

**ALTERNATIVE
FOR
DISCHARGE RESTRICTIONS TO CENTRAL CANAL**

**MALAGA COUNTY WATER DISTRICT
WASTEWATER TREATMENT FACILITY
FRESNO COUNTY**

**Proposed Waste Discharge Requirements/NPDES Permit and Proposed Cease and Desist Order
NPDES No. CA0084239**

At the 4/5 December 2014 Central Valley Water Board meeting, the Board will consider the subject items. The following tentative alternative may be considered by the Central Valley Water Board regarding a proposed provision for discharge restrictions to Central Canal from the above-named facility.

Potential changes to the tentative WDRs/NPDES permit and tentative Cease and Desist Order (CDO) are shown below in strikeout/underline format.

NPDES Permit

1. Modify Provision VI.C.6.b as follows:

- b. **Discharge to Central Canal.** By <permit expiration date>, discharge to Central Canal during months when there are no irrigation water deliveries shall cease completely. ~~The irrigation water delivery period each year is generally between April and September, but may vary from year to year. Discharge to Central Canal is not allowed when flow in the Canal provides less than 20:1 dilution. The Discharger shall work with Fresno Irrigation District every year to determine when the irrigation water delivery period begins and ends. The Discharger shall certify annually in its Annual Report required in Section X.C.3 of Attachment E – MRP when the irrigation water delivery period began and ended.~~

2. Remove Attachment E – MRP, Section X.C.3.f:

- ~~f. Beginning <permit expiration date>, the Discharger shall provide documentation that it conferred with Fresno Irrigation District regarding the beginning and end of irrigation water deliveries. The documentation must specify the beginning and end dates of the irrigation water delivery period for the year.~~

3. Modify Attachment F – Fact Sheet, section II.B.3, as follows:

3. Un-disinfected, secondary-treated municipal wastewater is discharged at Discharge Point 002 to eight onsite disposal ponds. The ponds have a surface area of approximately 23.24 acres and a storage capacity of approximately 185.92 acre-feet (60.6 million gallons).

Cease and Desist Order (CDO) Order R5-2008-0032, adopted on 14 March 2008, required the Discharger to, among other things, evaluate its disposal capacity and propose measures to secure adequate disposal capacity through at least 2028. Based on the information submitted by the Discharger in its *Treatment and Disposal Capacity Study* (Study) on 28 July 2008, the disposal capacity of the ponds remains below the treatment capacity of the Facility. The Central Valley Water Board calculated the disposal capacity of the ponds based on 100-year rainfall and evaporation, assuming half of the storage capacity available at the beginning of the water year (1 October), and a percolation rate of 0.6 inch per day. The rainfall, evaporation, and percolation rates used for calculation were obtained from the Study. The Study assumed the percolation rate would initially increase to 1.0 inch per day if, and when, the Discharger performed pond maintenance, including ripping and scraping. In September 2009, Central Valley Water Board staff provided a review of the

Study, which indicated the Study was deficient and requested the Discharger re-submit the Study to address the deficiencies (noted in the review) and provide additional information. The Central Valley Water Board case file indicates a revised Study was not submitted. However, in April 2011, the Discharger submitted the *Short Term Improvements Implementation Report* (Report), which included a list of the ponds that had been drained, scraped and ripped. The Report also indicated the Discharger had adopted a moratorium on new sewer connections until the disposal capacity was expanded. The Discharger also reportedly had several discussions with the City of Fresno regarding consolidation of sewerage services, but no additional information was provided regarding this particular matter. Additionally, the Report indicated the Discharger had contacted entities to inquire about their willingness to sell property, or to receive recycled water, but none were reportedly willing to do so. The Report, however, did not include any updated information regarding percolation rates or disposal capacity.

In August 2013, the Central Valley Water Board requested updated information regarding the Facility's disposal capacity, and requested the Discharger provide the number of ponds that had received maintenance work and whether the work had affected disposal capacity (e.g., increased percolation rates). The Discharger's response did not include detailed information about which ponds had received maintenance work, and only indicated the Discharger intended to isolate one or more ponds to determine the current percolation rate. The Discharger did not submit subsequent documentation indicating whether it isolated disposal ponds to determine the percolation rate(s). Additionally, the Discharger provided three tables showing the pond disposal capacity for three different percolation rates and three different flow rates. In the discussion section, the Discharger did not discuss the meaning of each percolation rate or each flow rate and only indicated that the ponds had capacity for disposing of current flows with a 1.0 inch per day percolation rate. There was no other discussion on how the 1.0 inch per day percolation rate was determined, or why each table had a different effluent flow rate with each different percolation rate. Due to the vagueness in the Discharger's response to the August 2013 letter, Central Valley Water Board staff used information from the Discharger's 2008 Study to calculate the disposal capacity of the ponds.

On 27 October 2014, as part of the public comment period for adoption of this Order, the Discharger submitted an internal memorandum from its consulting engineer addressed to the Discharger. The memorandum included information that may be useful in determining if the disposal ponds have a higher disposal capacity. The memorandum was resubmitted on 3 November 2014 with the signature and stamp of the engineer in responsible charge. However, the memorandum did not include a proposed pond maintenance program from the Discharger and there was also no communication from the Discharger on whether it agreed with the information in the memorandum and whether it intends on implementing the engineer's recommendations. This Order provides a path for the Discharger to provide necessary information and obtain approval prior to allowing a higher effluent flow to Discharge Point 002.

Based on the information in the July 2008 Study, which included the most complete and useful information, the estimated capacity of the disposal ponds is approximately 0.49 mgd, which is less than the average flow treated by the Facility between 2010-2013 of 0.65 mgd. This Order restricts the flow to the disposal ponds (Discharge Point 002) to 0.49 mgd as a monthly average. Additionally, this Order requires the Discharger to completely cease discharging to Central Canal ~~during months when there are no irrigation water deliveries~~ by **<permit expiration date>** (see Fact Sheet section VI.B.6.b). The lower flow effluent limitation for Discharge Point 002 and the requirement to cease discharge to Central Canal ~~during months when there are no irrigation water deliveries~~ by **<permit expiration date>** puts the Discharger in threatened noncompliance with this Order because the disposal capacity of the disposal ponds alone is insufficient to accommodate flows coming into the Facility. The Central Valley Water Board issued Cease and Desist Order R5-2014-XXXX to ensure the Discharger addresses the threatened noncompliance and addresses its disposal capacity issues

4. Modify Attachment F – Fact Sheet, section VI.B.6.b, as follows:

- b. Consistent with a letter from Fresno Irrigation District to the Central Valley Water Board, dated 25 June 2014, this Order requires the Discharger to completely cease discharging to Central Canal ~~during months when there are no irrigation water deliveries~~, beginning at the expiration date of this Order. While the Fresno Irrigation District letter indicated the District was open to accepting the discharge in Central Canal during the irrigation season, the letter also noted the District would “like the [Discharger] to work towards eliminating the discharge to the Central Canal.” The Discharger was previously made aware, as evidenced by a letter from Fresno Irrigation District provided to the Discharger in February 2008, that the District would prefer the discharge to Central Canal cease. Additionally, based on technical reports submitted by the Discharger in response to CDO R5-2008-0032, the Discharger was operating under the assumption that discharge to Central Canal would cease. Thus, this Order requires the discharge to Central Canal to cease. The Discharger shall not discharge to Central Canal when dilution is less than 20:1. Between the effective and expiration dates of this Order, the Discharger may discharge to Central Canal, in accordance with Limitation IV.A.1.a. ~~Beginning on <permit expiration date>~~, the Discharger shall work with Fresno Irrigation District personnel each year to determine when the irrigation water delivery period begins and ends, and shall provide that information to the Central Valley Water Board.

CDO

1. Modify Finding No. 5, as follows:

5. By letter dated 25 June 2014, Fresno Irrigation District informed the Central Valley Water Board that it would agree to continue allowing discharge from the Facility to Central Canal year-round for the next 3-5 years, after which it would be open to accepting the discharge during irrigation season. ~~The letter identified the irrigation season as typically lasting six months, between April through September, but also indicated the irrigation season could vary from two months to nine months. However, the letter also indicated Fresno Irrigation District would prefer the Discharger work towards eliminating the discharge to Central Canal.~~ Thus, WDRs Order R5-2014-XXXX, Provision VI.C.6.b requires the discharge to Central Canal to completely cease during months when there are no irrigation water deliveries beginning on ~~<permit expiration date>~~.

2. Modify Finding No. 40, as follows:

37. Based on Findings No. 3, 5-7, and 20-26, a discharge of waste is threatening to take place in violation of WDRs Order R5-2014-XXXX. The disposal ponds (Discharge Point 002) have a disposal capacity of 0.49 mgd, based on the available information submitted under the responsible charge of a professional engineer, and the Discharger will be restricted from discharging to Central Canal ~~during months when there are no irrigation water deliveries. The irrigation water delivery period can vary each year from approximately two months to nine months and is generally about six months. During wet years,~~ the disposal ponds do not have enough capacity to accommodate current flows, which averaged 0.65 mgd between 2010-2013, once the discharge to Central Canal becomes unavailable.

Staff Recommendation:

Central Valley Water Board staff recommends the Board adopt the tentative WDRs/NPDES permit and tentative CDO with the requirement to cease discharge only during periods when there are no irrigation water deliveries.