the QAPP.

Pesticide Analysis (Organo Phosphorous, Pyrethroids)

Comment: *Please submit the raw laboratory data as soon as possible.*

Response: Raw data have been sent to the Regional Board offices. They should arrive Wednesday May 25, 2005. The package is addressed to Diana Messina.

Comment: *Ensure that necessary field QC is conducted, and clearly indicated in the AMR, as outlined in Tables B-6c & B-6d on pages 35 and 36 of the ESJWQC QAPP (amended August 30, 2004).*

Response: Full field and laboratory QC has been conducted as specified.

Comment: *Work with the laboratory to ensure MDLs, and QLs are appropriate to measure exceedances of the Water Quality Objectives for each possible contaminant.*

Response: The MDLs for Ops have been lowered to meet Water Quality Objectives and were in place for the winter dormant sampling. The MDL study was submitted to the Regional Board on two occasions, and should be in the Regional Board offices for review.

Comment: *Work with the laboratory to ensure % Recovery (REC) and % Relative Percent Difference (RPD) levels for Laboratory Control Samples/Spike and Matrix Spikes and their duplicates meet project requirements as outlined in Tables B-6c & B-6d on pages 35 and 36 of the ESJWQC QAPP (amended August 30, 2004).*

Response: We continually monitor the lab QC results to insure compliance with the amended QAPP. The QC samples have generally met the QC targets as outlined in the amended QAPP, and continue to improve as we move forward with the sampling. We will continue to monitor closely the QC performance of the lab to insure reliable data.

Comment: *It was observed in the July 31st sample event that the OP Scan included detections of trifluralin and dimethoate occurring in your coalition area. It would be useful to know if these pesticides are applied in your area.*

Response: We are currently processing the PUR data and should have an indication of the use of these pesticides in the area.

In a previous communication, you requested an addendum to the AMR to include discussion of an additional communication report. That addendum will be provided within the next few days.



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