

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

SPECIAL BOARD ORDER R7-2011-0017 AMENDING
WASTE DISCHARGE REQUIREMENTS ORDER R7-2007-0034
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT NO. CA0105007 FOR THE
CITY OF WESTMORLAND, WESTMORLAND WASTEWATER TREATMENT PLANT
City of Westmorland – Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region (hereinafter Regional Water Board), finds:

A. Background.

1. On September 19, 2007, the Regional Water Board adopted Board Order R7-2007-0034, NPDES Permit No. CA0105007, prescribing Waste Discharge Requirements for the City of Westmorland (hereinafter Discharger) Municipal Wastewater Treatment Plant (WWTP) for the discharge of 0.50 million gallons per day (MGD) of secondary treated wastewater to the Trifolium Drain No. 6, which discharges to the New River, a water of the United States. Board Order R7-2007-0034 will expire on September 18, 2012.
2. The California Toxics Rule (CTR) (Title 40 Code of Federal Regulations (CFR) Section 131.38) and the State Water Resource Control Board's (State Water Board) Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Plan or SIP) establish specific criteria for freshwater and saltwater. When the salinity of receiving water is between 1 and 10 parts per thousand, such as is the case for the Trifolium Drain No. 6, the CTR and SIP provide for the Regional Water Board to prescribe in a permit the more stringent of the two criteria. Based on the foregoing, Board Order R7-2007-0034, as adopted by the Regional Water Board in 2007, includes interim¹ and final effluent limits for total recoverable copper, and total recoverable selenium that were developed based on saltwater and freshwater criteria. The final effluent limit for total recoverable copper is based on saltwater criteria, which is more stringent than freshwater criteria for these pollutants.
3. The Discharger conducted a Biological Assessment at the location of the discharge. The objective of the Biological Assessment is to demonstrate scientifically whether water, plant life, and aquatic life at the discharge location are more typical of a saltwater or a freshwater environment. Three sampling stations were established in the vicinity of the outfall. At each sampling station the following data were collected: water salinity, dominant vegetation, and aquatic life.

¹ The interim effluent limitation is based on saltwater criteria are for total recoverable copper.

4. On August 11, 2010, the Discharger submitted the results of the Biological Assessment to the U.S. Environmental Protection Agency (USEPA) requesting approval to use alternative freshwater criteria at the location of the discharge pursuant to 40 CFR 131.38(c)(3). This assessment determined that the applicable reach of the Trifolium Drain No. 6 is dominated by freshwater aquatic life and that freshwater criteria are more appropriate; therefore, saltwater aquatic life criteria are not applicable for this reach of the Trifolium Drain No. 6.
5. On February 2, 2011, following its review of the Biological Assessment submitted, USEPA issued a tentative approval of the findings in the Discharger's Biological Assessment and the application of water quality criteria for the protection of freshwater aquatic life.
6. Board Order R7-2007-0034 may be modified, rescinded and reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include, but are not limited to, the promulgation of new regulations, modification of land application plans, or modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or the Regional Water Board, including revisions to the Basin Plan.
7. This Special Board Order revises Board Order R7-2007-0034 to designate City of Westmorland's discharge location at the Trifolium Drain No. 6 as a freshwater environment. This Special Board Order removes the interim and final effluent limits for total recoverable copper based on CTR and SIP freshwater criteria for the discharge.
8. In accordance with section 1.3 of the SIP, the Regional Water Board staff conducted a Reasonable Potential Analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a water quality-based effluent limitation (WQBEL) was required in the Order. For the existing Board Order R7-2007-0034, the discharge demonstrates a reasonable potential to cause or contribute to an excursion above the applicable water quality standards based on freshwater and saltwater criteria for total recoverable copper and selenium. Based on the exclusion of saltwater criteria, the discharge did not demonstrate a reasonable potential to cause or contribute to an excursion above the applicable water quality standards for total recoverable copper; therefore, the effluent limitations for total recoverable copper has been discontinued.
9. Pursuant to 40 CFR 124.10(b) and 40 CFR 131.38(c)(3), a thirty (30) day public notice and comment period of USEPA's proposed tentative approval of the Biological Assessment and this revised Special Board Order are required prior to their becoming final. These public participation requirements provide stakeholders potentially affected by this action with an opportunity to object to or comment on the proposed tentative approval and revised Board Order.
10. Pursuant to 40 CFR 124.10(b) and California Water Code (CWC) Section 13167.5, the Regional Water Board published Public Notice No. 7-11-05 for this proposed Special Board Order on "date to be inserted".

11. The 2006 USEPA 303(d) list of impaired waters (hereinafter 303(d) List) classifies the Trifolium Drain No. 6 (Imperial Valley Drain) as impaired by toxaphene and selenium. Further, sedimentation/silt had previously been listed as a pollutant impairing Imperial Valley Drains; a sedimentation/siltation Total Maximum Daily Load (TMDL) for the Imperial Valley Drains has been approved by USEPA. The sedimentation/siltation TMDL has established a Waste Load Allocation (WLA) for sediment of twice the current Total Suspended Solids (TSS) loading rate (11.4 tons per year). The TSS effluent limitations contained in this Order comply with the WLA for sediment established in the Imperial Valley Drains sedimentation/siltation TMDL. Further, the New River, to which the Trifolium Drain No. 6 is tributary, is listed as impaired by 1,2,4-trimethylbenzene, chlordane, chloroform, chlorpyrifos, DDT, diazinon, dieldrin, mercury, meta-para xylenes, nutrients, dissolved oxygen, o-xylenes, PCBs, p-cymene, p-dichlorobenzene, pesticides, selenium, toluene, toxaphene, toxicity, copper and trash. A pathogen and sedimentation/siltation TMDL have been approved by USEPA for the New River and are implemented in this Order. The pathogen and sedimentation/siltation TMDL's established WLAs for fecal coliform, *E. Coli*, enterococci and sediment. The established fecal coliform, *E. Coli*, enterococci and total suspended solids effluent limitations in this Order comply with the WLAs established in the New River pathogen and sedimentation/siltation TMDLs. Further, there are two TMDLs under development for dissolved oxygen and VOCs for the New River. A Trash TMDL for the New River has been approved by the Regional Water Board, State Water Board, the Office of Administrative Law and the USEPA.

B. Facility Description. City of Westmorland owns and operates a wastewater collection and disposal system and provides a sewerage service to the City of Westmorland which is located in the Imperial Valley, south of the Salton Sea. The wastewater collection and disposal system serves a population of 2,400. The treatment system consists of a sewage pump station, an influent flow meter, an oxidation ditch, two twenty-eight foot clarifiers, chlorine contact chambers, dechlorination operations and constructed wetlands. The Discharger may divert all of the chlorinated effluent flow, a portion of, or no flow to the constructed wetlands prior to the discharge to Trifolium Drain No. 6.

The constructed wetlands consist of two, 2-acre unlined wetland ponds which became operational on January 1, 2007. The two, unlined wetland ponds operate in parallel. The wetlands have a series of deep open water and shallow emergent vegetated sections, which include bulrush, cattail and other wetland native plant species. Effluent from the two wetlands is joined into a single pipe that flows by gravity back to the main outfall pipe prior to the discharge to Trifolium Drain No. 6 at Discharge Point 001. The wetlands are not being used at this time.

The Facility also includes sludge drying beds and a septage receiving area.

Wastewater is discharged from Discharge Point 001 to the Trifolium Drain No. 6, which eventually discharges into the New River, a water of the United States, about 8 miles from the Salton Sea, within the Colorado River Basin.

- C. California Environmental Quality Act (CEQA).** This action to amend an NPDES permit is exempt from the provisions of Chapter 3 of CEQA (commencing with Section 21100) of Division 13 of the California Public Resources Code in accordance with Section 13389 of the CWC.
- D. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations (see Attachment A of this Order for full details on Public Participation).
- E. Consideration of Public Comment.** The Regional Water Board, in a public hearing, heard and considered all comments pertaining to the discharge.
- F. Anti-degradation Policy.** 40 CFR 131.12 requires that state water quality standards include an anti-degradation policy consistent with the federal policy. To comply with this federal requirement, the State Water Board established California's anti-degradation policy in State Water Board Resolution No. 68-16, titled "Policy with Respect to Maintaining High Quality Waters of the State." Resolution No. 68-16 incorporates the federal anti-degradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires discharges to waters of the State be regulated to achieve the "highest water quality consistent with maximum benefit to the people of the State." It also establishes the intent that where waters of the State are of higher quality than that required by state policies, including Water Quality Control Plans, such higher quality "shall be maintained to the maximum extent possible" unless it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in plans and policies (e.g., violation of any water quality objective). The discharge is also required to meet waste discharge requirements that result in the best practicable treatment or control necessary to assure that pollution or nuisance will not occur, and that the highest water quality consistent with maximum benefit to the people will be maintained.

The source water for the City of Westmorland and the entire Imperial Valley is the Colorado River. Average annual precipitation in the Imperial Valley is insignificant (~ 2 inches/year). Therefore, the Trifolium Drain No. 6 is an effluent dominated surface water that exclusively carries the discharge from the Discharger's WWTP and agricultural returns flows in the form of tilewater, tailwater and occasionally operational spills of irrigation water from adjacent farmlands. Tailwater is irrigation water that does not percolate into the soil, and exits the lower end of the field into the drain. Tailwater tends to erode fields and thus acquire silt and sediments as it crosses and exits a field. Tilewater is water that has percolated through the soil, but is not absorbed by crops. Tilewater flushes salts from the soil. This highly saline water accumulates in tile lines beneath the fields, wherein it is transported to drains by gravity flow or a sump system. Consequently, "background" water quality in the drain is difficult to establish for the purpose of conducting a typical antidegradation analysis. In other words, it is very likely that the Trifolium Drain No. 6 has historically contained "background" water from farmland that contains pollutants at concentrations that violate certain Basin Plan water quality objectives for those pollutants—in particular pesticides, silt/sediment², and selenium as discussed in Finding No. H of R7-2007-0034. They also contain nutrients (e.g., phosphorous) at concentrations that contribute to the nutrient impairment of the Salton Sea, but the

² Silt/sediment can be measured in terms of TSS.

agricultural return flows are essentially free of BOD and fecal coliform bacteria and have pH well within the receiving water quality objective of 6.0 to 9.0 pH Units.

The discharge from the WWTP contains conventional pollutants (BOD, TSS, fecal coliform bacteria and pH) that are controlled through best practicable control technology currently available (BPT) and best available technology economically achievable (BCT) to prevent exceedance of the receiving water quality objectives for those pollutants and prevent adverse impacts on the REC I and REC II beneficial uses of the Drain. The discharge also contains TDS, but at a concentration significantly below the 4000 mg/L TDS WQO for the receiving water. Except for selenium, the discharge from the WWTP does not contain any of the 303(d) List impairing pollutants for the receiving water at detectable levels. Therefore, except for selenium, the discharge is not likely to contribute to exceedances of the WQOs for 303(d) pollutants. Selenium has been found in the WWTP effluent at a Maximum Effluent Concentration (MEC) of 3.2 ug/L, which is below the receiving water quality objective of 5 ug/L. Although the effluent discharge exhibits reasonable potential to contribute to violation of the WQO for selenium as the maximum detected upstream receiving water concentration (B) for Trifolium Drain No. 6 exceeds the WQO for selenium, therefore a WQBEL for selenium was derived from water quality criteria established in the CTR. Nevertheless, the BOD, TSS, bacteria, and selenium in the discharge are likely to lower water quality in the receiving water (i.e., cause degradation). For conventional pollutants, including BOD, TSS and bacteria, this degradation is restricted to pollutants associated with domestic wastewater, is localized and will not result in water quality less than that prescribed in the Basin Plan. For toxic pollutants, including selenium, this degradation will be not significant once controlled and will not result in water quality less than prescribed in the Basin Plan.

The discharge from the WWTP as permitted herein reflects best practicable treatment and control (BPTC) for the subject wastewater. The control is intended to assure that the discharge does not create a condition of pollution or nuisance and that the highest "background" water quality as defined above will be maintained. The WWTP incorporates:

- a. technology for secondary treated domestic wastewater;
- b. sludge handling facilities;
- c. an operation and maintenance manual;
- d. staffing to assure proper operation and maintenance; and
- e. a standby emergency power generator of sufficient size to operate the necessary treatment units during periods of loss of commercial power.

The discharge is necessary to accommodate economic development in the area and essential public services to the City of Westmorland, which are a benefit to the State. Based on the foregoing, the discharge as permitted herein is consistent with Resolution No. 68-16.

IT IS HEREBY ORDERED, that Board Order R7-2007-0034 is amended in the manner specified below upon the effective date of this Special Board Order, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Special Board Order as well

as with those portions of Board Order R7-2007-0034 that were not amended by this Special Board Order:

- Page 12, IV.A.1.a, Final Effluent Limitations - Discharge Point 001. Replace Table 6 Final Effluent Limitations with the following table (New items are bold and underlined and deleted items are shown in bold and strikeout) and delete footnote No. 2:

Table 6. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	0.50	---	---	---	---
Chlorine, Total Residual	mg/L	0.01	---	---	---	0.02
	lbs/day ¹	0.04	---	---	---	0.08
pH	pH units	---	---	---	6.0	9.0
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	30	45	---	---	---
	lbs/day ¹	130	190	---	---	---
Copper, Total Recoverable²	µg/L	2.9	---	5.8	---	---
	lbs/day¹	0.012	---	0.024	---	---
Total Suspended Solids (TSS)	mg/L	30	45	---	---	---
	lbs/day ¹	130	190	---	---	---
Selenium, Total Recoverable	µg/L	4.1	---	8.2	---	---
	lbs/day ¹	0.017	---	0.034	---	---

¹ The mass-based effluent limitations are based on a design capacity of 0.50 MGD

² ~~The effluent limitations for Copper are applicable on May 18, 2010 provided the Discharger submits an Infeasibility Report for copper to the Regional Water Board by October 19, 2007~~

- Page 12, IV. A.2.a., Interim Effluent Limitations. Delete Section 2 a., Table 7 Interim Effluent Limitations and footnotes No. 1 and 2:

Table 7. Interim Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable ⁴	µg/L	7.9	7.9	---	---
	lbs/day ²	0.033	0.033	---	---

¹ In accordance with Special Provision VI.C.2.b of this Order, the Discharger shall submit a Copper Infeasibility Report by October 19, 2007 for the Interim Effluent Limitations described in Section IV.A.2 for copper to remain effective. If the Regional Water Board has not received the Copper Infeasibility Report by October 19, 2007, the final effluent limitations for copper specified in Section IV.A.1.a become effective on October 19, 2007.

² The mass-based effluent limitation is based on a design capacity of 0.50 MGD.

3. Page 17, VI. A.2. e. Replace this paragraph with the following:

- e. The Discharger shall immediately notify the Regional Water Board by phone at (760) 346-7491, the local health officer or directors of environmental health with jurisdiction over affected water bodies and the Office of Emergency Services by phone at (800) 852-7550 to report any noncompliance that may endanger human health or the environment as soon as: (1) the Discharger has knowledge of the discharge; (2) notification is possible; and (3) notification can be provided without substantially impeding cleanup or other emergency measures.

Although States and Regional Water Boards do not have duties as first responders, to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses, the following notification requirements are to be implemented:

- i. For any discharges of sewage that results in a discharge to a drainage channel or surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the Regional Water Board.
- ii. As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the Regional Water Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.
- iii. During non-business hours, the Discharger shall leave a voice message on the Regional Water Board's voice recorder. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the facility or collection system to the Regional Water Board in accordance with the above time limits.

4. Page 19, VI.C.2.a. Copper Infeasibility Report. Delete paragraph and replace VI.C.2.a:

- a. **Copper Infeasibility Report.** Not Applicable

5. Page 25, VI.C.7. Compliance Schedules. Replace Table 8. Compliance Schedule with the following table (New items are bold and underlined and deleted items are shown in bold and strikethrough).

Table 8. Compliance Schedule

Activity	Description	Due Date
Copper Infeasibility Report	The Discharger shall submit an Infeasibility Report that requests a compliance schedule to comply with new effluent limitations for copper pursuant to the implementation of the SIP and California Toxics Rule (CTR). The Discharger shall document that efforts are being made to quantify pollutant levels; document source control and pollutant minimization efforts; propose a schedule for additional source control measures; and demonstrate that the proposed schedule is as short as possible.	Within 30 days of the effective date of this Order
Spill Response Plan	The Discharger shall review its current Spill Response Plan (SRP) developed under previous Order No. R7-2002-0004 and revise if needed.	Within 60 days of the effective date of this Order
Priority Pollutant Monitoring	Submittal of laboratory analytical results for at least one round of upstream receiving water and effluent sampling, for monitoring locations RSW-001 and EFF-001, respectively, for priority pollutants. Analytical methods and reporting levels shall comply with requirements of the SIP.	Within 90 days of the effective date of this Order
TRE Work plan	Description of steps the Discharger will take in the event toxicity is detected. The work plan should describe investigation and evaluation techniques used to identify sources of toxicity; method for maximizing in-house efficiency; and identify the party who will conduct the TIE.	Within 90 days of the effective date of this Order
Copper Compliance Plan	The Discharger shall submit Compliance Plan that identifies the measures that will be taken to achieve compliance with the permit limitations specified in Effluent Limitations, IV.A.1.a. of this Order.	Within 1 year of the effective date of the Order
TDS Study	Submit a report indicating whether a 400 mg/L increase in salinity above the source water is practical.	Prior to filing date for re-application

6. Page E-4, IV.A.1. Table E-3 Effluent Monitoring Requirements. Replace Table E-3 with the following table (New items are bold and underlined and deleted items are shown in bold and strikethrough):

Table E-3. Effluent Monitoring EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Flow Meter Reading	Continuous	See Footnote 1
Chlorine, Total Residual	mg/L	<u>Grab</u>	<u>Grab</u> ²	See Footnote 3
	lbs/day			
Enterococci	MPN ⁴ / 100 ml	Grab	5x/Month ⁵	See Footnote 3
Escherichia Coli (E. Coli)	MPN/ 100 ml	Grab	5x/Month ⁵	See Footnote 3
Fecal Coliform	MPN/ 100 ml	Grab	5x/Month ⁵	See Footnote 3
Dissolved Oxygen	mg/L	Grab	1x/Week	See Footnote 3
pH	pH Units	Grab	1x/Week	See Footnote 3
Temperature	°F	Grab	1x/Week	See Footnote 3
BOD 5-Day 20° C	mg/L	24-Hour Composite ⁶	1x/Week	See Footnote 3
	lbs/day			

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Suspended Solids (TSS)	mg/L	24-Hour Composite ⁶	1x/Week	See Footnote 3
	lbs/day			
Copper, Total Recoverable	µg/L	24-Hour Composite ⁶	1x/Month	See Footnote 3
	lbs/day			
Selenium, Total Recoverable	µg/L	24-Hour Composite ⁶	1x/Month	See Footnote 3
	lbs/day			
Total Dissolved Solids	mg/L	24-Hour Composite ⁶	1x/Month	See Footnote 3
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1x/Quarter	See Footnote 3
Hardness (as CaCO ₃)	mg/L	24-Hour Composite ⁶	1x/Quarter	See Footnote 3
Nitrates as Nitrogen (as N)	mg/L	Grab	1x/Quarter	See Footnote 3
Nitrites as Nitrogen (as N)	mg/L	Grab	1x/Quarter	See Footnote 3
Nitrogen, Total (as N)	mg/L	Grab	1x/Quarter	See Footnote 3
Ortho-Phosphate (as P)	mg/L	Grab	1x/Quarter	See Footnote 3
Phosphate, Total (as P)	mg/L	Grab	1x/Quarter	See Footnote 3
Sulfates	mg/L	Grab	1x/Quarter	See Footnote 3
Oil and Grease	mg/L	Grab	1x/Year	See Footnote 3
Priority Pollutants ^{7,8}	µg/L	24-Hour Composite ⁶	1x/Year	See Footnote 3

¹ Report Total Daily Flow.

² ~~Until such time when continuous monitoring for total residual chlorine is commenced,~~ Compliance with effluent limitations for total residual chlorine will be determined using grab samples collected throughout the operators' work period. Samples shall be collected within the first and last hours of the operators' work period, and at least every 4 hours in between. The Discharger shall provide all monitoring data for total residual chlorine and report the maximum daily concentration with each monthly SMR.

³ Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136. For priority pollutants, the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, included as Attachment I. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

⁴ MPN = Most Probable number.

⁵ Five samples equally spaced over a 30-day period with a minimum of one sample per week.

⁶ Samples shall be flow-proportional composite samples.

⁷ Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.I of the Limitations and Discharge Requirements of this Order, and included as Attachment G. For priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

⁸ Volatile organic samples and samples with holding times of less than 24 hours shall be grab samples; the remainder shall be 24-hour composite samples.

7. Fact Sheet, Page F-17, IV. C. 2., Table F-8 Applicable Beneficial Uses and Water Quality Criteria and Objectives. Replace Table F-8 with the following table (New items are underlined and deleted items are shown in ~~strikeout~~):

Table F-8. Applicable Beneficial Uses and Water Quality Criteria and Objectives

CTR No.	Parameter	Selected Criteria	CTR/NTR Water Quality Criteria				
			Freshwater		Saltwater		Human Health for Consumption of:
			Acute	Chronic	Acute	Chronic	Organisms Only
			µg/L	µg/L	µg/L	µg/L	µg/L
2	Arsenic	36	340	150	69	36	--
3	Beryllium	No Criteria	--	--	--	--	--
5a	Chromium (III)	644	5405	644	--	--	--
6	Copper	30.5 3.73	51.68	30.50	5.78	3.73	--
7	Lead	8.52	476.82	18.58	220.82	8.52	--
9	Nickel	8.28	1,515.92	168.54	74.75	8.28	4,600
10	Selenium	5	--	5	290.58	71.14	--
12	Thallium	6.3	--	--	--	--	6.3
13	Zinc	85.62	387.83	387.83	95.14	85.62	--

8. Fact Sheet, Page F-18, IV. C. 3. Replace last paragraph prior to Table F-9 with the following:

The RPA was performed on available priority pollutant monitoring data and monthly monitoring data collected by the Discharger from September 2007 through October 2009. Based on the RPA, total recoverable copper did not demonstrate reasonable potential to cause or contribute to an excursion above a water quality standard. Data used in the RPA are summarized in Table F-9.

9. Fact Sheet, Page F-18, IV. C. 3. Table F-9. Summary of Reasonable Potential Analysis. Replace Table F-9 with the following table (New items are bold and underlined and deleted items are shown in bold and strikethrough):

Table F-9. Summary of Reasonable Potential Analysis

CTR No.	Parameter	Applicable Water Quality Criteria (C)	Max Effluent Concentration (MEC)	Maximum Detected Receiving Water Concentration (B)	RPA Result - Limit Required?	Reason
		µg/L	µg/L	µg/L		
2	Arsenic	36	3.5	5	No	MEC and B < C
3	Beryllium	No Criteria	< 0.4 (ND)	0.6	No	No Criteria
5a	Chromium (III)	644	< 1.1 (ND)	3.1	No	MEC and B < C
6	Copper	30.5 3.73	7.9	12	No <u>Yes</u>	MEC <u>and</u> B < C
7	Lead	8.52	0.9	3.6	No	MEC and B < C
9	Nickel	8.28	2.3	3.9	No	MEC and B < C
10	Selenium	5	3.2	7.7	Yes	B > C, and detected in effluent
12	Thallium	6.3	0.3 (DNQ)	1.4	No	MEC < C & B = ND
13	Zinc	85.62	8	9	No	MEC and B < C

ND = Not detected at or above detection limit for reporting
 DNQ = Detected, but not quantified
 “—” = Priority pollutant monitoring data not available

10. Fact Sheet, Page F-18, IV. C. 4. b. WQBELs Calculation Example. Replace this entire section with the following:

4. WQBEL Calculations

- a. Final WQBELs are based on monitoring results and following the calculation process outlined in section 1.4 of the SIP. A table providing the calculation for all applicable WQBELs for this Order is provided in Attachment I of this Order.
- b. WQBELs Calculation Example

Using selenium as an example, the following demonstrates how WQBELs based on aquatic life criterion were established for Order No. R7-2011-0017. The process for developing these limits is in accordance with section 1.4 of the SIP. Attachment I summarizes the development and calculation of all WQBELs for this Order using the process described below.

Step 1: For each constituent requiring an effluent limit, identify the applicable water quality criteria or objective. For each criterion determine the effluent concentration allowance (ECA) using the following steady state equation:

$$ECA = C + D(C-B) \quad \text{when } C > B, \text{ and}$$

$$ECA = C \quad \text{when } C \leq B,$$

Where

- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value of 400 mg/L (as CaCO₃) was used for development of hardness-dependant criteria, and a pH of 7.5 was used for pH-dependant criteria.
- D = The dilution credit, and
- B = The ambient background concentration

For this Order, dilution was not allowed due to the nature of the receiving water and quantity of the effluent; therefore:

$$ECA = C$$

For selenium, the applicable water quality criteria are:

$ECA_{acute} =$ Not Applicable
 $ECA_{chronic} =$ 5.0 µg/L
 $ECA_{human\ health} =$ Not Available

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for

the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in section 1.4, Step 3 of the SIP and will not be repeated here.

$$LTA_{acute} = ECA_{acute} \times Multiplier_{acute}$$

$$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic}$$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6.

For selenium, the following data was used to develop the acute and chronic LTA using Table 1 of the SIP:

<u>No. of Samples</u>	<u>CV</u>	<u>Multiplier_{acute}</u>	<u>Multiplier_{chronic}</u>
4	0.6	0.32	0.53

$$LTA_{acute} = \text{Not Applicable}$$

$$LTA_{chronic} = 5.0 \mu\text{g/L} \times 0.53 = 2.65 \mu\text{g/L}$$

Step 3: Select the most limiting (lowest) of the LTA.

LTA = most limiting of LTA_{acute} or LTA_{chronic}
 For selenium, the most limiting LTA was the LTA_{acute}
 LTA = 2.65 μg/L

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitations (MDEL). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (CV) of the data set, the number of samples (for AMEL) and whether it is monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in section 1.4, Step 5 of the SIP and will not be repeated here.

$$AMEL_{aquatic\ life} = LTA \times AMEL_{multiplier}$$

$$MDEL_{aquatic\ life} = LTA \times MDEL_{multiplier}$$

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For selenium, the following data was used to develop the AMEL and MDEL for aquatic life using Table 2 of the SIP:

<u>No. of Samples</u>	<u>CV</u>	<u>Multiplier_{MDEL}</u>	<u>Multiplier_{AMEL}</u>
4	0.6	3.11	1.55

$$AMEL_{\text{aquatic life}} = 2.65 \times 1.55 = 4.1 \text{ } \mu\text{g/L}$$

$$MDEL_{\text{aquatic life}} = 2.65 \times 3.11 = 8.2 \text{ } \mu\text{g/L}$$

Step 5: For the ECA based on human health, set the AMEL equal to the

$$AMEL_{\text{human health}} = ECA_{\text{human health}}$$

However, for selenium, there $ECA_{\text{human health}} = \text{Not Available}$. The CTR does not contain a numeric selenium criterion protective of human health; therefore, it was not possible to develop a selenium AMEL based on human health criteria.

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of the $Multiplier_{\text{MDEL}}$ to the $Multiplier_{\text{AMEL}}$. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

A selenium $MDEL_{\text{human health}}$ could not be calculated because a selenium $AMEL_{\text{human health}}$ was not available. There are no criteria protective of human health for selenium; therefore, none of the limitations for selenium are based on human health criteria.

Step 7: Select the lower of the AMEL and MDEL based on aquatic life and human health as the water-quality based effluent limit for the Order.

<u>AMEL_{aquatic life}</u>	<u>MDEL_{aquatic life}</u>	<u>AMEL_{human health}</u>	<u>MDEL_{human health}</u>
4.1 $\mu\text{g/L}$	8.2 $\mu\text{g/L}$	Not Applicable	Not Applicable

For selenium, there are no human health criteria; therefore, the AMEL and MDEL based on aquatic life criteria are considered for WQBELs. The lowest (most restrictive) effluent limits, those based on aquatic life criteria, were incorporated into this Order.

- Fact Sheet, Page F-22, Table F-10. Summary of WQBELs. Replace table F-10 with the following table (New items are bold and underlined and deleted items are shown in bold and strikeout font):

Table F-10. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	µg/L	2.9	---	5.8	---	---
	lbs/day ¹	0.012	---	0.024	---	---
Selenium, Total Recoverable	µg/L	4.1	---	8.2	---	---
	lbs/day ¹	0.017	---	0.034	---	---
Chlorine, Total Residual	mg/L	0.01	---	---	---	0.02
	lbs/day ¹	0.04	---	---	---	0.08
Enterococci	MPN/100mls	33 ³	--	100	--	--
Escherichia Coli (E. Coli)	MPN/100mls	126 ²	---	400	---	---
Fecal Coliform	MPN/100mls	200 ²	---	400 ³	---	---

12. Fact Sheet, Page F-24, Table F-11 Final Effluent Limitations. Replace Table F-11 with the following table (New items are underlined and deleted items are shown in strikeout font):

Table F-11. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Daily Effluent Flow	MGD	0.5	---	---	---	---	
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	30	45	---	---	---	40 CFR 133
	lbs/day	130	190	---	---	---	
Total Suspended Solids (TSS)	mg/L	30	45	---	---	---	40 CFR 133
	lbs/day	130	190	---	---	---	
pH	s.u.	---	---	---	6.0	9.0	40 CFR 133
Copper, Total Recoverable ¹	<u>µg/L</u>	<u>2.9</u>	---	<u>5.8</u>	---	---	CTR, SIP
	<u>lbs/day</u>	<u>0.012</u>	---	<u>0.024</u>	---	---	
Selenium, Total Recoverable	<u>µg/L</u>	<u>4.1</u>	---	<u>8.2</u>	---	---	CTR, SIP
	<u>lbs/day</u>	<u>0.017</u>	---	<u>0.034</u>	---	---	
Chlorine, Total Residual	mg/L	0.01	---	---	---	0.02	Basin Plan
	lbs/day	0.04	---	---	---	0.08	

¹ The effluent limitations for Copper are applicable on May 18, 2010 provided the Discharger submits an Infeasibility Report for copper to the Regional Water Board by October 19, 2007.

13. Fact Sheet, Page F-26, IV. E. Interim Effluent Limitations. Delete the entire section, and replace with "Not applicable".
14. Fact Sheet, Page F-27, IV. E. Table F-12 Interim Effluent Limitations. Delete Table F-12.
15. Attachment I, Page I-1, Summary Water Quality-Based Effluent Limit Calculations. Replace the table with the revised Attachment I (New items are underlined and deleted items are shown in strikeout font).

I, Robert E. Perdue, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on March 17, 2011.


 ROBERT PERDUE, Executive Officer

ATTACHMENT I – SUMMARY OF WQBELS CALCULATIONS

The WQBELS developed for this Order are summarized below and were calculated as described in the methodology summarized in Attachment F, Fact Sheet and are contained in section IV.A.1.a of this Order.

Table I-1 Summary of WQBELS Calculations

CTR #	Parameters	Human Health Calculations			Aquatic Life Calculations											Effluent Limitations	
		Organism Only			Saltwater / Freshwater											AMEL	MDEL
		AMEL HH = ECA = C HH only	MDEL/ AMEL multiplier	MDEL HH	ECA acute = C acute	ECA acute multiplier	LTA acute	ECA chronic = C chronic	ECA chronic multiplier	LTA chroni c	Lowest LTA	AMEL multiplier 95	AMEL aquati c life	MDEL multiplier 99	MDEL aquatic life		
µg/L		µg/L	µg/L		µg/L	µg/L		µg/L	µg/L					µg/L	µg/L		
6	Copper	n/a	2.01	n/a	5.78	0.32	1.86	3.73	0.53	1.97	1.86	1.55	2.88	3.11	5.78	2.9	5.8
10	Selenium	n/a	2.01	n/a	20	0.32	6.42	5	0.53	2.64	2.64	1.55	4.09	3.11	8.21	4.1	8.2

Notes:

C = Water Quality Criteria
 HH = Human health
 AMEL = Average monthly effluent limitation
 MDEL = Maximum daily effluent limitation
 ECA = Effluent concentration allowance
 LTA = Long-term average concentration

ATTACHMENT A – PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) is considering the amendment of Waste Discharge Requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for City of Westmorland's Wastewater Treatment Plant. As a step in the WDRs adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDRs adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was published in the following newspaper: Imperial Valley Press. In addition, copies of the proposed permit were sent to interested agencies and persons.

B. Written Comments

The Regional Water Board staff's determinations are tentative. Interested persons are invited to submit written comments concerning this tentative Special Board Order. Comments should be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order.

Comments made in reference to the Biological Assessment and USEPA's approval letter should be directed to:

Matthew Mitchell
USEPA
75 Hawthorne Street (WTR-5)
San Francisco, CA 94105

Comments made in reference to the Tentative Special Board Order should be directed to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

To be fully responded to by staff and considered by the Regional Water Board and USEPA, written comments should be received at the Regional Water Board and USEPA offices by 5:00 p.m. on March 11, 2011.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative Special Board Order during its regular Board meeting on the following date and time and at the following location:

Date: March 17, 2011
Time: 10:00 a.m.
Location: Town of Yucca Valley
Community Center – Yucca Room
57090 Twentynine Palms Highway
Yucca Valley, CA 92284

Interested persons are invited to attend. At the public hearing, the Regional Water Board will take testimony pertinent to the discharge and tentative Special Board Order. For accuracy of the record, however, a written copy of the proposed oral testimony to be given should be provided prior to or at the hearing.

Please be aware that dates and venues of the Regional Water Board's public meeting and hearing may change. The latest information concerning any scheduling changes can be found at the Regional Water Board's website: <http://www.waterboards.ca.gov/coloradoriver/>.

If you are disabled and require special accommodations to participate in this public meeting and hearing, please contact Hilda Vasquez at (760) 776-8950 no later than ten (10) days before the scheduled event.

D. Waste Discharge Requirements Petitions

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and the California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

Information related to the discharge facility and this proposed amendment, including any comments received on the proposed amendment, are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (760) 346-7491.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding this tentative Special Board Order should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this draft Special Board Order should be directed to John Carmona, Senior Water Resources Control Engineer, at (760) 340-4521.