CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

SPECIAL BOARD ORDER R7-2010-0009

AMENDING WASTE DISCHARGE REQUIREMENTS ORDER R7-2009-0006

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

PERMIT NO. CA7000001 FOR THE

STATE OF CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION

CENTINELA STATE PRISON WASTEWATER TREATMENT PLANT

El Centro – Imperial County

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

A. Background.

- 1. On March 19, 2009, the Regional Water Board adopted Board Order R7-2009-0006, NPDES Permit No. CA7000001, prescribing Waste Discharge Requirements for the State of California Department of Corrections and Rehabilitation hereinafter referred to as Discharger for the discharge of 0.96 million gallons per day (MGD) of secondary treated wastewater from Centinela Sate Prison Wastewater Treatment Plant (WWTP), hereinafter Facility, to the Dixie Drain 1-C, a tributary of the New River, a water of the United States. Board Order R7-2009-0006 will expire on March 18, 2014.
- 2. Pursuant to California Water Code (CWC) Sections 13263(e) and 13381, and Title 40 Code of Federal Regulations (40 CFR) 122.41(f), 122.62, and 124.5, Board Order R7-2009-0006 may be modified, or rescinded and reissued, for cause.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. (40 CFR 122.41(f).) 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, adoption of new regulations by the State Water Board or the Regional Water Board, including revisions to the Basin Plan, or to correct technical mistakes or mistaken interpretations of law made in determining permit conditions. ((40 CFR 122.62(a), 122.62(a)(15).)
- 3. Section VII.C. of the previous Board Order R7-2009-0006 prescribes compliance determination requirements for total chlorine residual.
- 4. The discharger has requested that these compliance determination requirements include the option of measuring dechlorinating agent to indicate compliance with the total chlorine residual effluent limitation.
- 5. The use of a continuous monitoring analyzer for dechlorination agent residual in the effluent is an appropriate method of process control and discharge monitoring. A positive residual dechlorination agent in the effluent indicates that chlorine is not present in the discharge. Other NPDES permits in the Colorado River Basin Region

provide the discharger with the option of either measuring total chlorine residual or dechlorination agent to determine compliance with the total chlorine residual effluent limitation.

- 6. This Special Board Order revises Board Order R7-2009-0006 to amend the compliance determination requirements for total chlorine residual and related provisions and monitoring requirements.
- 7. Pursuant to 40 CFR 124.10(b) and CWC Section 13167.5, public notice of this draft revised Special Board Order must be provided to allow at least thirty (30) days for the public to comment on it, and public notice of a public hearing must also be given at least 30 days before the hearing. The two notices may be combined. These public participation requirements provide stakeholders potentially affected by this action with an opportunity to object to or comment on the proposed revised Special Board Order.
- 8. Pursuant to 40 CFR 124.10(b) and CWC Section 13167.5, on March, 25, 2010, the Regional Water Board published Public Notice No. 7-10-04 for this proposed revised Special Board Order.
- **B. Facility Description.** The Discharger owns and operates a wastewater treatment plant designed to service an inmate population of 5,147. The system is currently servicing a population of approximately 5,000 with a wastewater treatment plant capacity of 0.73 MGD. Raw sewage flows by gravity through the collection system to the influent wet well where it is then raised by two screw pumps to the treatment facility. The wastewater then passes through a mechanical bar screen and a comminutor before entering the aerated lagoon system. The treatment system consists of four (4) aerated ponds which are operated in series. The wastewater is disinfected with gaseous chlorine and then dechlorinated with gaseous sulfur dioxide prior to discharge. Wastewater is discharged from Discharge Point 001 to the Dixie Drain 1-C via an outfall pipe, a tributary to the New River, a water of the United States and a tributary of the Salton Sea.

The Discharger proposes to increase the treatment plant capacity from 0.73 MGD to 0.96 MGD during this permit term. The plant upgrade is designed to accommodate an increased inmate population of 5,730. The Discharger proposes to construct a new headworks to be comprised of a mechanical coarse screening with a manual bar rack in the bypass channel. A new influent pumping station will be designed with two new submersible pumps, with Variable Frequency Drives. Influent flow will be metered and passed through mechanical fine screening prior to treatment through the four-cell aerated lagoon system. The upgrade will also replace the gas chlorination and dechlorination facilities with disinfection via liquid chemical feed systems. A schematic of the proposed upgrades was included with the permit renewal submitted on May 23, 2007.

- 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.

IT IS HEREBY ORDERED, that Board Order R7-2009-0006 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 R7-2009-0006 that were not amended by this Special Board Order:

- 1. Page 29, VII. COMPLIANCE DETERMINATION. Remove and replace the following section.
- C. Total Chlorine Residual Effluent Limitation (Continuous Effluent Limitation).

Compliance determinations for total chlorine residual shall be based on either Method 1 or 2 as follows:

Method 1 (Continuous Chlorine Monitoring)

Compliance determinations for total chlorine residual shall be based on 99% compliance. To determine 99% compliance with the effluent limitation for total chlorine residual, the following conditions shall be satisfied:

- 1. The total time during which the total chlorine residual values are above 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month:
- 2. Individual excursions shall not exceed from 0.1 mg/L for 30 minutes or longer; and
- 3. Individual excursions shall not exceed 5.0 mg/L at any time.

In the event of failure of the continuous chlorine monitoring device, grab samples for total chlorine residual shall be collected immediately and 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

instantaneous maximum and average monthly concentration and mass loadings with each monthly SMR for this period. Compliance with total chlorine residual for grab samples during this period will be determined as stated on pages 29-30, VII. D. and H. of Board Order R7-2009-0006.

Method 2 (Continuous Dechlorination Agent Monitoring)

Compliance determinations for total chlorine residual shall be based on maintaining a positive dechlorination agent residual.

1. A positive dechlorination agent residual shall be maintained at all times.

In the event of failure of the continuous dechlorinating monitoring device or monitoring value below minimum reporting level, grab samples for total chlorine residual or dechlorinating agent shall be collected immediately and 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 or dechlorinating agent and report the instantaneous maximum and average monthly concentration and mass loadings or volume with each monthly SMR for this period. Compliance with total chlorine residual for grab samples during this period will be determined as stated on pages 29-30, VII. D. and H. of Board Order R7-2009-0006.

2. Page E-7, IV.A.1. Table E-3. Effluent Monitoring. Replace Table E-3 with the following (new items are underlined and deleted items are shown in strikeout):

Table E-3 Effluent Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and ML
Flow	MGD	Recorder / Totalizer	Continuous	
Chlorine, Total Residual	mg/L lbs/day	Recorder	Continuous ¹	See Section 1.E of the MRP
Escherichia coli (E. coli)	MPN/100 ml	Grab	5/Month ^{2,5}	и
Enterococci	MPN/100 ml	Grab	5/Month ^{2,5}	и
Fecal coliform	MPN/100 ml	Grab	5/Month ²	и
рН	Standard Units	Grab	1/Week	и
Temperature	°F	Grab	1/Week	"
Oxygen, Dissolved (DO)	mg/L	Grab	1/Week	и
Ammonia (as N)	mg/L	Grab	1/Week	"
TSS	mg/L lbs/day	24-Hr. Composite	1/Week	u
BOD ₅	mg/L lbs/day	24-Hr. Composite	1/Week	"
Total Dissolved Solids (TDS)	mg/L lbs/day	24-Hr. Composite	1/Month	u
Selenium, Total Recoverable	μg/L lbs/day	24-Hr. Composite	1/Month	See Section 1.F of the MRP
Hardness, Total (as CACO ₃)	mg/L	24-Hr. Composite	1/Month	See Section 1.E of the MRP
Nitrite (as N)	mg/L	Grab	1/Month	33
Nitrate (as N)	mg/L	Grab	1/Month	33
Total Nitrogen	mg/L	Grab	1/Month	ı,
Orthophosphate (as P)	mg/L	Grab	1/Quarter	и
Phosphorous, Total	mg/L	Grab	1/Quarter	u
Sulfate	mg/L	Grab	1/Quarter	"
Oil and Grease, Total Recoverable	mg/L	Grab	1/Year	и
Priority Pollutants ³ (Inorganic Portion)	μg/L	24-Hr Composite	1/Year	See Section 1.F of the MRP
Priority Pollutants ⁴ (Remaining Portion)	μg/L	Grab	1/Year	и

Continuous sampling or a minimum of four grab samples performed daily and the average and maximum daily results indicated on the report. Compliance with effluent limitations for total residual chlorine shall be in accordance with Section VII. C. Total Chlorine Residual Effluent Limitation (Continuous Effluent Limitation).

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

Inorganic Priority Pollutants as listed in Attachment H and as defined by the California Toxics Rule (CTR).
 Volatile, Semi-Volatile, Pesticide and PCB Priority Pollutants as listed in Attachment H and as defined by the California Toxics Rule (CTR).

⁵ Monitoring for compliance with the E. Coli and Enterococci effluent limit shall begin on July 1, 2009.

3. Page E-17, IX. E. Table E-11 Operations and Maintenance Report. Replace Table E-10 with the following (new items are underlined and deleted items are shown in strikeout):

Table E-11 Operations and Maintenance Report

Activity	Reporting Frequency
The amount of chemical used (i.e., chlorine, <u>dechlorinating agent</u> etc.,) shall be monitored daily and reported monthly. Measured in pounds per day.	1x/Month
To inspect and document any operation/maintenance problems by inspecting each unit process. In addition, calibration of flow meters and mechanical equipment shall be performed in a timely manner and documented.	1x/Year
The Discharger shall include documentation of all logbooks (operation and maintenance), chain of custody sheets and sampling activities as stated in Special Provision VI.C.4.b (Limitations and Discharge Requirements) and Standard Provisions sections IV and V (Attachment D).	1x/Year

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 May 20, 2010.

ROBERT PERDUE, Executive Officer

ARTICLE I. 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 Centinela State Prison's Wastewater Treatment Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

Section 1.01 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.

Section 1.02 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 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, written comments should be received at the Regional Water Board office no later than 5:00 p.m. on April 29, 2010.

Section 1.03 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: May 20, 2010 Time: 10:00 a.m.

Location: City Council Chambers

City of Palm Desert

73-510 Fred Waring Drive Palm Desert, CA 92260

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.

Section 1.04 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

Section 1.05 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.

Section 1.06 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.

Section 1.07 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.