

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD-SANTA ANA REGION
FACILITIES INSPECTION REPORT
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Report Date: February 25, 2011

Location & County: 4th. Street, Beaumont, Riverside County

Contact(s): Mr. Vincent Ferrini, Wastewater Operator

Inspection Date: October 28, 2011

Inspected By: Najah N. Amin, WRCE

Site(s): Beaumont, STP

Background:

On October 28, 2010 I visited the City of Beaumont's Sewage Treatment Plant No.1 to inspect and to verify their compliance with discharge requirements of Order No. R8-2006-0003, NPDES No. CA 8000395.

I met with Mr. Vincent Ferrini, Chief Operator, Mr. Kishen Prathivadi, Assistant Director of Public Works, and Mr. Husam Baqi, a consultant for the City of Beaumont. Before touring the facility, we discussed the city's overall compliance with its permit and the problems they had in the past. All four of us started the tour of the plant from headworks and ended at the discharge points.

The treatment plant has a design capacity of 4.0 million-gallons-per-day (MGD); during this inspection the influent to the plant was 2.95 MGD. The plant accepts domestic and commercial/industrial wastes generated within the City of Beaumont. This plant consists of bar screen, aeration and equalization, secondary clarification, sand filtration, ultraviolet disinfection, and sludge drying system.

Observations and Comments:

There are gaps that exist between the bars of the bar screen at the headworks that are wide enough to allow potential rags and other larger materials to pass through. Onsite operators reported seeing these materials end up in the aeration basins thereby clogging the air diffusers. At 10:30 AM during this inspection, I noted the digital readings of the following parameters:

Flow (MGD)	2.95
Conductivity (μ S/cm)	898
pH (Units)	6.44

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Report Date: November 28, 2012

Location & County: 4th. Street, Beaumont, Riverside County

Contact(s): Mr. Vincent Ferrini, Wastewater Operator

Inspection Date: October 20, 2012

Inspected By: Najah N. Amin, WRCE

Site(s): Beaumont, STP

Background:

On October 20, 2012 I visited the City of Beaumont's Sewage Treatment Plant No.1 to inspect and to verify their compliance with discharge requirements of Order No. R8-2006-0003, NPDES No. CA 8000395.

I met with Ms. Kim Dunbar, Grade III Operator. Before touring the facility, we discussed the city's overall compliance with its permit and if there are any problems with any of the operational units and checked the log book for accuracy and problems. Kim and I toured the plant from headworks and ended at the discharge points.

The treatment plant has a design capacity of 4.0 million-gallons-per-day (MGD); during this inspection the influent to the plant was 3.35 MGD. The plant accepts domestic and commercial/industrial wastes generated within the City of Beaumont. This plant consists of bar screen, aeration and equalization, secondary clarification, sand filtration, ultraviolet disinfection, and sludge drying system.

Observations and Comments:

The gaps between the bars of the existing screen bar at the headworks is wide enough to allow potential rags and other larger materials to pass through. Operators reported seeing these materials end up in the aeration basins thereby clogging the air diffusers. During this inspection I found that the city of Beaumont has a new screen bar unit at the site and they will be replacing the old screen bar with new one few months from now. The observation of the digital readings of the influent parameters were as follow:

Flow (MGD)	3.35
Conductivity (μ S/cm)	719
pH (Units)	6.78

ADDITIONAL INFORMATION

Report Date: December 11, 2014

Location & County: 4th. Street, Beaumont, Riverside County

Contact(s): Kim Dunbar, Operator's Supervisor

Inspection Date: December 09, 2014

Inspected By: Najah N. Amin, WRCE

Site(s): STP, Beaumont

Observations and Comments:

On December 09, 2014 I visited the City of Beaumont's Sewage Treatment Plant No.1 to inspect and to verify their compliance with discharge requirements of Order No. R8-2006-0003, NPDES No. CA 8330101001.

I met with Ms. Kim Dunbar, Operator's Supervisor. Ms. Dunbar and I discussed the city's overall compliance with its permit and if there are any problems with any of the operational units. I checked the log book for daily activities at the plant. After our discussion we toured the plant from headwork's and ended at the discharge points.

The treatment plant has a design capacity of 4.0 million-gallons-per-day (MGD); during this inspection the influent to the plant was 3.073 MGD. The plant accepts domestic and commercial/industrial wastes generated within the City of Beaumont. This plant consists of bar screen, aeration and equalization, secondary clarification, sand filtration, ultraviolet disinfection, and sludge drying system.

The new bar screen is installed at the plant, but it is not operational yet. The old bar screen is operational and due to wide gaps between bars, rags and large materials passing through the bars and causing problems to the air diffusers and pumps in the aeration basins. The observation of the digital readings of the influent parameters was as follow:

Influent Flow (MGD)	3.073
Conductivity (μ S/cm)	704
pH (Units)	7.42

Operators clean and calibrate influent/effluent and pH meters weekly; the flow meters are calibrated annually by an outside contractor, last time the instruments serviced was on 7/17/14.

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Observations and Comments:

The treatment plant has a design capacity of 4.0 million-gallons-per-day (MGD); during this inspection the influent to the plant was 3.35 MGD which is above 75% of design capacity.

The new bar screen is installed and working adequately. The observation of the digital readings of the influent parameters were as follows:

Flow (MGD)	3.00
Conductivity (μ S/cm)	865
pH (Units)	5.4

Operators clean and calibrate influent/effluent and pH meters weekly; the flow meters are calibrated annually by an outside contractor. The influent automatic sampler was properly maintained and inside the sampler's temperature was 4° C.

At the headworks a metering pump pumps ferric chloride from a 5-gallon container to the influent wastewater right after the flow meter for flocculation and odor control as needed. The facility's new rag compactor and grit removal equipment were operating adequately.

Aeration basins 1, 2 and 3 are operational and aeration basins 4, 5 are off and are in rehab. This facility has seven blowers, 2 of 3 original blowers aerate basins 1 & 2 and the third one is on standby. Four (4) newer blowers aerate basins 3, 4, & 5. Blower # 3 is operational and # 4 and # 5 are standby. Blower #3 aerates aeration basin #3.

The sections of each aeration basin alternate as an anoxic/oxic zones by cycling on and off the air to the air-diffusers according to a timer. Return activated sludge (RAS) and influent raw sewage were distributed to each aeration basin from a splitter box. The air distribution in the aeration basins were even and DO concentration was kept at approximately 2.0 mg/L.

The two older clarifiers were not operational. The two newer circular clarifiers were operational and can reportedly handle up to 3 MGD of wastewater. The wastewater in the clarifiers was clean and clear and free of algae.

The filtration units were operating adequately; there were no problems observed at this unit. The effluent turbidity analyzer was reading 0.812 NTUs (within compliance). The NPDES permit has a 10 NTU instantaneous maximum limit.

Chamber two of the ultra-violet (UV) radiation disinfection system was operating and all lamp-banks were on. Once a month, operators clean the lamps and the channel of one UV chambers. Staff reviewed the facility logs and noted that the operators are keeping

Santa Ana Regional Water Quality Control Board

August 25, 2016

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Richard Warne
Interim City Manager
City of Beaumont
550 E. 6th Street
Beaumont, CA 92223

**CALIFORNIA WATER CODE SECTION 13267 ORDER: DIRECTIVE FOR
INVESTIGATION FOR ADDRESSING BEAUMONT WASTEWATER TREATMENT
PLANT CAPACITY**

Dear Mr. Warne:

The Santa Ana Regional Water Quality Control Board (Regional Board) is charged with the protection of beneficial uses of surface water and groundwater in parts of Orange, Riverside, and San Bernardino counties that are located within the Santa Ana River Watershed. The Beaumont Wastewater Treatment Plant (Facility) is located at 715 W. 4th Street in the City of Beaumont (City) and is owned by the City and operated by Utilities Partners LLC (a private contractor) under the National Pollutant Discharge Elimination System (NPDES) permit No. CA0105376 and Waste Discharge Requirements and Master Reclamation Permit Order No. R8-2015-0026 (Discharge Permit). The Facility is a tertiary treatment facility that discharges effluent to Cooper's Creek, San Timoteo Groundwater Management Zone (GMZ), Marshall Creek, and Beaumont GMZ. Beneficial uses of the Beaumont and San Timoteo GMZs include municipal supply, industrial service supply, industrial process supply and agricultural supply. Cooper's Creek and Marshall Creek are tributary to San Timoteo Creek, the beneficial uses of which include groundwater recharge, body contact recreation, non-body contact recreation, warm water aquatic habitat and wildlife habitat. The Facility treats domestic and commercial/industrial wastewater generated within the City, parts of Calimesa, and Highland Springs (portions of unincorporated area of Cherry Valley). The Facility has a maximum capacity of 4 million gallons per day (MGD).

Background: "Maximum Benefit" Salt Plan

In 2014, the Regional Board approved amendments to the Water Quality Control Plan for the Santa Ana Basin (Basin Plan) that established alternative total dissolved solids (TDS) and nitrate-nitrogen water quality objectives (called "maximum benefit")

objectives) for the San Timoteo and Beaumont GMZs. The "maximum benefit" TDS and nitrogen objectives are less stringent than the 2004 established "antidegradation" objectives for these Groundwater Management Zones. Pursuant to the Basin Plan, the "maximum benefit" objectives, rather than the "antidegradation objectives," are applied to the City's Facility discharge and this application is contingent on the implementation by the City and other watershed partners of their "maximum benefit" commitments. The "maximum benefit" commitments are a specific program of projects and requirements specified in Chapter 5 Implementation, sections VI.B.2 and VI.B.3 for the San Timoteo GMZ and for the Beaumont GMZ, respectively. The City's Permit includes language that requires implementation of the "maximum benefit" Program. If the Regional Board determines that any or all of the maximum benefit program commitments are not being implemented in accordance with the schedule(s) shown in the Basin Plan, then maximum benefit is not demonstrated and the more stringent antidegradation TDS and nitrate-nitrogen objectives apply, and the Facility's permit would be amended accordingly.

Pursuant to the Basin Plan, Chapter 5, section VI.B.2.A.4 and section VI.B.3.A.4, the City committed to submit by January 30, 2015 a "Plan and Schedule for the Construction of Salt Mitigation Facilities." On January 28, 2015, the City submitted their proposed Plan and Schedule. On March 26, 2015, the Regional Board Executive Officer approved those plans and schedule for construction of salt mitigation facilities. . As acknowledged in the City's plan and schedule, the City must have these desalting facilities in place no later than March 1, 2020. Plant capacity expansion was not part of those plans and schedule.

← Fraud

Wastewater Treatment Plant Capacity

In November 2015, Regional Board staff independently became aware that the Facility's waste flows had exceeded 75% of the design capacity. Therefore, on November 20, 2015, Regional Board staff sent the City a letter reminding the City of its requirement under the Discharge Permit, Standard Provision VI.A 15., to file a written report with the Regional Board within 90 days after the average dry-weather waste flow for any month equals or exceeds 75% of the design capacity of the waste treatment and/or disposal facilities. Transmittal of the report must be signed by the senior administrative officer and also must include a certification that the policymaking body, in this case, the City Council, is adequately informed in the matter. The City's Permit further requires that the report provide an estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of the treatment and/or disposal facilities and that the City submit a schedule for studies, design, and/or other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the design capacity of 4.0 MGD.

The City provided no response to the November 20, 2015 letter.

On April 19, 2016, Regional Board staff issued a Notice of Violation (NOV) to the City for violating Standard Provision VI.A.15 of the Discharge Permit for failure to report

STAFF REPORT

To: Mayor and Council Members
Through: City Manager *gib*
From: Development Services Department
Date: January 20, 2015
Subject: **Receive and File –Proposed Preliminary Plan and Schedule regarding the Salt Mitigation Facilities and Expansion of the Waste Water Treatment Plant**

Background and Analysis:

On April 25, 2014 the Santa Ana Regional Water Quality Control Board (the Regional Board) approved a Basin Plan Amendment, R8-2014-0005. It's attached for your review (Exhibit B). The Basin Plan Amendment mandates the City to reduce the level of Total Dissolved Solids (TDS) in Beaumont's waste water treatment plant effluent in order to meet the Basin Plan maximum benefit objectives in each basin management zone. In order to comply with the Basin Plan Amendment, the City has completed a Preliminary Plan and Schedule letter (Exhibit A) that outlines the construction of a desalter and brine disposal facilities which are required to be operational as soon as possible, but no later than 5 years from the Regional Board's approval of this Preliminary Plan and Schedule letter. This Preliminary Plan and Schedule are required to be submitted to the Regional Board by January 30, 2015.

The Preliminary Plan and Schedule lays out the City's intent and timeline to construct salt mitigation facilities and expand the existing plant as required in the Basin Plan Amendment. The Preliminary Plan also identifies alternatives and options to meet the mandated requirements in the Basin Plan. Other alternatives and costs for each are detailed on page 7 of 10 of the letter.

Benefits of the proposed plan:

- Cost effective solution for rate payers
- Consistent with the Basin Plan Amendment
- Keeps all recycled water local
- Maximum Storm water recovery
- Protects local water supply

Fiscal Impact:

There is no direct fiscal impact with the submittal of this Preliminary Plan and Schedule. All

items related to this plan will be publically bid and awarded by the City Council approval within the timeframe in the schedule.

Next Steps:

The next milestone in the Basin Plan amendment is to provide a non-potable water supply system to serve water for irrigation purposes and direct potable reuse by December 31, 2015 as explained on page 52 of 62 of the Basin Plan Amendment (Exhibit B).

Options:

1. Receive and File; and direct Staff to submit the Preliminary Plan and Schedule implement both subject to further approvals by Council.