



Central Valley Regional Water Quality Control Board

17 April 2012

Mr. Michael Wackman  
San Joaquin & Delta Water Quality Coalition  
3422 W. Hammer Lane, Suite A  
Stockton, CA 95219

Mr. Mike Johnson, Program Manager  
MLJ-LLC  
632 Cantrill Drive  
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REQUEST TO REMOVE ANALYTES FROM MANAGEMENT PLAN MONITORING – SAN JOAQUIN COUNTY AND DELTA WATER QUALITY COALITION

Thank you for your letter of 6 January 2012 requesting to remove analytes from the San Joaquin County and Delta Water Quality Coalition (Coalition) Management Plan. The request includes the Coalition's rationale for removing analytes (i.e. determining that these Management Plans are complete) from specific monitoring sites in its Management Plan (see Table 1 in attachment). In accordance with the Coalition's Management Plan, if there have been two or more years of Management Plan monitoring without an exceedance of a water quality trigger, then the Coalition may petition the Central Valley Water Board to remove it from the Management Plan.

In the attached memorandum, staff addresses Management Plans for the Grant Line Canal at Clifton Court Road (copper, lead), Mokelumne River at Bruella Road (dissolved oxygen, copper), and Terminous Tract Drain at Highway 12 (*Pimephales promelas*, *Selenastrum capricornutum* toxicity) sites. In a letter dated 22 March 2012, the Executive Officer approved completion of Management Plans at the Duck Creek at Highway 4 and French Camp Slough at Airport Way sites. Staff will address the remaining two sites, Lone Tree Creek at Jack Tone Road and Unnamed Drain to Lone Tree Creek at Jack Tone Road, in a subsequent memorandum.

The attached memorandum presents staff's analysis of the information provided in the Coalition's request. In summary, staff determined that there was sufficient evidence to support completion of the Management Plans for these sites and analytes. Based on staff's analysis, I approve the Coalition's request to consider those Management Plans complete. The Coalition will continue with the Assessment and Core monitoring schedule.

I commend the Coalition for successfully implementing the Management Plan for these analytes. The Coalition should continue aggressive outreach efforts to ensure these water quality problems do not recur. If the Coalition observes more than one exceedance within a three year period for any of these analytes going forward, then the Coalition must revert back to Management Plan implementation for those analytes.

If you have questions, please contact Chris Jimmerson at (916) 464-4859, or by E-mail at [cjimmerson@waterboards.ca.gov](mailto:cjimmerson@waterboards.ca.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Pamela C. Creedon". The signature is fluid and cursive, with a large initial "P" and "C".

Pamela C. Creedon  
Executive Officer

Attachment – staff memorandum

**Central Valley Regional Water Quality Control Board**

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

**FROM:** Chris Jimmerson  
Environmental Scientist  
Monitoring and Implementation Unit  
Irrigated Lands Regulatory Program

**DATE:** 27 March 2012

**SUBJECT:** REQUEST TO REMOVE ANALYTES FROM MANAGEMENT PLAN  
MONITORING – SAN JOAQUIN COUNTY AND DELTA WATER QUALITY  
COALITION

The California Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) received a request from the San Joaquin County and Delta Water Quality Coalition (Coalition) on 6 January 2012 to consider the Management Plans for certain analytes complete. The request proposes to remove analytes for specific monitoring sites from the Coalition's current Management Plan monitoring schedule (Table 1). In this memorandum, staff addresses the analytes requested for the Grant Line Canal at Clifton Court Road, Mokelumne River at Bruella Road, and Terminous Tract Drain at Highway 12 sites. Staff has already addressed Duck Creek at Highway 4 and French Camp Slough at Airport Way (22 March 2012). Staff will address the remaining two sites in a subsequent memorandum.

The Coalition does not propose to remove analytes from its Core or Assessment monitoring schedule or to remove the site subwatershed from the Management Plan because Management Plan monitoring may be ongoing for other analytes.

Table 1 (● = subject to this memorandum, X = petitioned for removal)

	Dissolved Oxygen	pH	Specific Conductivity	Copper (Total & Dissolved)	Lead (Total & Dissolved)	Diazinon	Dieldrin	Diuron	Simazine	Ceriodaphnia Toxicity	Pimephales Toxicity	Selenastrum Toxicity	Hyatella Toxicity
Duck Creek @ Hwy 4	X					X						X	
French Camp Slough @ Airport Way							X						
Grant Line Canal @ Clifton Court Rd				●	●								
Lone Tree Creek @ Jack Tone Rd			X	X		X		X				X	X
Mokelumne River @ Bruella Rd	●			●									
Terminous Tract Drain @ Hwy 12											●	●	
Unnamed Drain to Lone Tree Creek @ Jack Tone Rd								X	X	X		X	

Central Valley Water Board staff (staff) reviewed the Coalition's request and developed recommendations using a set of evaluation factors. Staff developed the evaluation factors as a tool to be consistent during the review process. A summary of the evaluation factors is presented below. However, not all of the evaluation factors can be considered for all the analytes because the nature of the analyte may not be relevant to the evaluation factor.

#### Evaluation Factors

1. Did the Coalition implement actions according to its Management Plan?
2. Does the analyte fall under a High Priority Management Plan Site?
3. What is the date of most recent exceedance?
4. Have there been any detects observed during the two year period with no exceedances?
5. What year did the last sampling event take place?
6. What year will monitoring resume?
7. Do we have a sufficient amount of sampling results?
8. Is the analyte currently being applied to a crop within the site subwatershed?
9. Is the site within the Legal Delta?
10. Is the analyte on the 303(d) list for that waterbody?
11. Is the analyte part of a TMDL?
12. Is the analyte a Group A organochlorine pesticide and by default no longer applied?
13. Have management practices been implemented?
14. Can the analyte likely be remedied or addressed by a Management Plan?

#### **A. Grant Line Canal at Clifton Court Road**

The Coalition proposes to remove copper and lead from the Grant Line Canal at Clifton Court Road Management Plan. Based on the evaluation factors, staff's findings support the Coalition's request to remove both copper and lead from the Management Plan. Each evaluation factor is summarized below.

##### A.1 Evaluation Factors Concerning Copper

1. The Coalition contacted growers identified as having greatest likelihood of contributing to exceedances. Alfalfa operators have been encouraged to consider irrigation tailwater retention to prevent copper from entering waterways.
2. This is a High Priority Management Plan Site since 2010 that required the Coalition to contact growers identified as having greatest likelihood of contributing to exceedances.
3. No exceedances of dissolved copper have been observed at this site.
4. Between 2006 and 2011, 32 sampling events have taken place and six exceedances of total copper have been observed. Between 2010 and 2011, 10 sampling events for dissolved copper have taken place and zero exceedances have been observed.
5. The last sampling event occurred in 2011.
6. This is a revolving Assessment site. Sampling for copper will not resume until the site falls back in Assessment rotation in 2031.
7. A sufficient number of sampling results have been collected - 32 total copper and 10 dissolved copper sampling events.
8. Copper is not currently being applied to alfalfa in this site subwatershed. Pesticide use reports indicate that no applications of copper have taken place in 2009, 2010, and 2011.
9. This evaluation factor does not apply.
10. Copper is not on the 303(d) list for this waterbody.
11. This evaluation factor does not apply.

12. This evaluation factor does not apply.
13. According to the Coalition, tailwater and spray drift management practices are the focal point in this subwatershed.
14. A Management Plan is not necessary for this site because no exceedances of dissolved copper have been observed.

The Coalition provided sufficient information and reasonable justification for staff to conclude that the Management Plan for copper is complete. Staff verified that the current Management Plan is based on the exceedances of "total" copper rather than the bio-available form "dissolved" copper. The Coalition has not observed any dissolved copper exceedances. Staff recommends that copper should be removed from this Management Plan.

#### A.2 Evaluation Factors Concerning Lead

1. This is a low priority analyte under the Management Plan since agricultural use of lead is banned. The banned pesticide formulation was lead arsenate.
2. This is a High Priority Site under a Management Plan, although the analyte itself is not a high priority.
3. The most recent exceedance was observed in 2006.
4. Between 2006 and 2008, 20 sampling events have taken place and three total lead exceedances have been observed. Fifteen sampling events occurred from February 2007 to September 2008 with no exceedances.
5. The last sampling event occurred in 2008 which ended the Assessment monitoring period. The Management Plan does not require lead monitoring during the Core monitoring years (2009-2011). Management Plan monitoring is not required for low priority analytes.
6. This is a revolving Assessment site. Sampling for lead will not resume until the site resumes Assessment monitoring in 2031.
7. A sufficient number of sampling results have been collected - 20 total lead sampling events.
8. Lead is not currently applied to crops.
9. This evaluation factor does not apply.
10. Lead is not on the 303(d) list for this waterbody.
11. This evaluation factor does not apply.
12. This evaluation factor does not apply.
13. According to the Coalition, tailwater and spray drift management practices are the focal point in this subwatershed.
14. The growers have implemented management practices according to the Coalition's follow up surveys, indicating a reduction of irrigation runoff.

The Coalition provided sufficient information and reasonable justification for staff to conclude that the Management Plan for lead is complete. Staff verified that the current Management Plan is based on the exceedances of "total" lead rather than the bio-available form "dissolved" lead. In the absence of "dissolved" lead sampling results, "total" lead is adequate because the "total" criterion is more protective than the "dissolved" criterion. In addition, Lead is not currently applied to crops. Staff recommends that lead should be removed from this Management Plan.

#### **B. Mokelumne River at Bruella Road**

The Coalition proposes to remove dissolved oxygen and copper from its Management Plan at this site. Based on the evaluation factors, staff's findings support the Coalition's request to remove dissolved oxygen and copper from the Management Plan. Each evaluation factor is summarized below.

### B.1 Evaluation Factors Concerning Dissolved Oxygen

1. As the Management Plan required, the Coalition contacted growers identified as having the greatest likelihood of contributing to exceedances, conducted meetings, and collected individual surveys.
2. This is a High Priority Site under a Management Plan since 2007 that required the Coalition to contact growers identified as having greatest likelihood of contributing to exceedances.
3. The most recent exceedance occurred in 2009. Since 2009, 30 sampling events have taken place with no exceedances.
4. This evaluation factor does not apply.
5. The most recent sampling event occurred in 2012.
6. The Coalition will continue monthly monitoring in 2012, as part of its monthly Core monitoring.
7. A sufficient number of sampling results have been collected.
8. This evaluation factor does not apply.
9. This evaluation factor does not apply.
10. Dissolved oxygen is on the 303(d) list for the lower Mokelumne River. Analysis will continue during the Assessment and Core monitoring.
11. This evaluation factor does not apply.
12. This evaluation factor does not apply.
13. According to the Coalition's management practice follow up surveys, growers have implemented management practices to reduce tail water runoff in 2011.
14. According to the MRP Order, "At the request of the Coalition Group or upon recommendation by Regional Water Board staff, the Executive Officer may provide authorization to exempt a Coalition Group from the development of a Management Plan if the Executive Officer determines that the exceedance is not likely to be remedied or addressed by a Management Plan." (MRP Order No. R5-2008-0005, page 25).

The Coalition provided sufficient information and reasonable justification for staff to conclude that the Management Plan for dissolved oxygen is complete. The Coalition will continue to collect dissolved oxygen monitoring results during its Assessment and Core monitoring.

### B.2 Evaluation Factors Concerning Copper

1. The Coalition contacted growers identified as having greatest likelihood of contributing to exceedances. The Coalition held nine individual grower meetings in 2011 to review each grower's operation and document current management practices.
2. This is a High Priority Management Plan Site requiring the Coalition to contact growers identified as having greatest likelihood of contributing to exceedances.
3. No exceedances of dissolved copper have been observed at this site.
4. Between 2006 and 2011, 53 sampling events have taken place and three exceedances of total copper have been observed. Between 2010 and 2011, 15 sampling events for dissolved copper have taken place and zero exceedances have been observed.
5. The last sampling event occurred in 2011.
6. The Coalition will continue monthly monitoring in 2014, as part of its monthly Assessment monitoring.
7. A sufficient number of sampling results have been collected - 38 total copper and 15 dissolved copper sampling events.
8. Copper is currently being applied in this site subwatershed.
9. This evaluation factor does not apply.

10. Copper is on the 303(d) list for the lower Mokelumne River. Analysis will continue during the Assessment monitoring.
11. This evaluation factor does not apply.
12. This evaluation factor does not apply.
13. According to the Coalition, targeted growers have implemented management practices to reduce copper use and tail water runoff in 2011.
14. A Management Plan is not necessary for this site because no exceedances of dissolved copper have been observed.

The Coalition provided sufficient information and reasonable justification for staff to conclude that the Management Plan for copper is complete. Staff verified that the current Management Plan is based on the "total" fraction exceedances rather than the "dissolved" fraction exceedances. There were no reported exceedances of dissolved copper. Staff recommends that copper should be removed from this Management Plan.

### **C. Terminous Tract Drain at Highway 12**

The Coalition proposes to remove *Pimephales promelas* and *Selenastrum capricornutum* from this Management Plan. Based on the evaluation factors, staff's findings support the Coalition's request to remove *Pimephales promelas* and *Selenastrum capricornutum* from the Management Plan. Each evaluation factor is summarized below.

#### C.1 Evaluation Factors Concerning *Pimephales promelas*

1. The Coalition contacted growers identified as having greatest likelihood of contributing to exceedances. The Coalition held four individual grower meetings in 2011 to review each grower's operation and document current management practices.
2. This is a High Priority Management Plan site requiring the Coalition to contact growers identified as having greatest likelihood of contributing to exceedances.
3. The most recent exceedance occurred in 2005. Since 2005, 34 sampling events have taken place through 2011 with no exceedances.
4. This evaluation factor does not apply.
5. The last sampling event occurred in 2011.
6. The Coalition will continue monthly monitoring in 2013, as part of its Assessment monitoring.
7. A sufficient number of sampling results have been collected – 34 between years 2005 and 2011.
8. Ammonia, copper and pesticides have been detected at this site, but there has been an absence of exceedances that occurred at the same time as the two toxicity exceedances.
9. This evaluation factor does not apply.
10. *Pimephales promelas* is not on the 303(d) list for this waterbody.
11. This evaluation factor does not apply.
12. This evaluation factor does not apply.
13. According to the Coalition, targeted growers have implemented management practices to reduce copper use and tail water runoff in 2011.
14. The Management Plan successfully managed *Pimephales promelas*.

The Coalition provided sufficient information and reasonable justification for staff to conclude that the management plan for *Pimephales promelas* is complete. There has been an absence of toxicity, ammonia, metal, and pesticide exceedances over the last 34 sampling events. *Pimephales promelas* sampling will resume in 2014, as part of Assessment monitoring.

C.2 Evaluation Factors Concerning *Selenastrum capricornutum*

1. The Coalition contacted growers identified as having greatest likelihood of contributing to exceedances. The Coalition held four individual grower meetings in 2011 to review each grower's operation and document current management practices.
2. This is a High Priority Management Plan site requiring the Coalition to contact growers identified as having greatest likelihood of contributing to exceedances.
3. The most recent exceedance occurred in 2008. Since 2008, 20 sampling events have taken place through 2011 with no exceedances.
4. This evaluation factor does not apply.
5. The last sampling event occurred in 2011.
6. The Coalition will continue monthly monitoring in 2013, as part of its Assessment monitoring
7. A sufficient number of sampling results have been collected – 46 between years 2005 and 2011.
8. Herbicides are applied to crops in this subwatershed and there has been an absence of any herbicidal exceedances.
9. This evaluation factor does not apply.
10. *Selenastrum capricornutum* is not on the 303(d) list for this waterbody.
11. This evaluation factor does not apply.
12. *Selenastrum capricornutum* is not a Group A organochlorine.
13. The growers have implemented management practices according to the Coalition's follow up surveys and participated in personal meetings with the Coalition.
14. The Management Plan successfully managed *Selenastrum capricornutum*.

The Coalition provided sufficient information and reasonable justification for staff to conclude that the management plan for *Selenastrum capricornutum* is complete. There has been an absence of toxicity, ammonia, metal, and pesticide exceedances over the last 20 sampling events since 2008. *Selenastrum capricornutum* sampling will resume in 2014, as part of Assessment monitoring.