

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2012-0006

CEASE AND DESIST ORDER

FOR

CITY OF ISLETON
WASTEWATER TREATMENT FACILITY
SACRAMENTO COUNTY

TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

The California Regional Water Quality Control Board, Central Valley Region, (hereafter "Central Valley Water Board" or "Board") finds that:

1. Waste Discharge Requirements (WDRs) Order 90-186, adopted by the Central Valley Water Board on 22 June 1990, prescribes requirements for the City of Isleton (hereafter referred to as "Discharger" or "City") Wastewater Treatment Facility (WWTF).
2. The City has a population of approximately 840 inhabitants and is in the northeastern portion of Andrus Island, along the east bank of the Sacramento River, in Sacramento County.
3. The Discharger owns and operates the WWTF which is located on the east side of Andrus Island, adjacent to Georgiana Slough, in Section 36, T4N, R3E, MDB&M. The Discharger receives domestic and commercial wastewater from the community, and has a contractual agreement to accept wastewater from the Oxbow Marina Recreational Facility.
4. The Oxbow Marina Recreational Facility consists of a boat holding tank pump-out station, public restrooms, club house, office, and 95 mobile homes. Wastewater is pumped to the WWTF via a force main which runs along the toe of the Georgiana Slough levee. The force main enters the WWTF near the headworks, is metered and then discharged into the primary aeration pond. Operation and maintenance of the Oxbow Marina Recreational Facility collection system, lift station, and force main is the responsibility of the Oxbow Marina Recreational Facility.
5. The City's sewer collection system consists of approximately 16,550 linear feet of gravity sewer lines. The collection system conveys the wastewater to the Discharger's lift station, which pumps the wastewater to the treatment plant.
6. The City's WWTF consists of a seven-acre aeration stabilization lagoon system with effluent disposal to 24.2 acres of evaporation/percolation ponds. The primary aeration pond is equipped with four aerators. Wastewater is transferred from the aeration pond

via gravity to the two stabilization ponds which are operated in series. Effluent from the stabilization ponds is then discharged via gravity to six evaporation/percolation ponds.

Previous Enforcement

7. On 3 May 1996, the Central Valley Water Board adopted Cease and Desist Order (CDO) 96-095 for capacity problems and wastewater spills at the WWTF. The CDO required the Discharger to prepare technical reports and implement improvements to the collection system, wastewater treatment plant, lift station and force main trunk line to ensure compliance with WDRs 90-186. Full compliance with the CDO was required by 1 January 1998. However, the Discharger did not meet the schedule in the Order.
8. Because the Discharger did not comply with the CDO, the Executive Officer issued Time Schedule Order (TSO) R5-2002-0901 on 9 August 2002. The TSO required the Discharger to submit: (a) a Groundwater Characterization Workplan, (b) a Sewer Lift Station Safeguard Plan, (c) a Sludge Disposal Plan, (d) a Collection System Engineering Evaluation and Corrective Action Plan, (e) a Groundwater Well Installation Report, (f) a Construction Inspection Report, (g) a Revenue Plan, and (h) Quarterly Progress Reports. In addition, the TSO required the Discharger to comply with revised MRP 90-186.
9. In a 26 April 2007 letter, Board staff indicated that the City had almost complied with the TSO. However, to accommodate growth, the City would most likely need to expand its WWTF, and therefore a Capacity Analysis Conceptual Plan was requested.
10. On 19 October 2007, following a facility inspection and meeting with the Discharger to discuss the outstanding issues with the TSO, the Executive Officer issued a California Water Code (CWC) section 13267 Order. The Order required the Discharger to submit: (a) a detailed plan and schedule to repair the percolation pond berms, (b) a report certifying that all equipment necessary to conduct freeboard monitoring in compliance with the revised MRP had been installed, (c) a report certifying that the Oxbow Marina influent flow meter had been repaired and/or replaced and was calibrated, and (d) a Capacity Analysis Conceptual Plan for the WWTF to address expected growth over the next four years.
11. With the exception of the Capacity Analysis Conceptual Plan, the Discharger has addressed the items in the October 2007 13267 Order. The Discharger indicated that the Capacity Analysis Conceptual Plan was not submitted because of problems with the influent flow meter. Because the problems persist, this Order requires the Discharger to submit flow meter calibration reports on an annual basis.
12. In September and October 2008, approximately two million gallons of raw sewage spilled into Georgiana Slough. In April 2009, the City reported another raw sewage spill of unknown volume to Georgiana Slough. The spills resulted from a leak in the force main that leads to the WWTF.

13. On 27 January 2010, the Assistant Executive Officer issued Administrative Civil Liability Order R5-2010-0504 for the raw sewage spills, the failure to have an operational flow meter, and failure to submit the Capacity Analysis Report required by the CWC section 13267 Order. The assessed liability for these violations was \$390,000. Of the \$390,000, the Order allowed the City to complete two compliance projects to satisfy \$375,000 of the liability, and pay the remaining \$15,000. The compliance projects were as follows: (a) a Capacity Analysis Report showing whether the wastewater treatment facility has adequate treatment, storage, and disposal capacity for both current influent flows and for projected 2015, and (b) a Sewer Force Main Completion Report showing that the sewer force main between the treatment plant headworks and the evaporation ponds was replaced and is operational. The City paid the \$15,000 and, following an extension granted by the Assistant Executive Officer, the City completed the compliance projects. The Board considers this matter to be settled.

Capacity Issues

14. WDRs Order 90-186 requires that the WWTF have adequate capacity to store effluent flows during a 100-year precipitation event. The Discharger's WDRs have a dry weather flow limit of 430,000 gallons per day. The 30 December 2010 Capacity Analysis Report indicated that the City's WWTF had adequate storage and disposal capacity for the permitted flows, and for projected flows through 2015, under a 100-year annual precipitation event. However, in March 2011, the Discharger notified Central Valley Water Board staff about a lack of capacity in the ponds and concerns about spills of wastewater. The Discharger indicated that the wet winter/spring of 2011 and increased river elevations created high groundwater conditions resulting in a high amount of inflow/infiltration (I/I). The I/I resulted in a significant increase in wastewater flows to the ponds.
15. Discharge Specification B.6 of the facility's WDRs states: "*A 1.0 foot freeboard shall be maintained in all ponds at all times.*" Current WDRs issued by the Central Valley Water Board typically require two feet freeboard for pond systems, and also require that the ponds be able to hold all wastewater and influent flows generated during a 100-year annual precipitation event. The Discharger should anticipate the two foot freeboard and 100-year storage requirements in future permit updates.
16. In its 27 April 2011 Quarterly Compliance Report, the Discharger reported that during the week of 23 March 2011, the freeboard in some of the wastewater ponds was less than two feet in several areas. To prevent overtopping of the pond levees, the Discharger made emergency repairs to raise portions of the pond berms. In addition, the report stated that a septic hauler transported approximately 80,000 gallons of raw sewage to the Rio Vista WWTF.
17. Review of monthly self-monitoring reports show that the freeboard in Pond 6 was reported at less than one foot beginning the last week of March 2011 through the end of May 2011, a total of 63 days. In addition, the freeboard in Ponds 2 and 3 was reported at less than one foot over a period of four days in March. During April, the freeboard in

Pond 2 was less than one foot on four occasions, and the freeboard in Pond 4 was less than one foot on one occasion. The freeboard in Pond 5 was not measured during these months because the pond staff gauge was damaged during a storm and was unreadable. The staff gauge was repaired at the beginning of August 2011. The 2010-2011 water year was less than a 100-year annual precipitation event.

18. Field data from 2011 indicates the WWTF does not have the capacity to handle a 100 year precipitation event. On 31 May 2011, Central Valley Water Board staff requested that the Discharger submit a revised water balance to evaluate whether the WWTF can comply with Discharge Specification B.6 of the WDRs under a 100 year precipitation event. If the water balance showed that there was insufficient capacity, the Discharger was to submit a plan to either increase capacity or reduce inflow to the ponds. In addition, the Discharger was to provide a schedule for completion of the improvements.
19. On 20 July 2011, the Discharger submitted the revised water balance showing that the WWTF has inadequate storage and disposal capacity and cannot comply with Discharge Specification B.6 of the WDRs. A plan describing measures necessary to increase the storage and disposal capacity was submitted on 15 August 2011.

Proposed Capacity Improvements

20. In its 15 August 2011 plan, the Discharger proposed the following short term improvements to increase the storage and disposal capacity of the ponds:
 - a. Increase the capacity of Pond 1 by adding material to certain parts of the levee to make a uniform elevation around the top of the pond.
 - b. Increase the height of the levees of Pond 2 by three feet, and levees of Pond 3 by two feet. Construct new outlet structures on Ponds 2 and 3.
 - c. Increase the height of the percolation pond levees by 3 to 3.5 feet.
 - d. Repair valves and control structures at Ponds 2 and 3, and at the six percolation ponds.
21. Because the 15 August 2011 plan does not provide specific details regarding the proposed improvements, and does not include a water balance showing that these improvements will be sufficient to maintain two feet of freeboard for a 100 year annual precipitation event, this Order requires the Discharger to submit a Revised Capacity Improvement Plan and then to document that the improvements were completed.
22. The 15 August 2011 plan stated that long term improvements to increase the storage and disposal capacity could include land application. The land application area would provide for emergency disposal if the pond levels were near their maximum levels prior to the end of the wet season. If the Revised Plan includes land application, then this Order requires the submittal of a *Report of Waste Discharge* prior to the design and construction of a land application area.

23. The 15 August 2011 plan stated that during the winter/spring of 2011, four areas of the collection system were identified in having excessive I/I, including the sanitary sewer crossing the school playground, the sanitary sewer from a trailer park, and the sewer lines along "C and D" streets. This Order requires the Discharger to submit a *Collection System Improvement Report* showing that these areas of the collection system with excessive I/I have been repaired.

Regulatory Considerations

24. California Water Code section 13301 states:

When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action.

In the event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to that system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order."

25. California Water Code section 13267 (b) states:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

26. The Discharger's acts and failure to act have caused or permitted waste to be discharged or deposited where it has or could discharge to waters of the state and has created, and continues to threaten to create, a condition of pollution or nuisance.
27. The *Central Valley Water Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, Fourth Edition revised September 2009 (hereafter "Basin Plan") designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin. The designated beneficial uses of underlying groundwater, as stated in the Basin Plan, are domestic and municipal supply, agricultural supply, and industrial supply

28. Surface water drainage from the facility is to the Sacramento San Joaquin Delta. The beneficial uses of the Sacramento San Joaquin Delta, as stated in the Basin Plan, are municipal and domestic supply, irrigation, stock watering, industrial process and service supply, contact recreation, other non-contact recreation, warm and cold freshwater habitat, warm and cold migration, warm water spawning, and navigation.
29. The technical reports required by this Order are necessary to assure compliance with WDR Order 90-186 and to assure protection of public health and safety. The Discharger owns and operates the facility that discharges the waste subject to this Order.
30. Issuance of this Order to enforce CWC Division 7, Chapter 5.5 is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code § 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15321(a) (2).
31. On 2 February 2012, in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Central Valley Water Board conducted a public hearing at which evidence was received to consider this Cease and Desist Order under Water Code section 13301 to establish a time schedule to achieve compliance with waste discharge requirements.

IT IS HEREBY ORDERED that pursuant to Sections 13301 and 13267 of the California Water Code, the City of Isleton, its agents successors, and assigns, shall implement the following measures necessary to ensure long-term compliance with WDRs 90-186, or any superseding permits or orders issued by the Central Valley Water Board.

This Cease and Desist Order rescinds and replaces Cease and Desist Order 96-095 except for the purpose of enforcing violations that have occurred between 3 May 1996 and 3 February 2012.

Any person signing a document submitted to comply with this Order shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

1. By **1 April of each year**, the Discharger shall submit an *Annual Flow Meter Calibration Report* certifying that all flow meters used for determining compliance with the WDRs and this Order have been independently calibrated by a third party.
2. By **1 April 2012**, the Discharger shall submit and implement as necessary an *Interim Spill Contingency Plan* containing interim measures necessary for preventing unauthorized discharges of wastewater to surface waters and surface water drainage courses. The

Plan shall remain in effect until all improvements to the WWTF are completed. The plan at a minimum shall consider options including, but not limited to: operational adjustments to draw down the wastewater pond levels, sandbagging the pond berms, enhanced evaporation, water conservation measures, trucking effluent to another properly permitted facility, or any other short-term measures to prevent discharges to surface waters. The plan must identify the selected alternatives, and for each alternative, specify all necessary materials, staffing, and equipment required for implementation.

3. By **1 May 2012**, the Discharger shall submit a *Revised Capacity Improvement Plan* that provides specific details to the proposed improvements described in Finding No. 20 and 22 of this Order, or any other necessary improvements to:
 - a. Increase in the overall storage and disposal capacity to accommodate design average dry weather flows, design long-term I/I flows, and direct precipitation during the 100-year, 365-day precipitation event; and,
 - b. Provide sufficient wastewater storage and disposal capacity for current connections and projected growth within the City of Isleton.

The *Revised Capacity Improvement Plan* shall include a water balance for both the current and projected flows through 2020. The water balance shall evaluate the storage ponds' ability to provide sufficient capacity to maintain two feet of freeboard on a month-by-month basis. The water balance shall include monthly evaporation, precipitation, and percolation rates, and shall identify contributions from major sources to monthly discharge volumes such as groundwater/subsurface inflows, storm water run-on, and inflow and infiltration from the collection system. Rainfall shall be based on the 100-year, 365-day precipitation event.

The *Revised Capacity Improvement Plan* shall include a proposed timeline for completion of the proposed improvements on the City's property which shall not extend beyond **1 October 2013**. If land discharge is a component, then the plan shall also identify the number of acres and location of the land to be obtained. The timeline for obtaining the land and installing a disposal area shall not extend beyond **1 October 2014**.

4. By **1 June 2012**, the Discharger shall submit a *Revenue Plan* that describes the costs associated with implementation of all tasks in this Order. The plan must show whether the Discharger has necessary funds to implement all tasks. Should the Revenue Plan show that there are inadequate funds, the Discharger must include an implementation schedule that shows how the Discharger will obtain the funds.
5. By **1 October 2012**, the Discharger shall make the repairs on the areas of the collection system described in Finding 23 and submit a *Collection System Improvement Report* describing the repairs.
6. If the *Revised Capacity Improvement Plan* includes a land application area, then by **1 October 2012**, the Discharger shall submit a *Report of Waste Discharge* to apply for revised Waste Discharge Requirements. The RWD shall include a completed Form 200 (Application for Report of Waste Discharge) and a technical report that addresses all

items listed in Attachment A of this Order, "Additional Information Requirements for a Report of Waste Discharge."

7. By **1 October 2013**, the Discharger shall complete the proposed improvements on the City's land and submit a *Capacity Improvements Completion Report* that describes the work was completed per the approved *Revised Capacity Improvement Plan*.
8. If the *Revised Capacity Improvement Plan* includes a land application area, then by **1 October 2014**, the Discharger shall submit a *Land Application Completion Report* documenting that the land application area is under the control of the City and is ready to receive wastewater.

In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain the professional's signature and/or stamp of the seal.

The Assistant Executive Officer may extend the deadlines contained in this Order if the Discharger demonstrates that circumstances beyond the Discharger's control have created delays, provided that the Discharger continues to undertake all appropriate measures to meet the deadlines. The Discharger shall make any deadline extension request in writing at least 30 days prior to the deadline. The Discharger must obtain written approval from the Assistant Executive Officer for any departure from the time schedule shown above. Failure to obtain written approval for any departures may result in enforcement action.

If, in the opinion of the Assistant Executive Officer, the Discharger fails to comply with the provisions of this Order, the Assistant Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions.

Failure to comply with this Order or with the WDRs may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the California Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and 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 that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final 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.

I, PAMELA C. CREEDON, 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, Central Valley Region, on 2 February 2012.

Original signed by

PAMELA C. CREEDON, Executive Officer

Attachment A Additional Information Requirements for a Report of Waste Discharge

gjc/ser/wsw: 29 Nov-11

ATTACHMENT A
TO
CEASE AND DESIST ORDER NO. R5-2012-0006
ADDITIONAL INFORMATION REQUIREMENTS
FOR REPORT OF WASTE DISCHARGE

Provide a technical report prepared by a California registered Civil Engineer that presents the following information:

A. General Information

1. Is this a new or existing facility?
2. If this is an existing facility, is the discharge currently regulated under Waste Discharge Requirements (WDRs) issued by the Central Valley Water Board?
 - a. If so, provide the WDRs order number.
 - b. If not, provide the name of the local agency that issued the current permit.
3. Provide the following for the facility that generates the waste and the site where the waste is discharged:
 - a. Street address (provide street name and distance from nearest cross street if there is no street number)
 - b. Township, Range, and Section
 - c. Assessor's parcel numbers

B. Proposed Facility and Discharge (for new facilities only)

1. A description of the sources and types of wastewater flowing into the system from:
 - a. residential (population served and number of connections or equivalent dwelling units)
 - b. commercial (number of connections by type)
 - c. industrial (number of connections by type)
2. Design influent flow rates (average daily, dry weather daily, peak hour, peak day, and peak month), and the design treatment capacity of the system with respect to each of these. Discuss the methods used to estimate these design parameters.
3. A description of all proposed wastewater conveyance, treatment, and disposal systems. Use site plans and conceptual drawings as appropriate to illustrate locations and typical construction.
4. The following maps, plans, and illustrations:
 - a. A facility location map showing local topography, the facility location and/or boundaries, streets, and surface waters;
 - b. A process flow diagram for the entire treatment and disposal system;
 - c. A scaled treatment plant site plan;
 - d. A scaled map showing the limits of all proposed wastewater treatment and effluent storage and disposal areas.

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ADDITIONAL INFORMATION REQUIREMENTS
FOR REPORT OF WASTE DISCHARGE

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5. Chemical characterization of the drinking water supply, including total dissolved solids; electrical conductivity, standard minerals (boron, bromide, calcium, chloride, fluoride, magnesium, phosphate, potassium, sodium, sulfate, alkalinity series, and hardness), and metals (aluminum, arsenic, cadmium, copper, lead, iron, manganese, nickel, and zinc). Include supporting analytical data.
6. Expected treatment system influent quality and effluent quality at the point of discharge to the disposal system (BOD, total suspended solids, settleable matter, total dissolved solids, sodium, chloride, nitrogenous compounds, fixed dissolved solids, electrical conductivity, pH, and total coliform organisms). Discuss the methods used to estimate these parameters.
7. A description of the proposed sewer system, materials and lift station details (type, location, capacity, backup systems, and alarm features). Provide a scaled plan of all proposed conveyance systems and discuss potential inflow and infiltration (I/I) rates in light of local groundwater conditions and sewer system materials/design.
8. A description of proposed alarm systems, emergency wastewater storage facilities, and other means of preventing system bypass or failure during reasonably foreseeable overload conditions (e.g., peak flows, power failure, sewer blockage). Consider both potential problems at the plant and within the sewer system.
9. For debris, grit and screenings, sludge, and biosolids the following:
 - a. A description of expected solids generation rates and handling/storage procedures; and
 - b. A description of proposed solids disposal practices.
10. For each wastewater treatment, storage, or disposal pond and containment structure, provide the following information:
 - a. Identification (name) and function of the pond;
 - b. Surface area, depth, and volumetric capacity at two feet of freeboard;
 - c. Height (relative to surrounding grade), crest width, interior slope, and exterior slope of each berm or levee;
 - d. Materials used to construct each berm or levee;
 - e. Description of engineered liner, if any;
 - f. Estimated steady state percolation rate for each unlined pond;
 - g. Depth to shallow groundwater below the base;
 - h. Overfilling/overflow prevention features; and
 - i. Operation and maintenance procedures.
11. For proposed subsurface disposal systems, provide the design basis and documentation demonstrating that the system has been designed in accordance with applicable regulations, codes, ordinances, and guidelines. If the design deviates from these requirements, provide justification in terms of system longevity, maintainability, and groundwater protection.

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12. If treated domestic effluent will be recycled for landscape irrigation or other beneficial reuse, provide a complete description the proposed discharge including:
- a. Effluent disinfection system;
 - b. Reclaimed water conveyance systems;
 - c. Water reclamation areas;
 - d. Cropping plans;
 - e. Planned reclamation operations (planting and harvest, irrigation method, irrigation frequency, irrigation amounts);
 - f. Expected nutrient loadings (pounds per acre per year total nitrogen);
 - g. Expected salt loadings (pounds per acre per year total dissolved solids);
 - h. Tailwater management methods;
 - i. Storm water runoff management methods; and
 - j. Plans that illustrate items 12.b, 12.c, 12.h, and 12.j.

Note: A Title 22 Engineering Report is required only if the wastewater will be recycled to grow crops. To the extent this information is already presented in the Title 22 Engineering Report, the RWD may incorporate that report by reference. The Title 22 Engineering Report must also be submitted to the California Department of Public Health for review and approval.

13. Projected monthly water balances demonstrating adequate containment capacity for both the average rainfall year and the 100-year return period total annual precipitation, including consideration of at least the following.
- a. Initial baseline influent and I/I flows as well as baseline influent and I/I flows at full build out with an aging sewer system.
 - b. A minimum of two feet of freeboard in each pond at all times (unless a registered civil engineer determines that a lower freeboard level will not cause overtopping or berm failure);
 - c. Historical local evapotranspiration, pan evaporation, and lake evaporation data (monthly average values);
 - d. Local precipitation data with the 100-year return period annual total distributed monthly in accordance with mean monthly precipitation patterns;
 - e. Proposed reclamation area/disposal system loading rates distributed monthly in accordance with expected seasonal variations based on crop evapotranspiration rates; and
 - f. Projected long-term percolation rates (including consideration of percolation from unlined ponds and the effects of solids plugging on all ponds).
14. Proposed flow limits and basis for the limit. Consider dry weather flows vs. peak flows and seasonal variations. Include the technical basis for the proposed flow limit (e.g., design treatment capacity; hydraulic capacity of a main lift station, headworks, or other system element; and demonstrated effluent disposal capacity).
15. A narrative description of plant operation and maintenance procedures to be employed, including those associated with effluent storage and disposal.

C. Existing Facility and Discharge

1. A description of the sources and types of wastewater flowing into the system, design flow rates (average daily, dry weather daily, peak hour, peak day, and peak month), and the design capacity of the system with respect to each of these.
2. A summary table of monthly influent flow totals and monthly precipitation totals for the last five years. Explain any data gaps, outliers, and/or unusual circumstances that might affect measured flow rates. If I/I contributes significantly to influent flow, provide an I/I analysis to project I/I as a function of precipitation and/or groundwater level as appropriate.
3. A detailed description of the facilities that will generate wastewater, and all existing and proposed wastewater conveyance, treatment, and disposal systems. Use site plans and conceptual drawings as appropriate to illustrate locations and typical construction.
4. A process flow diagram, scaled treatment plant site plan, and a scaled map showing the limits of all existing and proposed wastewater treatment and effluent storage and disposal areas.
5. Chemical characterization of the drinking water supply, including total dissolved solids; standard minerals (boron, bromide, calcium, chloride, fluoride, magnesium, phosphate, potassium, sodium, sulfate, alkalinity series, and hardness), and metals (aluminum, arsenic, cadmium, copper, lead, iron, manganese, nickel, and zinc). Include supporting analytical data. For public water supply systems, provide the last three years of Consumer Confidence Reports.
6. Influent quality and effluent quality at the point of discharge to the disposal system (BOD, total suspended solids, settleable matter, total dissolved solids, sodium, chloride, nitrogenous compounds, electrical conductivity, pH, and total coliform organisms). Include a summary table of all data obtained in the last five years.
7. A description of the existing sewer system, materials and lift station details (type, location, capacity, backup systems, and alarm features). Provide a scaled plan of all existing and proposed conveyance systems.
8. A description of existing emergency wastewater storage facilities or other means of preventing system bypass or failure during reasonably foreseeable overload conditions (e.g., peak flows, power failure, sewer blockage). Consider both potential problems at the plant and within the sewer system.
9. For debris, grit and screenings, sludge, and biosolids the following:
 - a. A description of expected solids generation rates and handling/storage procedures; and
 - b. A description of proposed solids disposal practices.
10. For each pond and other waste containment structure, provide the following information:
 - a. Identification (name) and function of the pond;
 - b. Surface area, depth, and volumetric capacity at two feet of freeboard;

- c. Height (relative to surrounding grade), crest width, interior slope, and exterior slope of each berm or levee;
 - d. Materials used to construct each berm or levee;
 - e. Description of engineered liner, if any;
 - f. Estimated steady state percolation rate for each unlined pond;
 - g. Depth to shallow groundwater below the planned base of the ponds;
 - h. Overfilling/overflow prevention features; and
 - i. Operation and maintenance procedures.
11. For subsurface disposal systems, provide documentation demonstrating that the system has been designed in accordance with applicable regulations, codes, ordinances, and Guidelines. If the design deviates from these requirements, provide complete justification in terms of system longevity, maintainability, and groundwater protection.
12. If treated effluent is currently recycled for landscape irrigation or other beneficial reuse, provide a complete description the discharge including:
- a. Effluent disinfection system;
 - b. Reclaimed water conveyance systems;
 - c. Water reclamation areas;
 - d. Cropping plans;
 - e. Typical reclamation operations (planting and harvest, irrigation method, irrigation frequency, irrigation amounts);
 - f. Nutrient loadings for each of the last five years (pounds per acre per year total nitrogen);
 - g. Salt loadings for each of the last five years (pounds per acre per year fixed or total dissolved solids);
 - h. Tailwater management methods; and
 - i. Storm water runoff management methods.
- Is reclamation performed pursuant to an approved Title 22 Engineering Report? If not, a Title 22 Engineering Report is required if the wastewater is recycled to grow crops. If required, the Title 22 Engineering Report must also be submitted to the California Department of Public Health separately for review and approval.
13. Projected monthly water balances demonstrating adequate containment capacity for both the average rainfall year and the 100-year return period total annual precipitation, including consideration of at least the following.
- a. Current baseline influent and I/I flows as well as baseline influent and I/I flows at full build out with an aging sewer system.
 - b. A minimum of two feet of freeboard in each pond at all times (unless a registered civil engineer determines that a lower freeboard level will not cause overtopping or berm failure);

- c. Historical local pan evaporation data (monthly average values);
 - d. Local precipitation data with the 100-year return period annual total distributed monthly in accordance with mean monthly precipitation patterns;
 - e. Proposed reclamation area/disposal system loading rates distributed monthly in accordance with expected seasonal variations based on crop evapotranspiration rates; and
 - f. Projected long-term percolation rates (including consideration of percolation from unlined ponds and the effects of solids plugging on all ponds).
14. Proposed flow limits and basis for the limit. Consider dry weather flows vs. peak flows and seasonal variations. Include the technical basis for the proposed flow limit (e.g., design treatment capacity; hydraulic capacity of a main lift station, headworks, or other system element; and demonstrated effluent disposal capacity).
15. A narrative description of plant operation and maintenance procedures to be employed, including those associated with effluent storage and disposal.

D. Planned Changes in the Facility and Discharge (for existing facilities only)

1. Describe in detail any and all planned changes in the facility or discharge, addressing each of items listed in C.1 through C.15 above.

E. Local and Site-Specific Conditions (Illustrate with maps as appropriate)

1. Neighboring land uses.
2. Typical crops grown (if agricultural area).
3. Primary irrigation water source (if agricultural area).
4. Terrain and site drainage features.
5. Nearest surface water drainage course.
6. FEMA floodplain designation(s).
7. Average Annual precipitation (inches)
8. 100-year 365-day precipitation (inches)
9. Reference evapotranspiration (monthly and annual total)
10. Pan evaporation (monthly and annual total)
11. A description of the types and depths of soil underlying ponds and/or effluent disposal areas (include a copy of the geotechnical report and/or NRCS soil report).

F. Groundwater Conditions

1. Description of the site hydrogeology including stratigraphy, groundwater elevation and gradient, transmissivity, and influence of all recharge and pumping sources (i.e., a site conceptual model).
2. What is the groundwater elevation and gradient at the existing facility?
3. What is background shallow groundwater quality for typical domestic waste constituents?
4. What are subsurface conditions at the proposed new disposal site(s)?¹

¹ This must be based on at least one groundwater monitoring event. If permanent monitoring wells will be installed to obtain this data, a workplan must first be approved.

5. What is the character of groundwater quality at the proposed new disposal site(s) with respect to total dissolved solids, major ions, nitrogenous compounds, electrical conductivity, pH, and total coliform organisms?

G. Antidegradation Analysis

The State Water Resources Control Board Resolution No. 68-16 (the Antidegradation Policy) requires that the Central Valley Water Board maintain the high quality of waters of the state 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 exceedances of one or more water quality objectives. If a discharge will degrade groundwater quality but not cause exceedance of one or more water quality objectives, the discharger must demonstrate that all feasible best practicable treatment and control (BPTC) measures have been implemented or will be implemented to justify allowing the current level of degradation to continue or increase (as applicable), or allowing any degradation in the case of a new discharge.

1. Provide a technical report by a Professional Geologist or Certified Hydrogeologist that provides an assessment of the following:
 - Description of the geology and hydrogeology of the area;
 - Groundwater quality at the site and any wastewater disposal site(s);
 - For existing facilities, whether the discharge has caused degradation. If so, for which constituents, to what degree, and whether the discharge has caused exceedance of a water quality objective.
 - The potential for the discharge to degrade groundwater quality (for new discharges) or further degrade groundwater quality (for existing discharges, whether or not the discharge is expanding).

The assessment must be made based on site-specific data and shall include the following items:

- a. Characterization of all waste constituents to be discharged that have the potential to degrade groundwater quality;
- b. Characterization of shallow groundwater quality (i.e., the uppermost layer of the uppermost aquifer) for typical waste constituents² upgradient and downgradient of the site and comparison to established water quality objectives³ (include tabulated historical groundwater monitoring data and groundwater elevation contour maps for the last eight monitoring events);
- c. A description of the geology and hydrogeologic conditions of the site including groundwater elevation and gradient, transmissivity, influence of all known recharge and pumping sources, and subsurface conditions at the facility, including any proposed new disposal site or storage ponds;

² Include analyses for the following: total coliform organisms, total dissolved solids, fixed dissolved solids, electrical conductivity, nitrate nitrogen, total nitrogen, and an anion/cation scan.

³ Compare to drinking water standards and Basin Plan numeric water quality objectives.

- d. Groundwater degradation , if any, that has resulted from existing operations, other nearby discharges, or natural occurrences;
- e. The extent the discharge has impacted or will impact the quality of the shallow groundwater, if any;
- f. The expected degree of degradation, if any.
- g. If degradation has occurred or is expected to occur describe the following:
 - i. Any facility design features and operational practices that reduce the potential for groundwater degradation (best practicable treatment and control). Such features might include salinity source control, other pollutant source control, advanced treatment, disinfection, concrete treatment structures, and pond lining systems;
 - ii. Additional best practicable treatment and control (BPTC) measures that could be implemented and a preliminary capital and annual operations and maintenance cost estimate for each;
 - iii. How current treatment and control measures are justified as BPTC (i.e., what justifies not implementing additional BPTC measures);
 - iv. How no water quality objectives will be exceeded; and
 - v. Why allowing existing and/or anticipated degradation is in the best interest of the people of the state.

H. Water Recycling Regulatory Compliance (Title 22, CCR)

I. Compliance With Other Applicable Laws and Regulations

- 1. **California Environmental Quality Act (CEQA).** Is the project that will create or significantly change the wastewater treatment and disposal facility subject to CEQA review? If not, provide a written determination from the local planning agency. If so, provide a copy of the final certified CEQA document.
- 2. **Industrial Storm Water Permit.** The State Water Resources Control Board adopted Order No. 97-03-DWQ (NPDES General Permit No. CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers. Some wastewater treatment facilities are required to obtain coverage under this permit. Provide evidence that the facility is exempt or has applied for coverage under the Industrial Storm Water Permit.
- 3. **General WDRs for Sanitary Sewer Systems.** State Water Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems General Order No. 2006-0003-DWQ. The permit requires all public agencies that own or operate sanitary sewer systems greater than one mile in length to obtain coverage. Provide evidence that the facility is exempt or has applied for coverage under the General WDRs for Sanitary Sewer Systems.

ATTACHMENT A TO CEASE AND DESIST ORDER NO. R5-2012-0006
ADDITIONAL INFORMATION REQUIREMENTS
FOR REPORT OF WASTE DISCHARGE

Page 9 of 9

4. **Department of Water Resources Well Standards.** California Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981). These standards, and any more stringent standards adopted by the State or county pursuant to CWC Section 13801, apply to all monitoring wells. Discuss whether existing monitoring wells at the facility were constructed in accordance with the Department of Water Resources Well Standards.



California Regional Water Quality Control Board

Central Valley Region

Karl E. Longley, ScD, P.E., Chair



Matthew Rodriguez
Secretary for
Environmental Protection

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Edmund G. Brown Jr.
Governor

6 February 2012

David Larsen
City of Isleton
101 Second Street
P.O. Box 716
Isleton, CA 95641

CERTIFIED MAIL
7010 3090 0001 2114

NOTICE OF ADOPTION OF CEASE AND DESIST ORDER NO. R5-2012-0006 FOR CITY OF ISLETON WASTEWATER TREATMENT FACILITY SACRAMENTO COUNTY

Cease and Desist Order (CDO) No. R5-2012-0006 for the City of Isleton Wastewater Treatment Facility was adopted by the California Regional Water Quality Control Board, Central Valley Region, at its 2 February 2012 meeting.

The CDO contains a compliance schedule with specific dates for submitting reports and completing certain tasks associated with upgrading the wastewater system. Please review your CDO carefully to ensure that you understand all aspects of the Order. The reports required by the CDO include the following:

Required Report	Due Date
Annual Flow Meter Calibration Report	1 April of each year
Interim Spill Contingency Plan	1 April 2012
Revised Capacity Improvement Plan	1 May 2012
Revenue Plan	1 June 2012
Collection System Improvement Report	1 October 2012
Report of Waste Discharge ¹	1 October 2012
Capacity Improvements Completion Report	1 October 2013
Land Application Completion Report ¹	1 October 2014

¹ Required if the Revised Capacity Improvement Report includes a land application area.

In order to conserve paper and reduce mailing costs, a paper copy of the order has been sent only to the Discharger. Interested parties are advised that the full text of this order is available on the Water Board's web site at http://www.waterboards.ca.gov/centralvalley/adopted_orders.

Anyone without access to the Internet who needs a paper copy of the order can obtain one by calling Water Board staff.

If you have any questions regarding the CDO, please call Guy Childs at (916) 464-4648.

Original signed by

WENDY WYELS, Supervisor
Compliance and Enforcement Section

Enclosures - Adopted Cease and Desist Order No. R5-2012-0006

cc w/o enc: Kenneth Landau, Central Valley Water Board, Rancho Cordova
Ellen Howard, Office of Enforcement, SWRCB, Sacramento
Barry Marcus, Sacramento Co. Environmental Management Dept., Mather
Bill Jennings, California Sportfishing Protection Alliance, Stockton
Dan Hinrichs, DJH Engineering, Placerville

gjc: 6 Feb-12