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In Reply Refer To: EOL0414-134

April 16, 2014

VIA CERTIFIED MAIL AND EMAIL

Ms. Gayleen Perreira  
Regional Water Quality Control Board, Central Valley Region  
11020 Sun Center Drive #200  
Rancho Cordova, CA 95670

Subject: Comments on Tentative Waste Discharge Requirements for the Deer Creek Wastewater Treatment Plant (NPDES No. CA0078662)

Dear Ms. Perreira:

The El Dorado Irrigation District appreciates the opportunity to review and comment on the Tentative Waste Discharge Requirements and NPDES permit (Tentative Permit) for the Deer Creek Wastewater Treatment Plant (DCWWTP). Our detailed comments on the Tentative Permit issued on March 18, 2014 are enclosed in Attachment A. The comments consist of factual corrections and requests for modified monitoring and reporting requirements.

The District is particularly concerned with the pretreatment program reporting requirements. There are a number of issues, including the fact that the requirements are defined in two different places, that the requirements conflict with each other, and that one set of requirements significantly expands monitoring beyond that required in the current NPDES permit for the DCWWTP, and relative to the NPDES permit for the District's El Dorado Hills Wastewater Treatment Plant adopted last year.

We would like to meet with you and your staff to discuss our comments at your offices in Rancho Cordova. I will be contacting you shortly following submittal of these comments to set up a meeting time. In the meantime, please contact me at (530) 642-4058 if you have any questions regarding these comments.

Sincerely,



Vickie Caulfield

Division Manager of Operations – Wastewater/Recycled Water

VC:krc

Enclosure: Attachment A – Comments on Preliminary Draft Permit

cc: Michael Bryan, Robertson-Bryan, Inc.  
9888 Kent St.  
Elk Grove, CA 95624

Elizabeth Wells, P.E., EID Engineering Division Manager

ATTACHMENT A

EL DORADO IRRIGATION DISTRICT COMMENTS  
ON  
TENTATIVE WASTE DISCHARGE REQUIREMENTS  
FOR THE  
EL DORADO IRRIGATION DISTRICT  
DEER CREEK WASTEWATER TREATMENT PLANT  
EL DORADO COUNTY

Submitted April 16, 2014

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**Effluent Limitations and Discharge Requirements**

p. 15–17, Provision VI.C.5.a. Pretreatment Requirements and p. E-20, Annual Pretreatment Reporting Requirements. The District has multiple concerns with the Pretreatment Program requirements in the tentative permit. These concerns are presented below.

1. First, there are two sets of pretreatment program reporting requirements, one begins on page 16 of the tentative permit and one is in the Monitoring and Reporting Program (MRP), beginning on page E-20. The two sets of reporting requirements are similar, but not exactly the same, and conflict in a few places. First, the District requests that the permit be modified so that the pretreatment program reporting requirements are specified in only one location, preferably in the MRP, which is been the location in past District NPDES permits.
2. Second, the District requests that the pretreatment program reporting requirements on page 16 be deleted and the reporting requirements beginning on page E-20 be retained, as the requirements beginning on page E-20 are more consistent with current application of federal pretreatment regulations and the El Dorado Hills Wastewater Treatment Plant (EDHWWTP) NPDES permit issued in 2013. For example, page 16 requires a full priority pollutant scan of both the influent and effluent, whereas page E-20 only requires “sampling of the POTW’s influent and effluent for those pollutants USEPA has identified under section 307(a) of the CWA which are known or suspected to be discharged by nondomestic users.” The latter is consistent with the current Deer Creek Wastewater Treatment Plant (DCWWTP) permit and the EDHWWTP permit adopted last year. Based on this requirement, the District currently monitors annually for a set of constituents suspected to be present based on the industry in the service area. Also, the page 16 requirements specify quarterly monitoring for one year, which would then be in addition to the annual monitoring currently required in the EDHWWTP NPDES permit. Therefore, the District requests that the pretreatment program monitoring of the influent and effluent be limited to an annual frequency and only those constituents known or suspected to be discharged by nondomestic users, as is the current requirement in the DCWWTP and EDHWWTP permits.

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3. Quarterly monitoring for one year for priority pollutants would significantly increase the influent monitoring, which is currently limited to those constituents suspected to be discharged by nondomestic users. Further, continued quarterly monitoring for priority pollutants detected is a significant increase in influent and effluent monitoring burden. Based on historical monitoring data, there will be a number of priority pollutants present at detectable levels in the influent and effluent, mostly metals. However, as demonstrated through the reasonable potential analysis conducted for the permit renewal, only one priority pollutant (zinc) has been at concentrations in the effluent greater than applicable water quality criteria. Thus, the usefulness of continuing quarterly monitoring for detected priority pollutants for regulating the discharge is questionable. Further, there are only two industrial users in the service area: Union Mine WWTF and JM Eagle. As described in the report of waste discharge, the Union Mine discharge is only once or twice per year and subject to chemical analysis prior to discharge. JM Eagle manufacturing has been discontinued and is not anticipated to resume during the next permit term. The requirement to continue quarterly influent and effluent monitoring for detected priority pollutants during the permit term is not commensurate with the fact that there is little to no industrial load and historical data show no reasonable potential for priority pollutants other than zinc. Thus, the District requests the requirement for quarterly influent priority pollutant monitoring and follow-up quarterly monitoring for detected priority pollutants be removed from the permit.

In summary, the District requests that the new pretreatment program reporting requirements beginning on page 16 be removed from the permit and those on page E-20 be retained.

p. 19, Total Mercury Mass Loading. This section includes procedures for calculating the mass load when the mercury monitoring frequency is less than once per month, because the mercury monitoring frequency in the MRP is once per quarter. The procedures are confusing and do not relate mercury load to actual flow that would occur during a quarter. The specific issues with the procedure are noted below.

- One part of the procedure deals with the situation when there is only one concentration value for a quarter. In this case, the total mass load for the quarter is to be reported as 3 times the mass load during the month that the sample was collected. This approach ignores the fact that discharge rates can differ from month to month.
- Another part of the procedure deals with the situation when there is a concentration value for two out of three months in the quarter. In this case, the mass load for the month without data is supposed to be the same as the previous month's load. Again, this ignores that fact that the discharge rates in the two months may be different. Also, there may not be a measurement in the previous month, given that monitoring is to be once per quarter.

Requested revisions are provided below, based on the permit for the Mountain House Wastewater Treatment Plant, which also has a quarterly mercury monitoring requirement. The requested approach is to determine an average mercury concentration for the entire quarter using all available data, then to apply that average concentration to the total flow for the quarter. It is more reasonable to make the assumptions regarding concentration, since flow is measured and, thus, it is not necessary to make any assumption for that aspect of the calculation.

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### **B. Total Mercury Mass Loading Effluent Limitations (Section IV.A.1. f.).** The procedures for calculating mass loadings are as follows:

- a. The total pollutant mass load for each individual calendar ~~month~~ quarter shall be determined using an average of all concentration data collected that ~~month~~ quarter and the corresponding total ~~monthly~~ flow for that quarter. All effluent monitoring data collected under the monitoring and reporting program, pretreatment program, and any special studies shall be used for these calculations. The total annual mass loading shall be the sum of the individual calendar quarters.
- ~~b. If data is not collected on at least a monthly basis and thus the total pollutant mass load is only calculated for one month during a quarter, then the total pollutant mass load for the quarter is 3 times that value. If the total pollutant mass load is calculated for two months during the quarter, the total pollutants mass load for the month without monitoring data shall be considered the same as the previous month's total pollutant mass load (i.e., if there is no monitoring data for April, then the total pollutant mass load from March shall be used for April). The total annual mass loading shall be the sum of the four individual calendar quarters.~~
- c. In calculating compliance, the Discharger shall count all non-detect measures at one-half of the detection level. If compliance with the effluent limitation is not attained due to the non-detect contribution, the Discharger shall improve and implement available analytical capabilities and compliance shall be evaluated with consideration of the detection limits.

### **Attachment E – Monitoring and Reporting Program (MRP)**

p. E-4, Table E-3. Effluent Monitoring. The District requests the following changes to the table for accuracy:

- Mercury, total recoverable – The footnote 1 under the required analytical test method should be in the “µg/L” row, not the “lbs/quarter” row.
- Footnote 9 – since methyl mercury is not listed in Table E-3, this footnote can be edited to remove “and a reporting limit of 0.05 ng/L for methyl mercury” from the end of the sentence.

Further, the District notes that the effluent monitoring frequency for hardness was increased from once per month (1/month) shown in the preliminary draft permit to twice per month (2/month) in the tentative permit. The District questions why the effluent hardness monitoring frequency was increased. Hardness monitoring of 1/month for the effluent is a common monitoring frequency in permits for other similarly sized and situated wastewater treatment plant (WWTP) discharges, including: the District’s El Dorado Hills WWTP (adopted January 2013), Roseville’s Pleasant Grove and Dry Creek WWTPs (adopted March 2014), and Placerville’s Hangtown Creek WRF (adopted February 2014). A monitoring frequency of 1/month will result in 60 values over the 5-year permit term, and 5 values for each month, which will capture any seasonal and annual variability in the effluent hardness.

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p. E-8, Table E-5. Receiving Water Monitoring Requirements. The District reiterates its request in comments on the preliminary draft permit to monitor receiving water hardness 1/month. The tentative permit specifies monitoring for hardness at 2/month. Hardness monitoring of 1/month for the receiving water is a common monitoring frequency in permits for other similarly sized and situated WWTP discharges, including those listed in the comment above. A monitoring frequency of 1/month will result in 60 values over the 5-year permit term, and 5 values for each month, which will capture the seasonal and annual variability in the creek hardness.

p. E-10, Footnote 2. This footnote contains text that is not applicable to measuring the volume of wastewater in the emergency storage basin. The District requests the footnote be edited as follows:

<sup>2</sup> The total volume of wastewater directed to the basin may be estimated. ~~This requirement is effective 120 days (26 November 2010) after adoption of this Order to allow the Discharger time to install necessary equipment. For continuous analyzers, the Discharger shall report documented routine meter maintenance activities, including date, time of day, and duration, in which the analyzer(s) is not in operation.~~

p. E-13, through E-15, Table E-7. Effluent and Receiving Water Characterization Monitoring. The District recommends the following changes to the table for accuracy:

- Mercury, methyl – delete “ng/L” from the Maximum Reporting Level column as the units are specified in the Units column.
- Nitrate – because the units are specified as “mg/L,” it appears that the Maximum Reporting Level should be 2, not 2,000.
- Nitrite – because the units are specified as “mg/L,” it appears that the Maximum Reporting Level should be 0.4, not 400.
- Sulfate – because the units are specified as “mg/L,” it appears that the Maximum Reporting Level should be 0.5, not 500.

Also, as further described in a comment below regarding Attachment F, the reach of Deer Creek into which DCWWTP discharges is in El Dorado County, which is not CWA section 303(d) listed for iron. Therefore, there is no justification for monitoring iron downstream of the discharge. Data collected for the effluent and creek upstream of the discharge will be all that is needed for conducting a reasonable potential analysis during the next permit renewal. The District requests footnote #4 be deleted from this table.

p. E-16, Table E-8. Monitoring Periods and Reporting Schedule. The monitoring period for the “2/month” entry should be “1<sup>st</sup> day of calendar month through last day of calendar month.” A period of “Sunday through Saturday” does not make sense for a parameter with a month-based monitoring frequency.

p. E-17, b. Calendar Annual Average Limitations. This section describes mercury as having a calendar annual “average” effluent limitation; however, the mercury limitation is a total annual “mass” load limitation. Thus, the concept of “average” does not apply, making this section is

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inaccurate and confusing. The District recommends replacing this section with two separate sections, one that addresses calendar annual average limitations (i.e., electrical conductivity) and one that address calendar total mass limitations (i.e., mercury), as follows.

- b. Calendar Annual Average Limitations.** For constituents with effluent limitations specified as “calendar annual average” (electrical conductivity) the Discharger shall report the annual average in the December SMR. The annual average shall be calculated as the average of the samples gathered for the calendar year.
- i. Total Calendar Annual Mass Loading Mercury Effluent Limitations.** The Discharger shall calculate and report the total calendar annual mercury mass loading for the effluent in the December SMR. The total calendar year annual mass loading shall be calculated as specified in Section VII.B. of the Limitations and Discharge Requirements.

p. E-18, h. Temperature Receiving Water Limitations. The temperature receiving water limitation is a restriction on the absolute daily maximum and monthly average temperature. Therefore, the concept of a temperature “increase” is not applicable. The District recommends the following revision to this reporting requirement.

- h. Temperature Receiving Water Limitations.** The Discharger shall report the daily maximum and monthly average temperatures at RSW-002. The Discharger shall also calculate and report the ~~temperature increase in the receiving water based on the difference in between the daily maximum and monthly average temperatures at RSW-002 and the limitations listed in Table 5 in the Limitations and Discharge Requirements of this Order~~ as RSW-002 minus the applicable limitation.

### Attachment F – Fact Sheet

p. F-9, D. Impaired Water Bodies on CWA 303(d) List, 2. Total Maximum Daily Loads (TMDLs). Deer Creek is CWA section 303(d)-listed for iron only in Sacramento County. The DCWWTP discharges effluent into Deer Creek in El Dorado County. Hence, the DCWWTP does not discharge into a 303(d)-listed segment of Deer Creek. The District requests this section be modified to clarify that the reach of Deer Creek on the 303(d) list is in Sacramento County, and that the reach the DCWWTP discharges to is in El Dorado County, which is not a limited segment.

p. F-19, Table F-6, Copper. This RPA calculation does not account for the discharger-specific copper Water Effect Ratio (WER) of 9.7 that the District has derived for this discharge. The discharge-specific copper WER needs to be included in this RPA calculation in the Fact Sheet. For reference, Central Valley Water Board permitting staff are directed to Table F-4 of the current (2008) permit.

p. F-37, e. Human Health Criteria. For accuracy, the second sentence should be revised as follows. AMELs are calculated from the ECAs, not the other way around.

- e. Human Health Criteria.** WQBELs based on human health criteria, are also calculated in accordance with Section 1.4 of the SIP. The ~~ECAs are~~ AMEL is set equal to the AMEL ECA and a statistical multiplier was used to calculate the MDEL.

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### **Attachment G – RPA Summary**

Notes. There is a typo and “DQN” should be changed to “DNQ” in the notes section of this table.