CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

BOARD ORDER R7-2013-0038

WASTE DISCHARGE REQUIREMENTS
FOR
CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION,
OWNER/OPERATOR
CALIPATRIA STATE PRISON WASTEWATER HOLDING BASIN
Calipatria – Imperial County

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

- 1. The California Department of Corrections and Rehabilitation (hereafter referred to as "Discharger") owns and operates the Calipatria State Prison (hereafter referred to as "Prison"), a medium security prison, which is located at 7818 Blair Road, approximately 3 miles north from the City of Calipatria California, in Section 27, 34 and 35, T11S, R14E, SBB&M.
- 2. The Prison currently has a combined custody and support services staff of approximately 1,100 and houses approximately 3,500 inmates, all of which generated and average of 0.6 million gallons per day (mgd) of domestic sewage in 2012. The Discharger owns and operates an onsite sewage collection, pretreatment, and pumping system for the prison's sewage. The pretreatment facilities consist of an automated bar screen and a grinder, which remove and manage gross solids found in the sewage. The sewage then goes to the lift station, which pumps the sewage to the City of Calipatria Wastewater Treatment Plant (WWTP) for final treatment and disposal. Attachment A, incorporated herein and made part of this Order by reference, shows the location of the Prison.
- 3. The City of Calipatria WWTP is a publicly owned treatment works (POTW), which treats and disposes of sewage from the City and the Prison. The POTW has a design capacity of 1.73 mgd and discharges to the "G" drain, pursuant to Regional Water Board Order R7-2010-0018 (NPDES Permit CA0105015). The "G" drain is a water of the United States and tributary to the Alamo River, which is also a water of the United States.
- 4. The Discharger also owns and operates an onsite water treatment plant for the Prison. The water treatment facilities consist of an activated carbon filtration plant and a water reservoir with a capacity of 2.06 million gallons. The Discharger uses sodium hypochlorite to treat the water for taste and odor and a phosphorus-based corrosion inhibitor. Activated carbon effectively removes volatile organic compounds, chlorine, and fine particulate matter, among other pollutants.

Wastewater Discharge Covered by this Order

5. The Prison also includes a wastewater holding basin (hereinafter referred to as "Basin") with a purported maximum storage capacity of 3.9 million gallons at 2 feet of freeboard, which the Discharger uses for (a) temporary storage of the domestic sewage when the Discharger has to perform routine and/or emergency maintenance of its onsite collection and pretreatment facilities, (b) temporary storage of domestic sewage when the City needs to perform

maintenance work at its POTW and/or sewage collection system, and/or (c) discharge of filter backwash wastewater when the Discharger to keep its activated carbon filters operational and to prolong their life.

- The discharges described in Findings 5, above, to the Basin are currently governed by Regional Water Board Order 98-092, which is not consistent with current state policies and regulations. Further, Order 98-092 does not reflect the actual volumes and frequencies of the discharges to the Basin.
- 7. Order 98-092 does not prescribe a flow discharge limit for any of the ongoing discharges to the Basin. This is inconsistent with current Regional Water Board policies. Further, Order 98-092 does not accurately reflect the current actual capacity of the Basin. The actual capacity of the Basin is approximately 2.8 million gallons with 2 feet of freeboard.
- 8. The Discharger reports that between 2002 and 2012 it discharged intermittently from 8,500 to 350,000 gallons of domestic sewage to the Basin once per year to perform routine maintenance of its sewage collection system or when the City performed maintenance of its POTW and/or collection system.
- 9. The Discharger used to backwash the filters 2 to 3 times per year. This process generated up to 100,000 gallons annually of filter backwash wastewater. The Discharger reports that now it backwashes both filters once a year, at a rate of 600 gallons per minute, for 15 to 20 minutes. This generates up to 24,000 gallons annually of backwash filter wastewater. The Discharger is discharging this backwash wastewater to the Basin for disposal by evaporation and percolation.
- 10. When the Discharger discharges domestic wastewater to the Basin for routine maintenance, maintenance work is accomplished within 2 days, and immediately thereafter the wastewater in the Basin is pumped back into the Discharger's collection system and sent to the City of Calipatria POTW for treatment and disposal pursuant to the NPDES Permit. If the Basin also has backwash wastewater during this time, the backwash wastewater is also pumped back into the collection system and sent to the City's POTW. During the last five years, the Discharger has only discharged domestic wastewater into the Basin on three separate occasions, most recently in June 2012.
- 11. The Prison's average flow discharged to the City of Calipatria during the five-year period of 2008-2012 is summarized below:

<u>Period</u>	Monthly Average (gpd)
2008	709,590
2008-2012	606,059
2012	600,406
2013 (Jan-Mar)	496,936

12. The Discharger reports that mandates by federal judges and changes in the State's policies regarding Inmate populations have resulted in a steady reduction in the inmate population at the Prison. The inmate population has gone down from a daily average of 4,235 in 2011 to 3,466 in 2013. This reduction is scheduled to continue until the target population of 3,300 Inmates per

day is reached. Additionally, beginning with fiscal year 2009/2010, water conservation measures have been taken which have caused the Institution's water consumption to steadily reduce. Based on these findings, the Prison's monthly average discharge to the City of Calipatria can be expected to fall below 0.5 mgd at the time when the target population is reached.

13. Based on the projected monthly average flow of 0.5 mgd (500,000 gpd), the Basin's storage capacity is at least 5 days at 2 feet of freeboard.

Hydrogeologic Conditions and Beneficial Uses to be Protected

- 14. The POTW is on a site that is relatively flat at an average elevation of minus 160 feet below sea level, and is not within a FEMA designated 100-year flood plain.
- 15. Soils beneath the Basin are silty-clay and have been compacted to minimize percolation of wastewater into the upper-most encountered groundwater.
- 16. Annual precipitation for Calipatria averages approximately 2.5 inches.
- 17. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), which was adopted on November 17, 1993, and amended on November 16, 2012, designates the beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (including amendments adopted by the Regional Water Board to date).
- 18. The discharge is within the Imperial Hydrologic Unit. The Basin Plan designates the following beneficial uses for groundwater in the Imperial Hydrologic Unit:
 - a. Municipal supply (MUN)
 - b. Industrial supply (IND)
- 19. Most of the first-encountered groundwater in the Imperial Hydrologic Unit is irrigation water that passes the root zone of crops and flushes salts accumulated in the soil profile. This groundwater is typically too saline (total dissolved solids > 5,000 mg/L) to serve for municipal purposes.
- 20. There are no supply groundwater wells within one mile of the WWTFs. The water supply for the Prison is water from the Colorado River delivered to the city by the Imperial Irrigation District's canal system.
- 21. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

Other Regulatory Considerations

22. Discharges of wastewater to land, including but not limited to evaporation ponds, percolation

ponds, or subsurface leachfields, are exempt from the solid waste management requirements of Title 27, CCRs, Section 2005 et seq. (hereinafter Title 27), pursuant to Section 20090(b) of Title 27, so long as the following conditions are met: (1) the discharge is regulated by Regional Water Board waste discharge requirements (WDRs) or a waiver; (2) the discharge is in compliance with the Basin Plan water quality standards; and (3) the wastewater does not need to be managed as a hazardous waste. In this case, there are two types of discharges to the Basin: (1) discharge of domestic wastewater; and (2) discharge of filter backwash wastewater.

- 23. The discharge of domestic wastewater to the Basin is temporary (two days typically), will be regulated by Regional Water Board requirements, and will be returned to the sewage collection system and sent to the City of Calipatria POTW for treatment and disposal pursuant to Board Order R7-2010-0018 (NPDES Permit CA0105015) for proper treatment and disposal. The discharge is also in compliance with the Basin Plan's water quality standards since it satisfies the antidegradation provisions of State Water Resources Control Board (State Water Board) Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereinafter Resolution 68-16), as further explained in Finding 25, below. Finally, the discharge is a domestic strength wastewater. As such, it does not need to be managed as a hazardous waste.
- 24. The discharge of backwash wastewater is intermittent (typically once a year), will be regulated by these Regional Water Board requirements, and is lower in strength than domestic wastewater. In addition, its total volume (< 30,000 gallons/year) is relatively insignificant. The discharge is also in compliance with the Basin Plan's water quality standards since it satisfies the antidegradation provisions of State Water Resources Control Board (State Water Board) Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereinafter Resolution 68-16), as further explained in the Finding 25, below. As such, it does not need to be managed as a hazardous waste.
- 25. Resolution 68-16 requires a Regional Water Board in regulating the discharge of waste to maintain high quality waters of the state (i.e., background water quality) until 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 applicable plans and policies (e.g., violation of any water quality objective).
- 26. Some degradation of groundwater from the discharge to standby storage basin is consistent with Resolution 68-16, provided that this degradation:
 - a. Is confined to a reasonable area and will provide social and economic benefit to the people of the State:
 - b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures;
 - c. Is limited to waste constituents typically encountered in domestic wastewater; and
 - d. Does not result in the loss of any beneficial use as prescribed in the applicable basin plan, or violation of any water quality objective.
- 27. The discharges permitted herein are intermittent and to an earthen-lined Basin. Domestic wastewater from the basin is pumped back into the WWTF within one (1) or (2) days for treatment and disposal pursuant to NPDES Order R7-2010-0018. Therefore, the amount of domestic wastewater that may percolate into the water table is insignificant. Notwithstanding

this fact, to the extent that any wastewater from the basin percolates during the 1- or 2-day time period, it does have a slight potential to degrade groundwater whose quality is already poor. However, compliance with the terms of this Order will keep degradation confined to the groundwater in the immediate area beneath and around the basin. Similarly, the volume of filter backwash wastewater discharged to the Basin is relatively very low (< 30,000 gallons/year). Most of this wastewater is expected to evaporate, and whatever amount percolates is relatively insignificant. Thus, its potential to further degrade the already poor groundwater is very slight. The Discharger provides sewage services which are in themselves a benefit to the people of the State and also allow for economic prosperity of people in the area. Therefore, the permitted discharge is consistent with the anti-degradation provisions of Resolution 68-16.

28. Pursuant to California Water Code Section 13263(g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

CEQA and Public Participation

- 29. In accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.) and the implementing CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), the action to adopt revised waste discharge requirements for this existing facility is exempt from the provisions of CEQA, pursuant to CEQA Guidelines Section 15301.
- 30. The Board has notified the Discharger and all known interested agencies and persons of its intent to draft WDRs for this discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 31. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Order 98-092 be rescinded, except for enforcement purposes, and in order to meet the provisions contained in Division 7 of the California Water Code, RCRA Subtitle D, and regulations adopted thereunder, and the provisions of the Federal Clean Water Act, and regulations and guidelines adopted thereunder, the discharger shall comply with the following in the discharge of waste:

A. Discharge Prohibitions

- 1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
- 2. Discharge of waste classified as 'hazardous,' as defined in Title 23, CCR, Section 2521(a), or 'designated,' as defined in California Water Code Section 13173, is prohibited.
- 3. Surfacing or overflowing of wastewater from the Basin is prohibited.

- 4. Discharge of domestic wastewater to the Basin for temporary storage other than (a) for emergency and/or routine maintenance of the Prison's wastewater facilities; or (b) emergency and/or routine maintenance of the City of Calipatria sewage collection system or POTW is prohibited.
- 5. Discharge of wastes from the Prison's water treatment plant to the Basin other than filter backwash wastewater is prohibited.

B. Discharge Specifications

- 1. The total volume of domestic wastewater discharged to the Basin during any three-day period shall not exceed 2.0 million gallons.
- 2. The total volume of filter backwash wastewater discharged to the Basin shall not exceed 30,000 gallons per year.
- 3. Domestic wastewater in the Basin shall be pumped back into the Prison's sewage collection system and sent to the City of Calipatria POTW for proper treatment and disposal within three (3) days from the date the discharge to the Basin took place.
- 4. The Basin shall have a minimum of two (2) feet of freeboard at all times.
- 5. The discharges to the Basin shall not cause pollution or nuisance as defined in Sections 13050(I) and 13050(m) of Division 7 of the California Water Code.
- 6. Public contact with wastewater shall be precluded or controlled through fences, signs, or other acceptable alternatives.
- 7. The discharges to the basin shall not cause degradation of any water supply.
- 8. The Basin shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 9. Disposal of oil and grease, biosolids, screenings, and other solids from the Basin shall be pursuant to Title 27, and the review and approval of the Regional Water Board Executive Officer.
- 10. Objectionable odors originating at this facility shall not be perceivable beyond the limits of Prison.
- 11. The Basin shall be managed to ensure its structural integrity. In this regard an erosion control program shall be implemented to assure that small coves and irregularities are not created in the basin.
- 12. The Basin shall have sufficient capacity to accommodate the allowable volume of wastewater that can be discharged during any two-day period and design seasonal precipitation based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

C. Provisions

- 1. The Discharger shall comply with Monitoring and Reporting Program (MRP) R7-2013-0038, and future revisions thereto, as specified by the Regional Water Board Executive Officer.
- Prior to implementing a modification that results in a material change in the quality or quantity of the discharge, or a material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board, and obtain revised requirements.
- 3. Prior to a change in ownership or management of the Basin, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board.
- 4. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
- 5. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- 6. The Discharger shall comply with all of the conditions of this Board Order. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Cal. Water Code, § 13000 et seq.), and is grounds for enforcement action.
- 7. The Discharger shall report orally any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Regional Water Board Executive Officer and the Office of Emergency Services as soon as:
 - a. The Discharger has knowledge of the discharge,
 - b. Notification is possible, and
 - c. Notification will not substantially impede cleanup or other emergency measures.

During non-business hours, the Discharger shall leave a message on the Regional Water Board office voice recorder. A written report shall be provided within five (5) business days the Discharger is aware of the incident. The written report shall include a description of the noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills occurring within the facility or collection system to the Regional Water Board office in accordance with the above time limits.

- 8. The Discharger shall allow the Regional Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter the premises regulated by this Board Order, or the place where records are kept under the conditions of this Board Order;

- b. Have access to and copy, at reasonable times, records kept under the conditions of this Board Order;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
- d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
- 9. The Discharger is the responsible party for the WDRs and the Monitoring and Reporting Program (MRP) for the facility, incorporated herein and made a part of this Order by reference. The Discharger shall comply with all conditions of these WDRs. Violations may result in enforcement action, including Regional Water Board orders or court orders that require corrective action or impose civil monetary liability, or modification or revocation of these WDRs by the Regional Water Board.
- 10. The Discharger shall provide adequate notice to the Regional Water Board Executive Officer of the following:
 - a. The introduction of pollutants into any treatment facility described in the Findings of this Board Order from an indirect Discharger which would be subject to Section 301 or 306 of the Clean Water Act, if the pollutants were discharged directly.
 - Any substantial change in the volume or character of pollutants introduced into any treatment facility described in the Findings of this Board Order, by an existing or new source; and
 - c. Any planned physical alteration or addition to the facilities described in this Board Order, or change planned in the Discharger's sludge use or disposal practice, where such alterations, additions, or changes may justify the application of Board Order conditions that are different from or absent in the existing Board Order, including notification of additional disposal sites not reported during the Board Order application process, or not reported pursuant to an approved land application plan.
- 11. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the Discharger's next scheduled self-monitoring report or earlier if requested by the Regional Water Board Executive Officer, or if required by an applicable standard for sludge use and disposal.
- 12. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
- 13. This Board Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights, or infringement of federal, state, or local laws or regulations.
- 14. This Board Order may be modified, rescinded, or reissued, for cause. The filing of a request

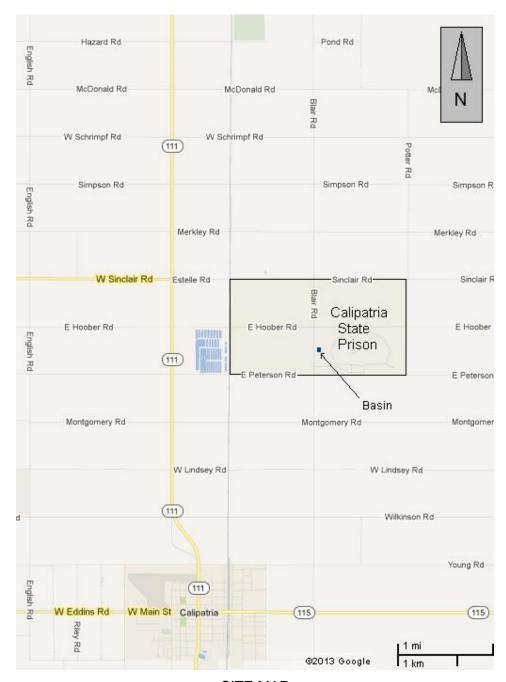
by the Discharger for a Board Order modification, rescission or reissuance, or notification of planned changes or anticipated noncompliance, does not stay any Board Order condition. Causes for modification include a change in land application plans, or sludge use or disposal practices, and adoption of new regulations by the State or Regional Water Board (including revisions to the Basin Plan), or federal government.

I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 20, 2013.

Ordered by: Original signed by
ROBERT PERDUE
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ATTACHMENT "A"



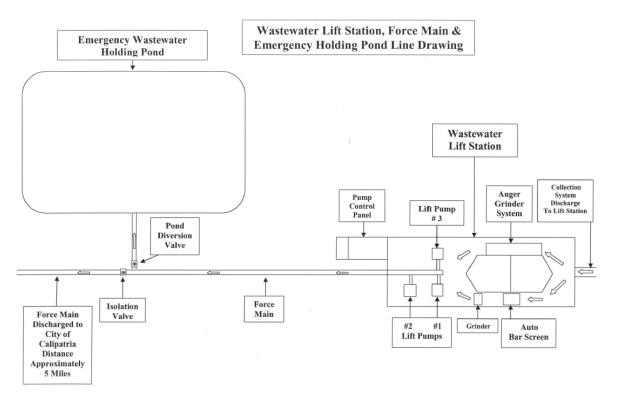
SITE MAP

CALIPATRIA DEPARTMENT OF CORRECTIONS, OWNER/OPERATOR
CALIPATRIA STATE PRISON
WASTEWATER HOLDING BASIN
Calipatria – Imperial County

Discharge Location: NW¼ of Section 35, T11S, R14E, SBB&M

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ATTACHMENT "B"



Please note this Drawing in NOT to scale.

WASTEWATER COLLECTION SYSTEM FLOW DIAGRAM

CALIPATRIA DEPARTMENT OF CORRECTIONS, OWNER/OPERATOR CALIPATRIA STATE PRISON WASTEWATER HOLDING BASIN

Calipatria – Imperial County
Discharge Location: NW¼ of Section 35, T11S, R14E, SBB&M