

California Regional Water Quality Control Board
Santa Ana Region

August 28, 2009

STAFF REPORT

ITEM: *7

SUBJECT: Amendment of Order No. R8-2006-0003, NPDES No. CA0105376, Waste Discharge and Producer/User Water Recycling Requirements for the City of Beaumont, Waste Water Treatment Plant No. 1 , Riverside County -- Order No. R8-2009-0002

DISCUSSION:

On January 18, 2006, the Regional Water Board adopted Order No. R8-2006-0003, NPDES No. CA0105376, prescribing waste discharge requirements and Producer/User Water Recycling Requirements for the City of Beaumont's (hereinafter Discharger) Waste Water Treatment Plant No. 1. Order No. R8-2006-0003 required the Discharger to implement the maximum benefit commitments specified in Attachment L of the Order in accordance with the compliance date(s) stipulated therein. Item 9 of Attachment L required the Discharger to remove/reduce the discharge of Beaumont's effluent from the unlined portion of San Timoteo Creek.

Currently, Order No. R8-2006-0003 authorizes the City of Beaumont to discharge tertiary treated wastewater at discharge point (DP) 001 to Cooper's Creek, a tributary of Reach 3 of San Timoteo Creek. San Timoteo Creek is a tributary of Reach 5 of the Santa Ana River and it recharges the San Timoteo Groundwater Management Zone (STGMZ).

To comply with the maximum benefit commitment identified in Item 9 of Attachment L of Order No. R8-2006-0003, the Discharger worked with Beaumont-Cherry Valley Water District (BCVWD)¹ to design and construct a recycled water pump station and a transmission system to deliver recycled water for irrigation of landscaping and golf courses in service areas that overlie the Beaumont Groundwater Management Zone (BGMZ). The Discharger and BCVWD are in the process of constructing a recycled water storage and distribution system. Implementation of the recycled water system will result in changes in the volume and frequency of surface water discharges into San Timoteo Creek.

¹

BCVWD is a member agency of the San Timoteo Watershed Authority. The amended Basin Plan required the Discharger and the San Timoteo Watershed Management Authority (STWMA) to submit for approval a plan and schedule for the reduction of treated wastewater discharges to the unlined portion of San Timoteo Creek. This workplan and schedule were submitted by the Discharger and approved by the Regional Water Board on April 24, 2009 (Resolution No. R8-2009-0035).

BCVWD obtained permission from the State Water Resources Control Board and the US Fish and Wildlife Services for the Discharger to reduce its discharge of tertiary treated effluent to Cooper's Creek from about 2.5 mgd to 1.8 mgd. BCVWD plans to divert and use recycled water in excess of 1.8 mgd to meet irrigation demands in its service area, which overlies the Beaumont Groundwater Management Zone (BGMZ). BCVWD began construction of its non-potable distribution system in 2006. State Revolving Fund monies used to fund the completion of the system were put on hold due to the State budget crisis, delaying completion of the system. Because of these delays, on April 13, 2009, the Discharger requested that Order No. R8-2006-0003 be amended to include two new discharge points DP 007 and 008 for discharges into streams affecting the Beaumont Groundwater Management Zone (BGMZ).

DP 007 is an outfall to an unnamed tributary of Marshall Creek, while DP 008 is an outfall to Noble Creek. The Discharger proposes to discharge varying amounts of recycled water, the exact amount being equal to the total recycled water produced minus the 1.8 mgd ongoing discharge to Cooper's Creek (DP 001). The recycled water supplied to these streams will support a streambed restoration project. Recycled water that is not consumed by riparian vegetation will completely and incidentally recharge through the streambed into the BGMZ. A negative declaration for the new discharge locations was certified on April 8, 2009.

The amendment Order will also include additional UV disinfection requirements and monitoring requirements, since the City has installed and now operates a UV system.

The following shows the proposed changes to Order No. R8-2006-0003. Additions are bold and highlighted. Deletions are stricken-out.

- Order No. R8-2006-0003, page 1, modify the following table, as follows:

The Discharger is authorized to discharge from the following discharge points as set forth below:

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Tertiary treated and disinfected	33° 55' 24" N	116° 59' 34" W	Cooper's Creek, Reach 3 of San Timoteo Creek; San Timoteo Management Zone (STMZ)
002	Recycled Water	33° 55' 25" N	116° 59' 35" W	Beaumont Groundwater Management Zone
003	Stormwater	33° 55' 25" N	116° 59' 31" W	Cooper's Creek; STMZ
004	Stormwater	33° 55' 24" N	116° 59' 38" W	Cooper's Creek; STMZ
005	Stormwater	33° 55' 23" N	116° 59' 42" W	Cooper's Creek, STMZ
006	Stormwater	33° 55' 25" N	116° 59' 24" W	Cooper's Creek, STMZ

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
007	Tertiary treated and disinfected	33° 55' 53" N	116° 59' 14" W	An unnamed tributary of Marshall Creek, Reach 3 of San Timoteo Creek; Beaumont Groundwater Management Zone (BGMZ)
008	“	33° 57' 30" N	116° 58' 54" W	Nobel Creek, a tributary of Reach 3 of San Timoteo Creek, Beaumont Groundwater Management Zone

2. Order No. R8-2006-0003, Findings, page 3, modify Section II.B. as follows:

B. Facility Description. The Discharger operates Wastewater Treatment Plant No. 1 through **United Water** ~~Urban Logic Consultants~~, a private contractor. The treatment system consists of bar screens, aeration/equalization, clarification, sand filtration, UV disinfection, sludge thickening/drying, and aerobic digestion. Wastewater is discharged from Discharge point 001 to Cooper's Creek, which leads to San Timoteo Creek, Reach 3, a tributary to the Santa Ana River, Reach 5. Reach 3 of San Timoteo Creek is unlined and flows in the Creek recharge the underlying San Timoteo Management Zone. While the discharge is to Cooper's Creek, it is considered a *de facto* discharge to San Timoteo Creek and the San Timoteo Management Zone. **Because of delays in the completion of a recycled water distribution system, on April 13, 2009, the Discharger proposed two new discharge points; DP 007 to an unnamed tributary of Marshall Creek, and DP 008 to Noble Creek, both of which overlie the Beaumont Groundwater Management Zone (BGMZ).** Part of ~~Most of~~ the wastewater produced at Treatment Plant No. 1 will be recycled for uses overlying the Beaumont **Groundwater** Management Zone, including landscape irrigation. Attachment B shows the location of the facility. Attachment C provides a flow schematic of the treatment process at the facility.

3. Order No. R8-2006-0003, Findings, page 4, modify paragraph E. as follows:

E. California Environmental Quality Act (CEQA). This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC. **Pursuant to CEQA, a negative declaration was certified for discharges from the new discharge locations on April 8, 2009.**

4. Order No. R8-2006-0003, Findings II.H., page 5, modify the table as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
001, 003, 004, 005, and 006	Cooper's Creek and San Timoteo Creek, Reach 3 ¹	a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, and e. Wildlife habitat.
001, 003, 004, 005, and 006	Santa Ana River, Reach 5 ²	a. Agricultural supply, b. Groundwater recharge, c. Water contact recreation, d. Non-contact water recreation, e. Warm freshwater habitat, f. Wildlife habitat, and g. Rare, threatened, or endangered species.
007	An unnamed Creek tributary to Marshall Creek, a tributary to Reach 3 of San Timoteo Creek	Present or Potential beneficial uses: a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, e. Wildlife habitat, and f. Rare, threatened, or endangered species.
008	Noble Creek, headwater of San Timoteo Creek	a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, e. Wildlife habitat, and f. Rare, threatened, or endangered species.
001, 003, 004, 005, and 006	San Timoteo Groundwater Management Zone	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial process supply, and d. Industrial service supply.
002, 007, 008	Beaumont Groundwater Management Zone	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial process supply, and d. Industrial service supply.

5. Order No. R8-2006-0003, Section IV.- Effluent Limitations and Discharge Specifications, page 7, modify paragraph A. as follows:

A. Effluent Limitations **at DP 001, DP 007, and DP 008:**

6. Order No. R8-2006-0003, Section IV.- Effluent Limitations and Discharge Specifications, page 9, paragraph IV.A.1.e., insert new sub-paragraph (2) and new footnotes 7 and 8 as follows and renumber subsequent sub-paragraphs and footnotes accordingly:

(2) The disinfected effluent shall meet the following:

(a) Where ultraviolet (UV) disinfection is used for disinfection, UV disinfection shall meet the requirements specified in the Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, published by the National Water Research Institute, Second Edition, unless otherwise approved by the California Department of Public Health (CDPH) and/or recommissioned under CDPH oversight.

(b) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate⁷ inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS-2⁸, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

Footnote 7: Meeting the discharge limits in A.1.e.(2), (3), and (4) shall constitute the demonstration required by this sub-paragraph.

Footnote 8: F-Specific bacteriophage MS-2 means a strain of a specific type of virus that infects coliform bacteria that is traceable to the American Type Culture Collection (ATCC) 15597B1 and is grown on lawns of E. coli (ATCC) 15597.

7. Order No. R8-2006-0003, Section IV.C. Reclamation Specifications, page 11, paragraph IV.C.1.e., insert new sub-paragraph (2) as follows and renumber subsequent sub-paragraphs accordingly:

(2) The disinfected effluent shall meet the following:

(a) Where ultraviolet (UV) disinfection is used for disinfection, UV disinfection shall meet the requirements specified in the Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, published by the National Water Research Institute, Second Edition, unless otherwise approved by the California Department of Public Health and/or recommissioned under CDPH oversight.

(b) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS-2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

8. Attachment B, add page B-2, Discharge Points of Beaumont, see attached map:
9. Attachment E, Section II., page E-6, Monitoring Locations, modify Table of Effluent Monitoring Locations, as follows:

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Influent	M-INF	Grit Chamber
Potable	M-POT	Treatment facility's administrative office
001	M-001	Latitude 33° 55' 24" N and longitude 116°59'34"W, to Cooper's Creek
002	Rec-001	Outfall to recycled water use area
003	Storm-001	V-shaped Concrete Channel
004	Storm-002	V-shaped Concrete Channel
005	Storm-003	V-shaped Concrete Channel
006	Storm-004	V-shaped Concrete Channel
007	M-001	Latitude 33° 55' 24" N and longitude 116°59'34"W
008	M-001	Latitude 33° 55' 24" N and longitude 116°59'34"W

10. Attachment E, Section IV., page E-10, add a new sub-paragraph B. - UV Monitoring Requirement, as follows:

B. UV Monitoring Requirements

1. The Discharger shall continuously determine the operational UV dose and UV transmittance.
2. The Discharger shall replace any bulbs that exceed the lamp age as approved by CDPH.

11. Attachment F, Section II. Facility Description, page F-3, Item B. Discharge Points and Receiving Waters, add a paragraph to the last Table of Effluent Monitoring Locations, as follows:

- B. On April 13 2009, the Discharger proposed to add two new discharge points: DP 007 to an unnamed tributary of Marshall Creek and DP 008 to Noble Creek . Both creeks are tributary to Reach 3 of San Timoteo Creek and overlie the Beaumont Groundwater Management Zone (BGMZ).**

12. Attachment F, Section III.C.1., Applicable Plans, Policies, and Regulations, page F-8, modify last paragraph and table as follows:

Tertiary treated wastewater from the treatment plant is discharged at **DP 001** to Copper's Creek, **at DP 007 to an unnamed tributary of Marshall Creek and at DP 008 to Nobel Creek,** ~~to all tributaries~~ of San Timoteo Creek, Reach 3. San Timoteo Creek is a tributary to the Santa Ana River, Reach 5. The Santa Ana River, Reach 5 is tributary to the Santa Ana River, Reach 4, thence Reach 3 and downstream reaches. The beneficial uses of receiving waters affected by the discharge from the Facility are tabulated as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
001, 003, 004, 005, and 006	Copper's Creek and San Timoteo Creek, Reach 3 ¹	a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, and e. Wildlife habitat.
001, 003, 004, 005, and 006	Santa Ana River, Reach 5 ²	a. Agricultural supply, b. Groundwater recharge, c. Water contact recreation, d. Non-contact water recreation, e. Warm freshwater habitat, f. Wildlife habitat, and g. Rare, threatened, or endangered species.
001, 003, 004, 005, and 006	San Timoteo Groundwater Management Zone	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial process supply, and d. Industrial service supply.
002, 007, 008	Beaumont Groundwater Management Zone	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial process supply, and d. Industrial service supply.
007	An unnamed tributary of Marshall Creek, a tributary to Reach 3 of San Timoteo Creek	Present or potential beneficial uses: a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, e. Wildlife habitat, and f. Rare, threatened, or endangered species.
008	Noble Creek, headwater of San Timoteo Creek	a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, e. Wildlife habitat, and f. Rare, threatened, or endangered species.

RECOMMENDATION:

Adopt Order No. R8-2009-0002, as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) -
U.S. Fish and Wildlife Service, Carlsbad – Karen Goebel
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch
U.S. Fish and Wildlife Service, Carlsbad – Christine Medak
State Water Resources Control Board, Office of the Chief Counsel – David Rice
State Department of Water Resources, Glendale – Charles Keene
State Department of Fish and Game, Los Alamitos - Ms. Latonio
State Department of Health Services - San Diego – Steve Williams
Riverside County Environmental Health Services – Sandy Buncek
Riverside County Flood Control and Water Conservation District – Jason Uhley
Santa Ana River Discharger's Association - Ed Filadelfia
Santa Ana Watershed Project Authority – Celeste Cantu
Inland Empire Waterkeeper – Autumn DeWoody
Lawyers for Clean Water C/c San Francisco Baykeeper
Natural Resources Defense Council- David Beckman
Wildermuth Environmental Inc. - Mark Wildermuth/Michael Plinski

California Regional Water Quality Control Board
Santa Ana Region

Order No. R8-2009-0002
Amendment of Order No. R8-2006-0003, NPDES No. CA0105376
Waste Discharge and Producer/User Water Recycling Requirements
for
The City of Beaumont
Wastewater Treatment Plant No. 1
Riverside County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter, Board), finds that:

1. On January 18, 2006, the Regional Board adopted Order No. R8-2006-0003, NPDES No. CA0105376, prescribing waste discharge requirements and Producer/User Water Recycling Requirements for the City of Beaumont's (hereinafter Discharger) Wastewater Treatment Plant No. 1.
2. Order No. R8-2006-0003 required the Discharger to implement the maximum benefit commitments specified in Attachment L of the Order in accordance with the compliance date(s) stipulated therein. Item 9 of Attachment L required the Discharger to remove/reduce the discharge of Beaumont's effluent from the unlined portion of San Timoteo Creek.
3. Currently, Order No. R8-2006-0003 authorizes the City of Beaumont to discharge tertiary treated wastewater at discharge point (DP) 001 to Cooper's Creek, a tributary of Reach 3 of San Timoteo Creek. San Timoteo Creek is a tributary of Reach 5 of Santa Ana River and it recharges the San Timoteo Groundwater Management Zone (STGMZ).
4. To comply with Item 9 of Attachment L of Order No. R8-2006-0003, the Discharger worked with Beaumont-Cherry Valley Water District (BCVWD)¹ to design and construct a recycled water pump station and a transmission system to deliver recycled water for irrigation of landscaping and golf courses in service areas which overlie the Beaumont Groundwater Management Zone (BGMZ). The Discharger and BCVWD are in the process of constructing a recycled water storage and distribution system. Implementation of the recycled water system will result in changes in the volume and frequency of surface water discharges into San Timoteo Creek.

¹

BCVWD is a member agency of the San Timoteo Watershed Authority. The amended Basin Plan required the Discharger and the San Timoteo Watershed Management Authority (STWMA) to plan and schedule the reduction of treated wastewater discharges to the unlined portion of San Timoteo Creek. This workplan and schedule was submitted by the Discharger and on April 24, 2009, the Regional Board adopted Resolution No. R8-2009-0035 approving the workplan.

5. BCVWD obtained permission from the State Water Resources Control Board and the US Fish and Wildlife Services for the Discharger to reduce its discharge of tertiary treated effluent to Cooper's Creek from about 2.5 mgd to 1.8 mgd. BCVWD plans to divert and use recycled water in excess 1.8 mgd to meet irrigation demands in its service area, which overlies the Beaumont Groundwater Management Zone (BGMZ). BCVWD began construction of its non-potable distribution system in 2006. Funding from the State Revolving Fund for the completion of the system was put on hold due to the State budget crisis. Because of the delays in the completion of BCVWD's non-potable system, on April 13, 2009, the Discharger requested that Order No. R8-2006-0003 be amended to include two new discharge points DP 007 and 008 into streams affecting the Beaumont Groundwater Management Zone (BGMZ).
6. DP 007 is an outfall to an unnamed tributary of Marshall Creek, while DP 008 is an outfall to Noble Creek. The Discharger proposes to discharge varying amounts of recycled water to these discharge points, the exact amount being equal to the total recycled water produced minus the 1.8 mgd to Cooper's Creek (DP 001). The recycled water supplied to these streams will support a streambed restoration project. Recycled water that is not consumed by riparian vegetation will completely and incidentally recharge through the streambed into the BGMZ.
7. This Order also includes additional UV disinfection requirements and monitoring requirements, since the City has installed and now operates a UV disinfection system.
8. It is appropriate to amend Order No. R8-2006-0003 to include these two new discharge points to surface streams overlying the Beaumont Groundwater Management Zone. Discharges from these new outfalls will then be regulated under this Order.
9. In accordance with Water Code Section 13389, amending the waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act (CEQA) contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code. A negative declaration for discharges from the new discharge points was certified on April 8, 2009.
10. The Board has notified the discharger and other interested agencies and persons of its intent to amend waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.
11. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. R8-2006-0003 be amended as follows:

1. Order No. R8-2006-0003, page 1, replace the following table, as follows:

The Discharger is authorized to discharge from the following discharge points as set forth below:

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Tertiary treated and disinfected	33° 55' 24" N	116° 59' 34" W	Cooper's Creek, Reach 3 of San Timoteo Creek; San Timoteo Management Zone (STMZ)
002	Recycled Water	33° 55' 25" N	116° 59' 35" W	Beaumont Groundwater Management Zone
003	Stormwater	33° 55' 25" N	116° 59' 31" W	Cooper's Creek; STMZ
004	Stormwater	33° 55' 24" N	116° 59' 38" W	Cooper's Creek; STMZ
005	Stormwater	33° 55' 23" N	116° 59' 42" W	Cooper's Creek, STMZ
006	Stormwater	33° 55' 25" N	116° 59' 24" W	Cooper's Creek, STMZ
007	Tertiary treated and disinfected	33° 55' 53" N	116° 59' 14" W	An unnamed tributary of Marshall Creek, Reach 3 of San Timoteo Creek; Beaumont Groundwater Management Zone (BGMZ)
008	"	33° 57' 30" N	116° 58' 54" W	Nobel Creek, a tributary of Reach 3 of San Timoteo Creek, Beaumont Groundwater Management Zone

2. Order No. R8-2006-0003, Findings, page 3, modify Section II.B. as follows:

B. Facility Description. The Discharger operates Wastewater Treatment Plant No. 1 through United Water, a private contractor. The treatment system consists of bar screens, aeration/equalization, clarification, sand filtration, UV disinfection, sludge thickening/drying, and aerobic digestion. Wastewater is discharged from Discharge point 001 to Cooper's Creek, which leads to San Timoteo Creek, Reach 3, a tributary to the Santa Ana River, Reach 5. Reach 3 of San Timoteo Creek is unlined and flows in the Creek recharge the underlying San Timoteo Management Zone. While the discharge is to Cooper's Creek, it is considered a *de facto* discharge to San Timoteo Creek and the San Timoteo Management Zone. Because of delays in the completion of a recycled water distribution system, on April 13, 2009, the Discharger proposed two new discharge points; DP 007 to an unnamed tributary of Marshall Creek, and DP 008 to Noble Creek, both of which overlie the Beaumont Groundwater Management Zone (BGMZ). Part of the wastewater produced at Treatment Plant No. 1 will be recycled for uses

overlying the Beaumont Groundwater Management Zone, including landscape irrigation. Attachment B shows the location of the Facility. Attachment C provides a flow schematic of the treatment process at the Facility.

3. Order No. R8-2006-0003, Findings, page 4, modify paragraph E. as follows:

E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC. Pursuant to CEQA, a negative declaration was certified for discharges from the new discharge locations on April 8, 2009.

4. Order No. R8-2006-0003, Findings II.H., page 5, replace the table as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
001, 003, 004, 005, and 006	Copper's Creek and San Timoteo Creek, Reach 3 ¹	a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, and e. Wildlife habitat.
001, 003, 004, 005, and 006	Santa Ana River, Reach 5 ²	a. Agricultural supply, b. Groundwater recharge, c. Water contact recreation, d. Non-contact water recreation, e. Warm freshwater habitat, f. Wildlife habitat, and g. Rare, threatened, or endangered species.
007	An unnamed Creek tributary to Marshall Creek, a tributary to Reach 3 of San Timoteo Creek	Present or Potential beneficial uses: a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, e. Wildlife habitat, and f. Rare, threatened, or endangered species.
008	Noble Creek, headwater of San Timoteo Creek	a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, e. Wildlife habitat, and f. Rare, threatened, or endangered species.
001, 003, 004, 005, and 006	San Timoteo Groundwater Management Zone	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial process supply, and d. Industrial service supply.
002, 007, 008	Beaumont Groundwater Management Zone	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial process supply, and d. Industrial service supply.

5. Order No. R8-2006-0003, Section IV.- Effluent Limitations and Discharge Specifications, page 7, replace paragraph A. as follows:
 - A. Effluent Limitations at DP 001, DP 007, and DP 008:
6. Order No. R8-2006-0003, Section IV.- Effluent Limitations and Discharge Specifications, page 9, paragraph IV.A.1.e., insert new sub-paragraph (2) and new footnotes 7 and 8 as follows and renumber subsequent sub-paragraphs and footnotes accordingly:
 - (2) The disinfected effluent shall meet the following:
 - (a) Where ultraviolet (UV) disinfection is used for disinfection, UV disinfection shall meet the requirements specified in the Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, published by the National Water Research Institute, Second Edition, unless otherwise approved by the California Department of Public Health (CDPH) and/or recommissioned under CDPH oversight.
 - (b) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate⁷ inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS-2⁸, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

Footnote 7: Meeting the discharge limits in A.1.e.(2), (3), and (4) shall constitute the demonstration required by this sub-paragraph.

Footnote 8: F-Specific bacteriophage MS-2 means a strain of a specific type of virus that infects coliform bacteria that is traceable to the American Type Culture Collection (ATCC) 15597B1 and is grown on lawns of E. coli (ATCC) 15597.
7. Order No. R8-2006-0003, Section IV.C. Reclamation Specifications, page 11, paragraph IV.C.1.e., insert new sub-paragraph (2) as follows and renumber subsequent sub-paragraphs accordingly:

- (2) The disinfected effluent shall meet the following:
- (a) Where ultraviolet (UV) disinfection is used for disinfection, UV disinfection shall meet the requirements specified in the Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, published by the National Water Research Institute, Second Edition, unless otherwise approved by the California Department of Public Health and/or recommissioned under CDPH oversight.
 - (b) When a disinfection process combined with the filtration process is utilized, the combined process shall demonstrate inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS-2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

8. Attachment B, add page B-2, Discharge Points of Beaumont, see attached map:
9. Attachment E, Section II., page E-6, Monitoring Locations, replace Table of Effluent Monitoring Locations, as follows:

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Influent	M-INF	Grit Chamber
Potable	M-POT	Treatment facility's administrative office
001	M-001	Latitude 33° 55' 24" N and longitude 116°59'34"W, to Cooper's Creek
002	Rec-001	Outfall to recycled water use area
003	Storm-001	V-shaped Concrete Channel
004	Storm-002	V-shaped Concrete Channel
005	Storm-003	V-shaped Concrete Channel
006	Storm-004	V-shaped Concrete Channel
007	M-001	Latitude 33° 55' 24" N and longitude 116°59'34"W
008	M-001	Latitude 33° 55' 24" N and longitude 116°59'34"W

10. Attachment E, Section IV., page E-10, add a new sub-paragraph B. - UV Monitoring Requirement, as follows:

B. UV Monitoring Requirements

- 1. The Discharger shall continuously determine the operational UV dose and UV transmittance.
- 2. The Discharger shall replace any bulbs that exceed the lamp age as approved by CDPH.

11. Attachment F, Section II. Facility Description, page F-3, Item B. Discharge Points and Receiving Waters, add a paragraph to the last Table of Effluent Monitoring Locations, as follows:

B. On April 13 2009, the Discharger proposed to add two new discharge points: DP 007 to an unnamed tributary of Marshall Creek and DP 008 to Noble Creek. Both creeks are tributary to Reach 3 of San Timoteo Creek and overlie the Beaumont Groundwater Management Zone (BGMZ).

12. Attachment F, Section III.C.1., Applicable Plans, Policies, and Regulations, page F-8, replace last paragraph and table as follows:

Tertiary treated wastewater from the treatment plant is discharged at DP 001 to Copper's Creek, at DP 007 to an unnamed tributary of Marshall Creek and at DP 008 to Nobel Creek, all tributaries to San Timoteo Creek, Reach 3. San Timoteo Creek is a tributary to the Santa Ana River, Reach 5. The Santa Ana River, Reach 5 is tributary to the Santa Ana River, Reach 4, thence Reach 3 and downstream reaches. The beneficial uses of receiving waters affected by the discharge from the Facility are tabulated as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
001, 003, 004, 005, and 006	Copper's Creek and San Timoteo Creek, Reach 3 ¹	a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, and e. Wildlife habitat.
001, 003, 004, 005, and 006	Santa Ana River, Reach 5 ²	a. Agricultural supply, b. Groundwater recharge, c. Water contact recreation, d. Non-contact water recreation, e. Warm freshwater habitat, f. Wildlife habitat, and g. Rare, threatened, or endangered species.
001, 003, 004, 005, and 006	San Timoteo Groundwater Management Zone	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial process supply, and d. Industrial service supply.
002, 007, 008	Beaumont Groundwater Management Zone	a. Municipal and domestic supply, b. Agricultural supply, c. Industrial process supply, and d. Industrial service supply.
007	An unnamed tributary of Marshall Creek, a tributary to Reach 3 of San Timoteo Creek	Present or potential beneficial uses: a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, e. Wildlife habitat, and f. Rare, threatened, or endangered species.

Discharge Point	Receiving Water Name	Beneficial Use(s)
008	Noble Creek, headwater of San Timoteo Creek	a. Groundwater recharge, b. Water contact recreation, c. Non-contact water recreation, d. Warm freshwater habitat, e. Wildlife habitat, and f. Rare, threatened, or endangered species.

13. These amendments shall become effective upon the adoption of this Order.

14. All other conditions and requirements of Order No. R8-2006-0003, including Attachments, shall remain unchanged.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the forgoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on August 28, 2009.

TENTATIVE

Gerard J. Thibeault
Executive Officer