

City of Atwater



October 21, 2011

CIVIC CENTER
750 BELLEVUE ROAD
ATWATER, CALIFORNIA 95301

Ms. Pamela C. Creedon
Executive Officer
California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova CA 95670

TENTATIVE WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF ATWATER, ATWATER REGIONAL WASTEWATER TREATMENT FACILITY, MERCED COUNTY

Dear Ms. Creedon:

The City of Atwater (City) appreciates this opportunity to submit comments on the Tentative Waste Discharge Requirements and NPDES permit (TWDRs) for the City's Bert Crane Regional Wastewater Treatment Facility. The Central Valley Regional Water Quality Control Board (Regional Board) issued the TWDRs for public comment on September 21, 2011. The comment period extends through October 21, 2011.

The attached comment document was prepared by West Yost Associates on behalf of the City. The comment document details the City's recommended clarifications and minor technical corrections to be incorporated into the TWDR. The suggested modifications are listed in the order of which they appear in the TWDRs. The City respectfully requests that the recommended revisions outlined in the attached document be incorporated into the TWDRs prior to adoption.

In addition to the suggested edits outlined in the attached document, we have some concerns with the Turbidity Operational Requirements contained in the TWDRs as they apply to City's facility. The City would like the opportunity to work with Regional Board staff to address our concerns and the practical impact that these requirements may have on our day-to-day operations.

If you have any questions regarding the City's comments, please contact me at (209) 357-6370 or Ms. Kathryn Gies from West Yost Associates at (925) 461-6795.



Mr. Dave Church
Director of Public Works
City of Atwater

- c.c. Mr. Matt Scroggins, California Regional Water Quality Control Board, Fresno
Ms. Aide Ortiz, California Regional Water Quality Control Board, Fresno
Ms. Kathryn Gies, West Yost Associates
Ms. Tess Dunham, Somach, Simmons and Dunn



**COMMENTS ON THE
TENTATIVE WASTE DISCHARGE REQUIREMENTS
FOR THE CITY OF ATWATER
REGIONAL WASTEWATER TREATMENT FACILITY
MERCED COUNTY
NPDES NO. CA0085308**

WASTE DISCHARGE REQUIREMENTS

1. Page 1, Findings (II), Facility Description

The City plans to construct a paved, partially covered, solids drying area within the next year. In addition, the City plans to retain the services of a third party hauling contractor to transport the solids. Finally, the City may dispose of the biosolids in a permitted landfill facility. To ensure the permit does not preclude these proposed operations, the City requests the following modifications:

Facility Description. The Discharger owns the Publicly Owned Treatment Works. The Discharger has contracted with Veolia Water North America – West, LLC to operate and maintain the Facility. The treatment system will consist of headworks with screens and a vortex grit removal system, two oxidation ditches that will provide nitrification and denitrification, three secondary clarifiers, three cloth media filters, an ultraviolet light disinfection system, and an emergency storage basin, which will also be used to collect on-site storm water runoff. Sludge handling facilities will consist of two concrete aerobic digesters. Supernatant from the digesters will be conveyed to the headworks. Stabilized biosolids will be pumped to temporary holding tanks prior to dewatering. Dewatered biosolids will be hauled offsite by a third party contractor to a permitted land application site or landfill that is permitted to accept a Class B biosolids disposal facility. The Discharger plans to construct an onsite biosolids drying area that will be used to further dewater the biosolids prior to offsite disposal. Wastewater will be discharged from Discharge Point 001 (see table on cover page) to Peck/Atwater Drain, which is hydraulically connected to the San Joaquin River, a water of the United States, between Sack Dam and the mouth of the Merced River within the El Nido-Stevinson Hydrologic Area of the San Joaquin Valley Floor Hydrologic Unit (Hydrologic Area No. 535.70). Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

**2. Page 10, Effluent Limitations and Discharge Specifications (IV), Item V.A
Surface Water Limitations**

The City requests that the Surface Water Limitations section be modified to remove the statement that the discharge shall not *contribute to* a specific condition in the Atwater Drain. This requirement is somewhat ambiguous and difficult to interpret in terms of assessing compliance. Moreover, as we understand it, the standard permit language used by the Central Valley Regional Board does not include this requirement. The following specific change is requested:

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause ~~or contribute to~~ the following in Peck/Atwater Drain:

**3. Page 13, Effluent Limitations and Discharge Specifications (IV), Item V.B
Groundwater Limitations**

The City requests that the Groundwater Limitations section be modified to remove the statement that the discharge shall not *contribute to* a specific groundwater condition. This requirement is somewhat ambiguous and difficult to interpret in terms of assessing compliance. Moreover, as we understand it, the standard permit language used by the Central Valley Regional Board does not include this requirement. The following specific change is requested:

Release of waste constituents from any storage, treatment, or disposal component associated with the Facility shall not cause ~~or contribute to~~ the following in groundwater:

**4. Page 26-27, Provisions (VI), Special Provisions, Item C.5.c – Biosolids Storage
and Transportation Specifications**

As stated above, the City plans to construct a paved, partially covered, solids drying area within the next year. In addition, the City will retain the services of a third party contractor to haul the biosolids offsite. Finally, we ask that the requirement for Regional Board approval of the Biosolids Storage Plan be removed from the Permit. Instead, we suggest that the City would submit the Biosolids Storage Plan at least 30 days prior to the use of the storage facility. The City requests the following, specific, modifications:

- i. Biosolids shall not be stored directly on the unpaved ground at any one location for more than seven (7) consecutive days.
- ii. Facilities for the storage of Class B biosolids shall be located, designed, and maintained to restrict public access to biosolids.

- iii. Biosolids storage facilities shall be designed and maintained to prevent washout or inundation from a storm or flood with a return frequency of 100 years.
- iv. Biosolids storage facilities, which contain biosolids, shall be designed and maintained to contain all storm water falling on the biosolids storage area during a rainfall year with a return frequency of 100 years.
- v. Staged bBiosolids placed on site for more than 24 hours shall be covered.
- vi. Biosolids storage facilities shall be designed, maintained, and operated to minimize the generation of leachate and the effects of erosion.
- vii. If biosolids are to be stored at the site, a plan describing the storage program and means of complying with the specifications contained in sections VI.C.5.b and c of this Order shall be submitted ~~to for~~ the Central Valley Water Board at least 30 days prior to use of the storage facility. ~~staff approval.~~ The storage plan shall also include an adverse weather plan.
- viii. The Discharger shall operate the biosolids storage facilities in accordance with the ~~approved~~-biosolids storage plan.
- ix. The Discharger shall immediately remove and relocate any biosolids stored on site in violation of this Order.
- x. All biosolids shall be transported in covered vehicles capable of containing the designated load.
- xi. All biosolids having a water content that is capable of leaching liquids shall be transported in leak proof vehicles.
- xii. Each biosolids transport ~~contractor driver~~ shall be informed~~trained~~ as to the nature of the load and the proper response to accidents or spill events and shall be provided ~~carry~~ a copy of an approved spill response plan.
- xiii. The Discharger shall work with the biosolids hauling contractors to identify a hauling routes that avoid ~~the use of haul routes near~~ residential land uses to the extent possible. If the use of haul routes near residential land uses cannot be avoided, the Discharger shall try ~~to~~ limit project-related truck traffic to daylight hours.

5. Page 28, Provisions (VI), Special Provisions, Item C.5.e – Interagency Agreements

The City questions whether we have the legal authority to enforce collection system maintenance and record keeping activities in the interagency agreements with our collection system users. Moreover, the collection system users are required to conduct maintenance and record keeping practices in accordance with State Water Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, so enforcement by the City is not necessary.

In addition, the City Council will need to approve the changes to the interagency agreements needed to comply with the pretreatment program requirements. These changes will also need to following discussions and negotiations with the collection system users. Therefore, the City requests that a time schedule be provided in the Permit to allow the City time to comply with the interagency agreement requirements.

The following specific changes are requested:

- e. Limited portions of the wastewater collection system may be outside the service area of the Discharger. In order to assure ~~compliance with Discharge Prohibitions against overflows and bypasses, and to assure~~ protection of the entire collection system and treatment works from industrial discharges, it is necessary that the Discharger control discharges into the system. To control discharges into the entire collection system, the Discharger shall establish interagency agreements with the collection system users within 12 months of the adoption of this Order. The interagency agreements shall contain, at a minimum, requirements for ~~reporting of unauthorized releases of wastewater, maintenance of the collection system, backup power or adequate wet well capacity at all pump stations to prevent overflows during power outages and pump failures, and pump station high water alarm notification systems. The agreements shall also require~~ implementation of an industrial pretreatment program that meets the minimum requirements of this Order.

6. Page 28, Provisions (VI), Special Provisions, Item C.6.c – Agreement with Joseph Gallo Farms

The City is currently in negotiation with Joseph Gallo Farms regarding the discharge agreement. However, due to a number of potential circumstances, we are concerned that the City will not have a final agreement with Joseph Gallo Farms 30 days prior to the when discharge begins. Therefore, the following specific changes are requested:

c. At least ~~730~~ days prior to initial discharge to Discharge Point 001, the Discharger shall provide to the Central Valley Water Board a copy of the agreement between the Discharger and Joseph Gallo Farms for discharges into Peck Drain. In addition, the Discharger shall provide the Central Valley Water Board any revisions or amendments to the agreement within 30 days of the revisions or amendments becoming final.

7. Page 29, Compliance Determination (VII), Item C, Average Dry Weather Flow Effluent Limitation

It is not clear how the City would calculate the average dry weather flow on a monthly basis, as it is to be based on the flow during three consecutive dry weather months. Moreover, the Standard Provisions VI.A.k also states that future flow projections shall be based on the 3 previous *years*' average dry weather flow. This Standard Provision language therefore suggests that the average dry weather flow is to be calculated on an annual basis. Therefore, the City suggests the following, specific change:

Average Dry Weather Flow Effluent Limitation (Section IV.A.1.b).
The average dry weather discharge flow represents the daily average flow when groundwater is at or near normal and runoff is not occurring. Compliance with the average dry weather flow effluent limitation will be determined monthly during dry weather flow periods based on the average daily flow over three consecutive dry weather months (e.g., July, August, and September).

ATTACHMENT C - FLOW SCHEMATIC

8. As discussed herein, the City proposes to construct a biosolids drying area within the next year. We have attached a revised Flow Schematic that reflects these changes.

ATTACHMENT E – MRP

9. Page E-3, General Monitoring Provisions (I), Item I

The meter that will be used to measure flow at RSW-001 is a continuous flow meter. For clarity, the City requests the following modification:

- I. The results of all monitoring required by this Order shall be reported to the Central Valley Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order. Unless otherwise specified, discharge and receiving water flows shall be reported in terms of the monthly average and the daily averagemaximum discharge flows. With the exception of flow, all constituents monitored on a continuous basis (metered) shall be reported as daily maximums, daily minimums, and daily averages.

10. Page E-9, Receiving Water Monitoring Requirements (VII), Table E-5

As mentioned, the meter that will be used to measure flow at RSW-001 is a continuous flow meter. For simplicity, the City requests that flows be reported as daily totals. In addition, the City suggests that it is not necessary to measure priority pollutant flows downstream of the discharge.

Therefore, the following changes are requested to the Table E-5:

The Minimum Sampling Frequency for Flow should be listed as “Continuous”

In addition, Footnote 2 should be modified as follows:

2. Priority pollutants shall include all of the constituents listed in Attachment I of this Order. Priority pollutant monitoring at RSW-002 is not required.

11. Page E-11, Other Monitoring Requirements (IX), Item D, Tertiary Treatment Filters

The City has the ability to automatically divert flow to the emergency storage basin if the influent or effluent turbidity does not meet the permitted operational requirements. Under the rare circumstance that water could not be diverted to Emergency Storage (*i.e.* Bear Creek is near flood stage and a major rainfall is forecasted or had just occurred), the City would collect the required total coliform sample. However, because the Facility is not staffed 24-hours a day, it may not be possible to immediately collect an effluent sample. Therefore, for clarity, the following changes are requested to the Tables E-9 and E-10:

Table E-9, Footnote 1:

If turbidity exceeds 5 NTU for more than 15 minutes, the Discharger shall add chemicals or divert the wastewater. If turbidity exceeds 10 NTU, and the wastewater is not diverted to the emergency storage basin, the Discharger shall collect a sample as soon as practicable for total coliform at EFF-001 and report the duration of the turbidity exceedance.

Table E-9, Footnote 1:

If the turbidity exceeds 10 NTU when coagulation is used or 2 NTU when coagulation is not used, and the wastewater is not diverted to the emergency storage basin, the Discharger shall collect a sample as soon as practicable for total coliform at EFF-001 and report the duration of the turbidity exceedance.

ATTACHMENT F – FACT SHEET

12. Page F-4, Facility Description (II), Item A – Description of Wastewater and Biosolids Treatment or Controls

The following specific changes are requested to this section:

The treatment system at the Facility will consist of headworks with screens and a vortex grit removal system, two oxidation ditches, three secondary clarifiers, three cloth media tertiary filters, and an ultraviolet light disinfection system. Sludge wasted from the secondary clarifiers will be sent to a return activated sludge pump station and will either be recycled within the system as return activated sludge (RAS) or wasted from the system as waste activated sludge (WAS). RAS will be pumped back to the oxidation ditches. WAS will be pumped to two concrete aerobic digesters. Supernatant from the digesters will be conveyed to the headworks of the Facility. Stabilized biosolids will be pumped to temporary holding tanks prior to dewatering. Dewatered solids will be hauled to an onsite drying bed storage area and/or offsite to a disposal facility (either a land application site or a landfill).

**13. Page F-10, Rationale for Effluent Limitations and Discharge Specifications (IV),
Item C.2.a, Receiving Water and Beneficial Uses**

For clarity, we request the following modification to this section:

Receiving Water and Beneficial Uses. As described in Section II.B.3 of this Fact Sheet, Peck Drain is a man-made extension of Atwater Drain, which is also a man-made channel. During a 12 June 2001 inspection, Central Valley Water Board staff observed humans harvesting crayfish and frogs from Atwater Drain. On a 29 June 2005 reconnaissance inspection of Atwater Drain, Central Valley Water Board staff observed crayfish, catfish, carp, and other unidentified fishes. Self-monitoring reports from March 2008 through December 2010 for the Atwater Wastewater Treatment Plant noted that Discharger staff observed fish, birds, frogs, crawdads, minnows, and crayfish in the Atwater Drain. It is not appropriate to use the tributary rule to determine the beneficial uses of Peck/Atwater Drain because it is a man-made facility used to convey storm water and agricultural waters. ~~storm drain.~~ Given the flow conditions, the beneficial uses actually attained in Peck/Atwater Drain since 1975, information in the case file, and information submitted by the Discharger, the beneficial uses applicable to Peck/Atwater Drain are listed in Table F-3, below. Municipal and domestic supply (MUN) is applied in accordance with the Basin Plan, which states that water bodies that do not have beneficial uses designated in Table II-1 are assigned MUN designations. Agricultural supply (AGR) is applied because, as described previously, water in Peck/Atwater Drain is diverted to Gallo Ranch for irrigation use. The beneficial use category of agricultural supply includes irrigation of crops for direct human consumption, otherwise known as unrestricted irrigation use. Water contact recreation (REC-1) is applicable because sections of Peck/Atwater Drain are accessible to the public and the people who harvest aquatic life such as frogs and crayfish from the Drain have body contact with the water. Warm freshwater habitat (WARM) is applicable because information available shows Peck/Atwater Drain supports warm freshwater aquatic life. Wildlife habitat (WILD) is applied because Peck/Atwater Drain provides water that supports wetland ecosystems and wildlife within its reaches and in the Wildlife Refuge. Groundwater recharge (GWR) is applicable because in areas where groundwater elevations are below the invert of Peck/Atwater Drain, water conveyed in the Drain will percolate to groundwater.

**14. Page F-38, Rationale for Effluent Limitations and Discharge Specifications (IV),
Item D.1.a, Electrical Conductivity**

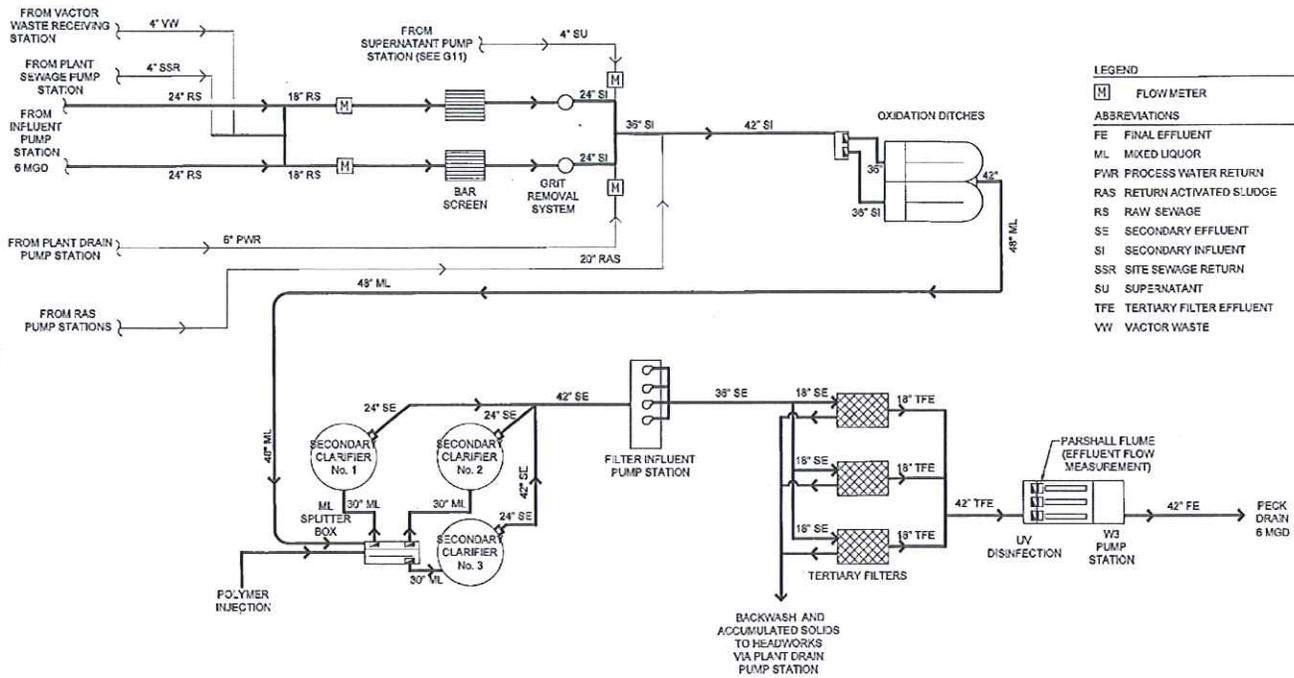
The Fact Sheet with respect to Performance-based Effluent Limitations explains the Central Valley Water Board's justification for including an effluent limitation for EC even though the City's discharge does not have reasonable potential to cause or contribute to a violation of a water quality objective. In general, the City does not object to the effluent limitation for EC. However, also included in the Fact Sheet explanation is a paragraph that suggests that the Central Valley Water Board may consider limiting effluent salinity in municipal wastewater to an increment of 500 umhos/cm over the salinity of municipal water supply. The City does not support the inclusion of this paragraph because it presents speculative information that is not necessary to support the permit findings.

The following specific changes are suggested to the last paragraph of this section:

~~For salinity, the Central Valley Water Board is considering limiting effluent salinity of municipal wastewater treatment facilities to an increment of 500 umhos/cm over the salinity of the municipal water supply as representing best practicable treatment or control.~~ This Order requires the Discharger to monitor its municipal water supply for EC and total dissolved solids.

ATTACHMENT C – FLOW SCHEMATIC

LIQUID FLOW DIAGRAM



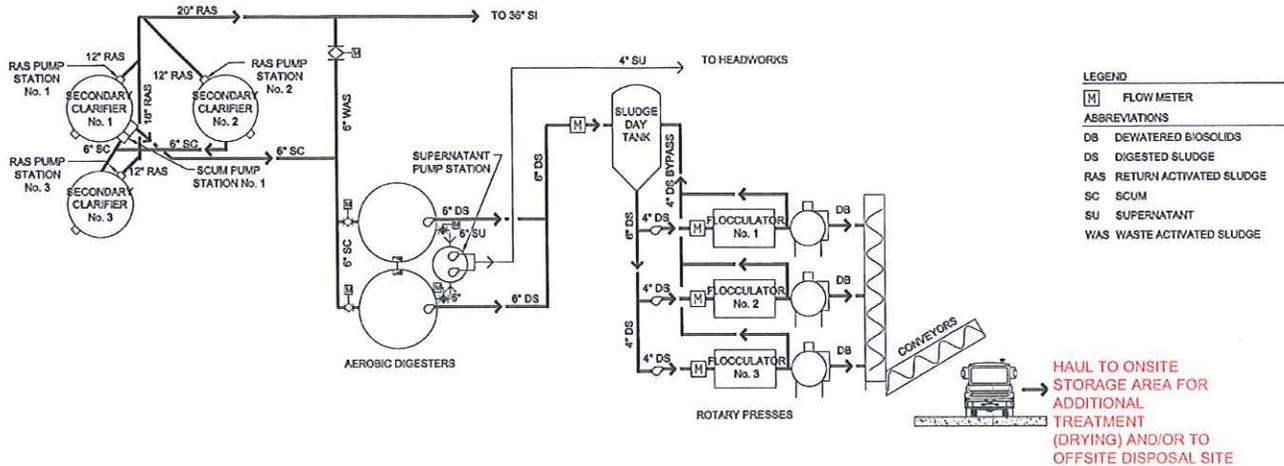
LEGEND

[M] FLOW METER

ABBREVIATIONS

FE FINAL EFFLUENT
 ML MIXED LIQUOR
 PWR PROCESS WATER RETURN
 RAS RETURN ACTIVATED SLUDGE
 RS RAW SEWAGE
 SE SECONDARY EFFLUENT
 SI SECONDARY INFLENT
 SSR SITE SEWAGE RETURN
 SU SUPERNATANT
 TFE TERTIARY FILTER EFFLUENT
 VV VACTOR WASTE

SOLIDS FLOW DIAGRAM



LEGEND

[M] FLOW METER

ABBREVIATIONS

DB DEWATERED BIOSOLIDS
 DS DIGESTED SLUDGE
 RAS RETURN ACTIVATED SLUDGE
 SC SCUM
 SU SUPERNATANT
 WAS WASTE ACTIVATED SLUDGE