

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

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## ORDER R7-2020-0014

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### Order Information

**Dischargers:** Imperial Irrigation District, U.S. Bureau of Reclamation  
**Facility:** Imperial Dam Domestic Wastewater Oxidation Ponds  
**Address:** Rt. 1, 2400 Imperial Road, Winterhaven, CA 92283  
**County:** Imperial County  
**WDID:** 7B130128001  
**GeoTracker ID:** WDR100031668  
**Prior Order(s):** R7-2008-0046

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I, PAULA RASMUSSEN, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 24, 2020.

*Original signed by*  
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PAULA RASMUSSEN  
Executive Officer

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

**ORDER R7-2020-0014**

WASTE DISCHARGE REQUIREMENTS  
FOR  
IMPERIAL IRRIGATION DISTRICT, OPERATOR  
U.S. BUREAU OF RECLAMATION, OWNER  
IMPERIAL DAM DOMESTIC WASTEWATER OXIDATION PONDS  
WINTERHAVEN-IMPERIAL COUNTY

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) hereby makes the following Findings:

1. The Imperial Irrigation District (IID) operates and U.S. Bureau of Reclamation (USBOR) owns the onsite domestic wastewater oxidation ponds that serve IID's River Division Office and associated housing at Imperial Dam (Facility). The IID and USBOR are jointly referred to as "Discharger."<sup>1</sup> The Facility is assigned California Integrated Water Quality System (CIWQS) number CW-232275, Waste Discharger Identification (WDID) number 7B130128001, and GeoTracker Global Identification number WDR100031668.
2. The Facility is located at Rt. 1, 2400 Imperial Road, Winterhaven, CA 92283, in the SE 1/4 of Section 17, T15S, R23E, SBB&M, and Assessor's Parcel Number 050-180-007-000, 32.8667°N Latitude, 114.4778°W Longitude. The Facility's location is shown in **Attachment A**-Vicinity Map and **Attachment B**-Site Map, made part of this order by reference.
3. The Facility was most recently regulated by Waste Discharge Requirements (WDRs) in Order R7-2008-0046, which was adopted by the Regional Water Board on June 25, 2008.
4. On August 1, 2019, the Discharger submitted an application and Report of Waste Discharge (ROWD) to the Regional Water Board, applying for updated WDRs for the Facility.
5. This Order updates the WDRs to comply with current laws and regulations applicable to the discharge. Accordingly, this Order supersedes WDRs Order R7-2008-0046 upon the effective date of this Order, except for enforcement purposes.

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<sup>1</sup> Primary responsibility is assigned to IID and secondary responsibility to USBOR. If IID fails to meet the requirements of this Order, then USBOR will become the primary responsible party for Order compliance.

### Wastewater Treatment Facility and Discharge

6. Imperial Dam, located about 20 miles north of Yuma, Arizona, is a diversion structure for the Colorado River, All-American Canal, and Gila Canal water deliveries, serving southeastern California, Arizona, and Mexico. The operations of IID's River Division Office at Imperial Dam, as well as system wide water distribution, all fall under the direction of the USBOR.
7. IID's housing and office operations at the River Division Office, which consists of 17 residences and one conference room, generate an average of 2,700 gallons per day (gpd) of domestic wastewater.
8. The Facility consists of a septic tank and three oxidation ponds. The tank has a capacity of 7,100 gallons, and the ponds are used for disposal of waste by evaporation/percolation. The Facility discharges a maximum of 7,500 gpd at capacity. The wastewater flows by gravity into the 7,100-gallon septic tank, where it receives primary treatment, and it continues to flow from the tank by gravity into three oxidation ponds for disposal by evaporation/percolation.
9. The Discharger's Self-Monitoring reports (SMRs) for the discharge period from January 2016 through December 2018 reported the following average characteristics of the discharged wastewater:

**Table 1 – Effluent Characterization**

<b>Constituent</b>	<b>Units</b>	<b>Average</b>	<b>Maximum</b>	<b>Minimum</b>
Total Dissolved Solids (TDS)	mg/L	958	2056	784
pH	s.u.	7.34	8.33	6.16
Dissolved Oxygen (DO)	mg/L	7.01	10.3	4.12
Biochemical Oxygen Demand (BOD)	mg/L	7.16	31.3	3.30
Total Suspended Solids (TSS)	mg/L	39.5	111	5.20

10. The Discharger has contracted the service of a private contractor to pump out the septic tank and remove solids periodically. Therefore, no solids are removed from the oxidation ponds.

### Hydrogeologic Conditions

11. The Facility overlies Yuma Valley Groundwater Basin. The basin is bounded by nonwater-bearing rocks of the Cargo Muchacho Mountains on the west and by the Chocolate and Picacho Mountains on the north and northeast. Low-lying alluvial drainage divides form boundaries on the northwest and southwest, and the Colorado River bounds the basin on the south and east. Elevation in the mountains ranges from about 1,300 feet in the Cargo Muchacho Mountains and about 2,000 feet in the Picacho Mountains.
12. Water levels have remained largely unchanged in those areas within the Colorado River floodplain south and east of the All-American Canal. Depth to groundwater remains shallow and ranges from about 6 to 18 feet below ground surface, according to the recent reports from the Bureau of Reclamation. (USBR, Sept. 2018.) There are localized areas where the depth to groundwater is closer to the ground surface. In the eastern portion of the basin along the Colorado River, high groundwater levels and fluctuations in the elevation of the water table are in direct response to various stages of the Colorado River. (Cal Dep't Water Resources, 2004.)
13. Natural recharge to the basin is mainly from subsurface inflow from the Ogilby Valley Basin on the west, and infiltration of surface runoff from the bordering mountains. Additional recharge comes from seepage loss from unlined canals and from the percolation of irrigation return flows. There are no known barriers to the movement of groundwater except localized clay layers, which may obstruct the downward percolation of water. Groundwater generally moves in a southern direction towards the Colorado River.
14. In the *Groundwater Monitoring Well Installation Report*, received on December 5, 2008, the report stated that subsurface soils encountered near the surface at the Facility consist of sandy silts with loose to medium dense clayey silts and silty sands to a depth of 15 feet. Groundwater was encountered at about 9 to 10.7 feet during the time of exploration. Measurement of groundwater elevation after placement of the monitoring wells was not conducted. Based on calculations, since 10 feet was drilled beyond groundwater depth and well depths ranged from 13.6 to 15.3 feet, groundwater depth was about 4 to 5 feet deep after placement of the monitoring wells.
15. The closest surface waters to the Facility are the All American Canal and the Colorado River, shown in **Attachment C-Project Boundaries**.
16. Annual precipitation in the Winterhaven area is about 3 inches, and the average annual evapotranspiration rate is about 72 inches. The average maximum temperature is about 104 degrees F in the summer.

17. The Discharger owns and operates a network of five groundwater monitoring wells, two up-gradient, two down-gradient, and one between Pond 1 and the existing lined drainage ditch, shown in **Attachment D-Groundwater Monitoring Wells Locations**.
18. The source water wells, Well 1 and Well 2, are rotated on a monthly basis, and show the following average constituent concentrations in milligrams per Liter for 2018:

**Table 2 – Source Water Wells 2018 Characterization**

<b>Constituent</b>	<b>Well #1</b>	<b>Well #2</b>
TDS	750	843
Nitrate	Not Detected	0.29

**Basin Plan, Beneficial Uses, and Regulatory Considerations**

19. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), adopted on November 17, 1993 and most recently amended on January 8, 2019, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Pursuant to Water Code section 13263, subdivision (a), WDRs must implement the Basin Plan and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.
20. The Facility and discharge is located within the Yuma Hydrologic Unit, and the Basin Plan designates the following beneficial uses for groundwater:
  - a. Municipal Supply (MUN), and
  - b. Agricultural Supply (AGR).
21. This Order establishes WDRs pursuant to division 7, chapter 4, article 4 of the Water Code for discharges that are not subject to regulation under Clean Water Act section 402 (33 U.S.C. § 1342).
22. These WDRs implement numeric and narrative water quality objectives for groundwater and surface waters established by the Basin Plan and other applicable state and federal laws and policies. The numeric objectives for groundwater designated for municipal and domestic supply are the maximum contaminant levels (MCLs) specified in California Code of Regulations, title 22,

section 64421 et seq. Groundwater for use as domestic or municipal water supply (MUN) must not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.

23. 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 MCLs designed to protect human health and ensure that water is safe for domestic use.
24. The discharge authorized by this Order, except for discharges of residual sludge and solid waste, are exempt from the solid waste requirements of California Code of Regulations, title 27, section 20005 et seq. This exemption is based on section 20090, subdivisions (a) and (b) of title 27 of the California Code of Regulations, which provides that discharges of domestic sewage or wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields are not subject to the requirements of title 27 as long as:
  - a. The applicable Regional Water Board has issued WDRs, reclamation requirements, or waived such issuance;
  - b. The discharge is in compliance with the applicable water quality control plan; and
  - c. The wastewater does not need to be managed according to chapter 11, division 4.5, title 22 of the CCR as a “hazardous waste.”
25. The discharge of waste authorized by these WDRs satisfies the conditions to be exempted from the requirements of title 27 of the California Code of Regulations, because (1) the discharge is regulated by these WDRs; (2) these WDRs will ensure the discharge complies with the Basin Plan; and (3) the discharge will not be a “hazardous waste.”
26. Consistent with Water Code section 13241, the Regional Water Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:
  - a. Past, present, and probable future beneficial uses of water.
  - b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
  - c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
  - d. Economic considerations.



- e. The need for developing housing within the region(s).
  - f. The need to develop and use recycled water.
27. Water Code section 13267 authorizes the Regional Water Board to require technical and monitoring reports. The monitoring and reporting requirements in Monitoring and Reporting Program (MRP) R7-2020-0014 are necessary to demonstrate compliance with this Order. The State Water Resources Control Board's (State Water Board) electronic database, GeoTracker Information Systems, facilitates the submittal and review of facility correspondence, discharger requests, and monitoring and reporting data. The burden, including costs, of the MRP bears a reasonable relationship to the need for the information and the benefits to be obtained from that information.
28. Pursuant to Water Code section 13263, subdivision (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.

#### **Antidegradation Analysis**

29. State Water Board Resolution 68-16, entitled *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Resolution 68-16), generally prohibits the Regional Water Board from authorizing discharges that will result in the degradation of high quality waters, unless it is demonstrated that any change in water quality will (a) be consistent with maximum benefit to the people of the state, (b) not unreasonably affect beneficial uses, and (c) not result in water quality less than that prescribed in state and regional policies (e.g., the violation of one or more water quality objectives). The discharger must also employ best practicable treatment or control (BPTC) to minimize the degradation of high-quality waters. High quality waters are surface waters or areas of groundwater that have a baseline water quality better than required by water quality control plans and policies.
30. Some degradation of groundwater from the discharge to the oxidation ponds is consistent with Resolution 68-16, provided that the degradation:
- a. Is confined to a reasonable area;
  - b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures by the Discharger;
  - c. Is limited to waste constituents typically encountered in domestic wastewater;
  - d. Does not unreasonably affect any beneficial uses of groundwater prescribed in the Basin Plan, and will not result in the violation of any water quality objective; and

- e. Is consistent with the maximum benefit to the people of the state.
31. The constituents that potentially pose the greatest risk to groundwater quality from the Facility's effluent are total dissolved solids (TDS), nitrogen, and coliforms (pathogen-indicator organisms). Each of these constituents is discussed below:
- a. **TDS.** The average TDS concentration of the oxidation ponds was approximately 913 mg/L in 2018, with the two source water wells averaging approximately 800 mg/L. The TDS increase reported for the Facility in 2018 is 113 mg/L, provided wastes are exclusively domestic and without water softener discharges. It is not likely that groundwater will exhibit significant degradation by TDS, however, this Order adds TDS monitoring in the groundwater monitoring wells to evaluate the incremental degradation due to TDS.
  - b. **Nitrogen.** The Primary Maximum Contaminant Level (MCL) found in California Code of Regulations, title 22, section 64431 for nitrate plus nitrite as nitrogen is 10 mg/L. To account for the various components of total nitrogen, as a conservative value, it is assumed that all nitrogen present converts to nitrate/nitrite. Given the relatively low volume of the discharge, the degradation of groundwater is believed to be limited to the area near the oxidation ponds. To verify no degradation due to nitrogen is occurring, this Order adds nitrogen monitoring in the groundwater monitoring wells.
  - c. **Coliforms.** Given the depth to groundwater, it is reasonably likely that pathogen-indicator bacteria will reach groundwater at densities exceeding those prescribed in California Code of Regulations, title 22, section 64426.1. Therefore, this Order adds *E. coli* monitoring in the groundwater monitoring wells to determine groundwater degradation for pathogen-indicator bacteria.
32. The discharge of wastewater from the Facility, as permitted herein, reflects BPTC. The Facility incorporates:
- a. Controls to monitor the concentrations of waste constituents;
  - b. Structural controls to dispose of waste constituents in a designated area;
  - c. Sludge handling facilities;
  - d. An operation and maintenance manual;
  - e. Staffing to ensure proper operation and maintenance; and
  - f. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.

33. Degradation of groundwater by some of the typical waste constituents associated with discharges from a facility treating domestic wastewater, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from reliance on numerous, concentrated individual wastewater systems, and the impact on water quality will be substantially less. The economic prosperity of surrounding communities and associated industries is of maximum benefit to the people of the state and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

### **Stormwater**

34. Federal regulations for stormwater discharges were promulgated by the U.S. Environmental Protection Agency (USEPA) on November 16, 1990 (40 C.F.R. parts 122, 123, and 124) to implement the Clean Water Act's stormwater program set forth in Clean Water Act section 402(p) (33 U.S.C. §1342(p)). In relevant part, the regulations require specific categories of facilities that discharge stormwater associated with industrial activity to "waters of the United States" to obtain National Pollutant Discharge Elimination System (NPDES) permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.
35. The State Water Board adopted Order 2014-0057-DWQ (NPDES No. CAS000001), *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial General Permit) on July 1, 2015. Facilities (1) used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage (including land dedicated to the disposal of sewage sludge that are within the confines of such a facility) with a design flow of one million gallons per day or more, or (2) that are required to have an approved pretreatment program under 40 Code of Federal Regulations part 403, are required to enroll under the Industrial General Permit, unless there is no discharge of industrial stormwater to waters of the United States. Because the Facility has a design flow of only 7,500 gpd, it is not subject to the federal regulations for discharges of storm water associated with industrial activity.

### **CEQA and Public Participation**

36. Pursuant to California Code of Regulations, title 14, section 15301, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq.

37. The Regional Water Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for this discharge, and has provided them with an opportunity for a public meeting and to submit comments.
38. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

**IT IS HEREBY ORDERED** that Order R7-2008-0046 is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code, and regulations adopted thereunder, the Discharger shall comply with the following:

**A. Effluent Limitations**

1. The 30-day average daily dry weather discharge from the Facility into the oxidation ponds shall not exceed 7,500 gallons per day (gpd).
2. The hydrogen ion concentration (pH) of the effluent shall be maintained within the limits of 6.0 to 9.0 standard units.
3. The oxidation ponds shall be maintained so that they continuously operate in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of the oxidation ponds shall be equal to or greater than 1.0 mg/L.

**B. Receiving Water Limitations**

1. The discharge of wastewater from the Facility shall not cause groundwater to: exceed applicable water quality objectives; acquire taste, odor, toxicity, or color that create nuisance conditions; impair beneficial uses; or contain constituents in excess of California Maximum Contaminant Levels (MCLs), as set forth in title 22 of the California Code of Regulations (including, but not limited to, section 64426.1 for bacteriological constituents; section 64431 for inorganic chemicals; section 64444 for organic chemicals; and section 64678 for lead and copper).

**C. Discharge Prohibitions**

1. Discharge of waste classified as "hazardous," as defined in California Code of Regulations, title 27, section 20164, or "designated," as defined in Water Code section 13173 and California Code of Regulations, title 27, section 20164, is prohibited.
2. The discharge of treated wastewater at a location other than the designated disposal areas is prohibited.

3. The discharge of any wastewater from the Facility to any surface waters or surface drainage courses is prohibited.
4. The Discharger shall not accept waste in excess of the design treatment capacity of the Facility's disposal system.
5. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
6. Bypass or overflow of untreated or partially-treated waste is prohibited, except as permitted in Standard Provision G.13.
7. The discharge of wastewater to a location or in a manner different from that prescribed in this Order is prohibited.
8. The discharge of wastewater to land not owned or controlled by the Discharger, or not authorized for such use, is prohibited.
9. The storage, treatment, or disposal of wastes from the Facility shall not cause contamination, pollution, or nuisance as defined in Water Code section 13050, subdivisions (k), (l), and (m).

#### **D. Discharge Specifications**

1. The Discharger shall maintain sufficient freeboard in the oxidation ponds to accommodate seasonal precipitation and to contain a 100-year storm event, but in no case no less than two (2) feet of freeboard (measured vertically). Freeboard shall be utilized for wake and waves of fluid motion and emergency or natural disaster purposes only.
2. All treatment, storage, and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
3. Oxidation ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation ancillary inflow, and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
4. The oxidation ponds shall be managed to prevent breeding of mosquitoes, in particular:
  - a. An erosion control program should ensure that small coves and irregularities are not created around the perimeter of the water surface;

- b. Weeds shall be minimized through control of water depth, harvesting, or herbicides;
  - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
5. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
6. Objectionable odors originating at the Facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.
7. The oxidation ponds shall be maintained and operated so as to maximize infiltration and minimize the increase of salinity in the groundwater.

#### **E. Sludge and Solids Limitations**

1. Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes shall be pursuant to title 27 of the California Code of Regulations.
2. Sludge use and disposal shall comply with federal and state laws and regulations, including permitting requirements, and technical standards in 40 Code of Federal Regulations part 503.
3. Any proposed change in use or disposal of biosolids requires the approval of the Regional Water Board's Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least **90 days** in advance of the change.
4. The Discharger shall submit an annual report that gives the amount (in tons) and the method of all sludge disposals for the previous year. In addition, if the Discharger intends to dispose of pond sludge, then the Discharger shall provide a plan as to the method, treatment, handling and disposal of sludge that is consistent with all state and federal laws and regulations.
5. The Discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the MRP of this Order. Sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the MRP of this Order and as required by 40 Code of Federal Regulations part 503. The results of the analyses shall be submitted to the Regional Water Board as part of the MRP.

## F. Special Provisions

### 1. Groundwater Monitoring Network Technical Report and Work Plan

- a. Within **six (6) months** of the adoption of this Order, the Discharger shall submit to the Regional Water Board's Executive Officer for review and approval a technical report on the adequacy of the existing groundwater monitoring network. The technical report shall:
  - i. Describe the current condition of the groundwater monitoring network;
  - ii. Evaluate whether this network adequately monitors the effects of the discharge from the oxidation ponds on groundwater;
  - iii. Analyze the groundwater data collected from the existing groundwater monitoring wells. The analysis shall include:
    - (A) Maps (e.g., equipotential maps) showing the direction of flow and identification of up-gradient and down-gradient monitoring wells.
    - (B) An appropriate statistical analysis for constituents of concern (COCs) for the up-gradient and down-gradient wells, based on the groundwater data collected to date. COCs in this case are bacteria, TDS and its major ions: sulfate, chloride, nitrogen (total nitrogen, nitrite, and nitrate), and fluoride.
- b. If the technical report indicates that repair or addition of monitoring wells is necessary, the Discharger shall submit a work plan to the Regional Water Board's Executive Officer for review and approval within four (4) months of technical report approval. The work plan shall include:
  - i. A description of proposed changes to the groundwater monitoring network (e.g., monitoring locations, monitoring frequency, sampling protocol, or quality assurance/quality control); and
  - ii. A time schedule for the implementation of these changes, which shall not be longer than **18 months**.

- c. **Within 30 days** of approval of the work plan by the Executive Officer, the Discharger shall begin implementation of the work plan in accordance with the time schedule.
2. **Request for extension.** If the Discharger is unable to comply with the Special Provisions within the applicable schedule, the Discharger may request an extension subject to approval by the Regional Water Board's Executive Officer. The extension request must be in writing and submitted as soon as a delay is recognized and prior to the compliance date. The extension request should include justification for the delay.

## G. Standard Provisions

1. **Noncompliance.** The Discharger shall comply with all of the terms, requirements, and conditions of this Order and MRP R7-2020-0014. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.) and grounds for: (1) an enforcement action; (2) termination, revocation and reissuance, or modification of these waste discharge requirements; or (3) denial of an Order renewal application.
2. **Enforcement.** The Regional Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code section 13308, or referral to the California Attorney General for recovery of judicial civil liability.
3. **Proper Operation and Maintenance.** The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment, and control installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes, but is not limited to, effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained and made available to the Regional Water Board on request.
4. **Reporting of Noncompliance.** The Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Regional Water Board office and the Office of Emergency Services within twenty-four (24) hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside



of business hours, the Discharger shall leave a message on the Regional Water Board's office voicemail. A written report shall also be provided within five 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. All other forms of noncompliance shall be reported with the Discharger's next scheduled Self-Monitoring Report (SMR), or earlier if requested by the Regional Water Board's Executive Officer.

5. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.
6. **Material Changes.** Prior to any modifications which would result in any material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board, and if required by the Regional Water Board, obtain revised requirements before any modifications are implemented.
7. **Design Capacity Report.** The Discharger shall provide a report to the Regional Water Board when it determines that the Facility's average dry-weather flow rate for any month exceeds 80 percent of the design capacity. The report should indicate what steps, if any, the Discharger intends to take to provide for the expected wastewater treatment capacity necessary when the Facility reaches design capacity.
8. **Operational Personnel.** The Facility shall be supervised and operated by persons possessing the necessary expertise in the construction, operation, and maintenance of OWTS and disposal systems.
9. **Familiarity with Order.** The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order and maintain a copy of this Order at the site.
10. **Inspection and Entry.** 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 Order, or the place where records are kept under the conditions of this Order;

- b. Have access to and copy, at reasonable times, records kept under the conditions of this Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.
11. **Records Retention.** The Discharger shall retain copies of all reports required by this Order and the associated MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board's Executive Officer.
12. **Change in Ownership.** This Order is not transferable to any person without written approval by the Regional Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Regional Water Board's Executive Officer in writing at least 30 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The Regional Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.
13. **Bypass.** Bypass (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is prohibited. The Regional Water Board may take enforcement action against the Discharger for bypass unless:
- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in fee collection; and

- b. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent bypass occurring during equipment downtime, or preventative maintenance; or
- c. Bypass is (1) required for essential maintenance to ensure efficient operation; (2) neither effluent nor receiving water limitations are exceeded; and (3) the Discharger notifies the Regional Water Board ten (10) days in advance.

In the event of an unanticipated bypass, the Discharger shall immediately report the incident to the Regional Water Board. During non-business hours, the Discharger shall leave a message on the Regional Water Board's office voicemail. A written report shall be provided within five (5) business days after the Discharger is aware of the incident. The written report shall include a description of the bypass, any 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.

- 14. **Backup Generators.** Standby, power generating facilities shall be available to operate the Facility during a commercial power failure.
- 15. **Format of Technical Reports.** The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with California Code of Regulations, title 23, division 3, chapter 30, as groundwater raw data uploads electronically over the Internet into the State Water Board's GeoTracker database, found at: <https://geotracker.waterboards.ca.gov/>. Documents that were formerly mailed by the Discharger to the Regional Water Board, such as regulatory documents, narrative monitoring reports or materials, and correspondence, shall be uploaded into GeoTracker in the appropriate Microsoft Office software application format, such as Word or Excel files, or as a Portable Document Format (PDF) file. Large documents must be split into appropriately-labelled, manageable file sizes and uploaded into GeoTracker.
- 16. **Qualified Professionals.** In accordance with 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 California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, describe the conduct of investigations and studies, or 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 a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field activities are to be conducted under the direct supervision of one or more of these professionals.

17. **Certification Under Penalty of Perjury.** All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the State of California, that the reports were prepared under his or her supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted, and that based on his or her inquiry of the person or persons who manage the system, the information submitted is, to the best of his or her knowledge and belief, true, complete, and accurate.
18. **Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.
19. **Property Rights.** This 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.
20. **Modification, Revocation, Termination.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for an Order modification, rescission, or reissuance, or the Discharger's notification of planned changes or anticipated noncompliance, does not stay any Order condition. Causes for modification include, but are not limited to, the violation of any term or condition contained in this Order, a material change in the character, location, or volume of discharge, a change in land application plans or sludge use/disposal practices, or the adoption of new regulations by the State Water Board, Regional Water Board (including revisions to the Basin Plan), or federal government.
21. **Severability.** The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of these requirements shall not be affected.

Any person aggrieved by this Regional Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30th day after the date of this Order; if the 30th day 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 statutes and regulations applicable to filing petitions are available on the State Water Board's website and can be provided upon request.

**Order Attachments**

Attachment A— Vicinity Map

Attachment B— Site Map

Attachment C— Project Boundaries

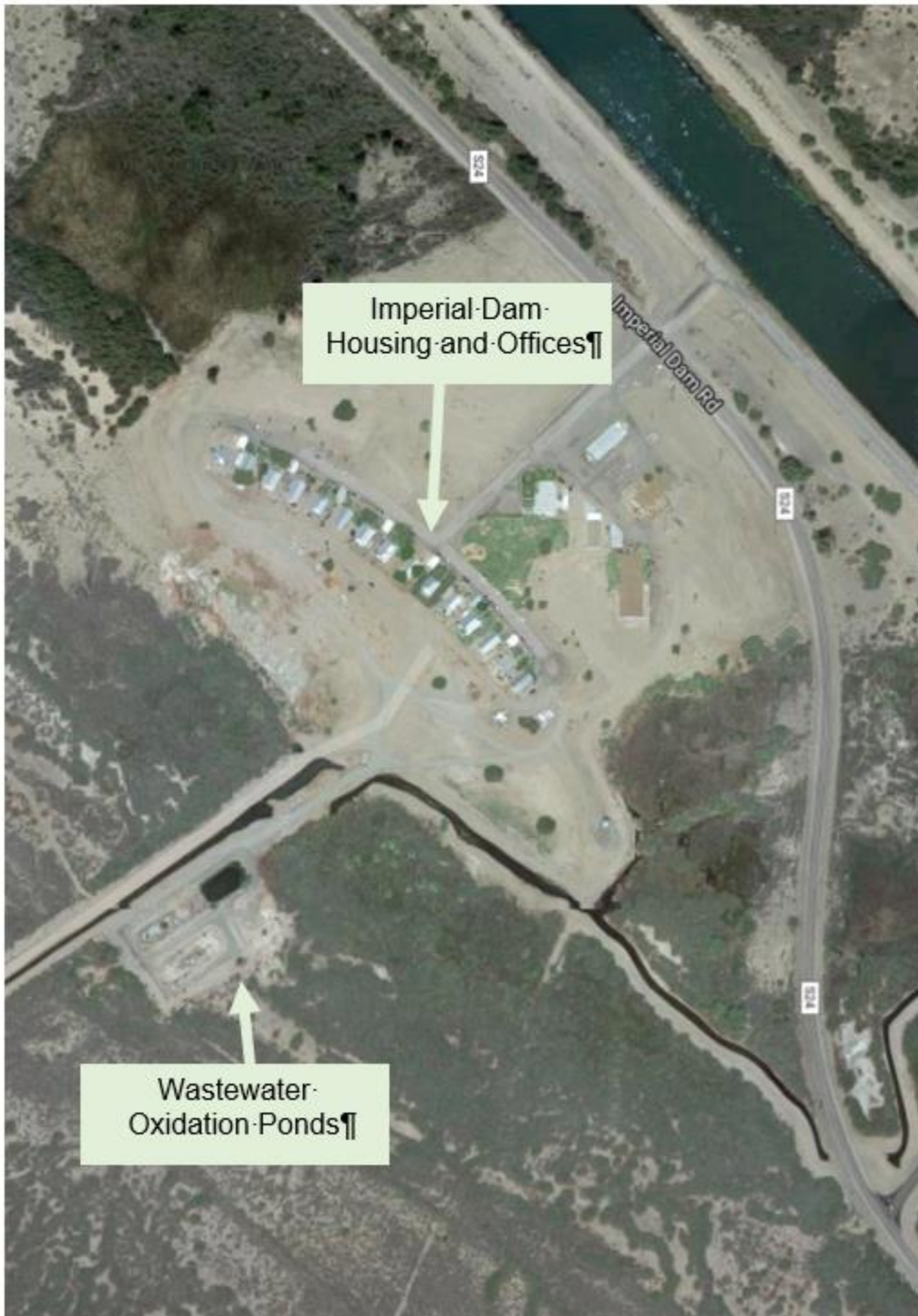
Attachment D— Groundwater Monitoring Well Locations

Attachment E— Monitoring and Reporting Program R7-2020-0014

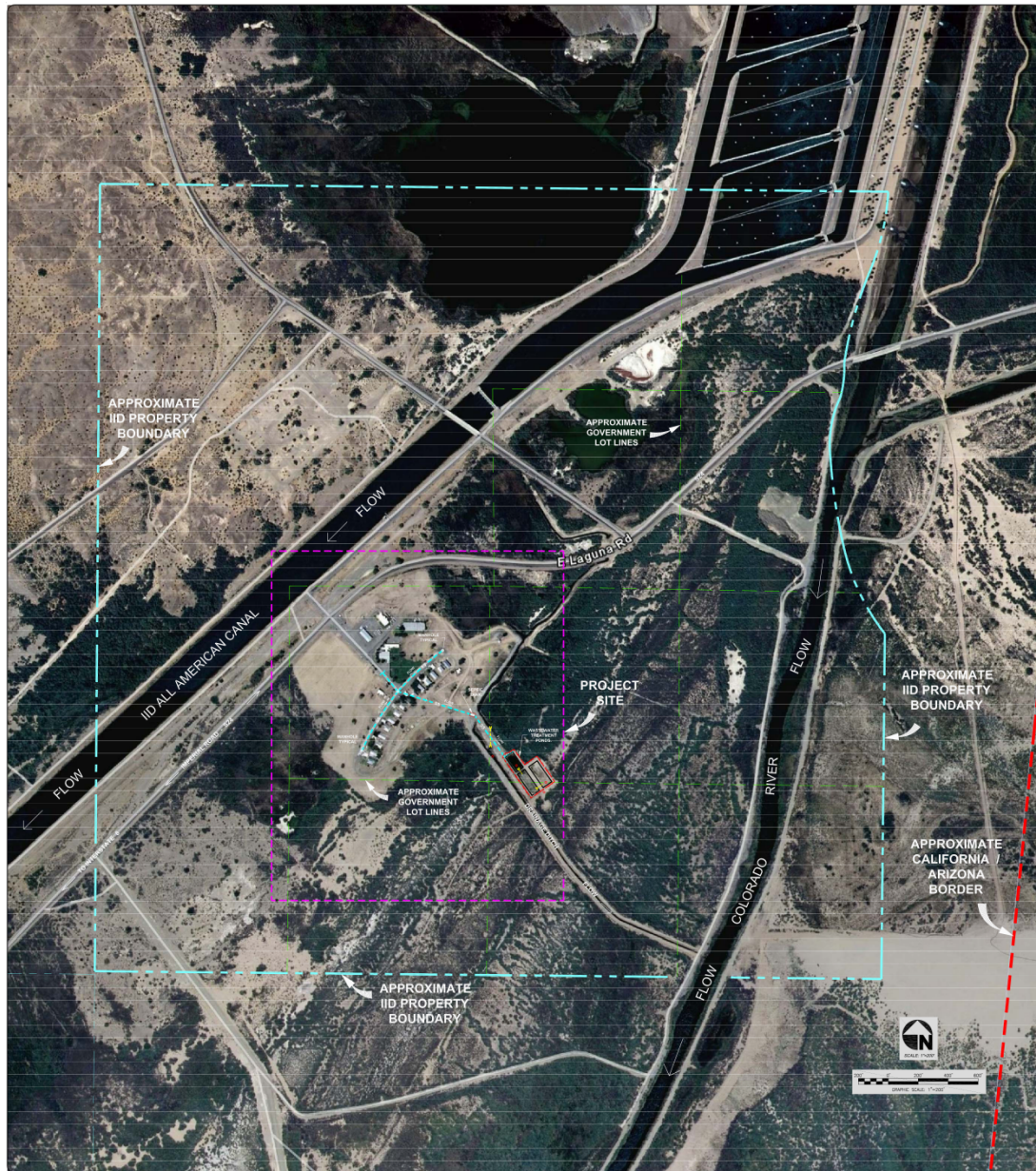
**ATTACHMENT A—VICINITY MAP**



**ATTACHMENT B—SITE MAP**



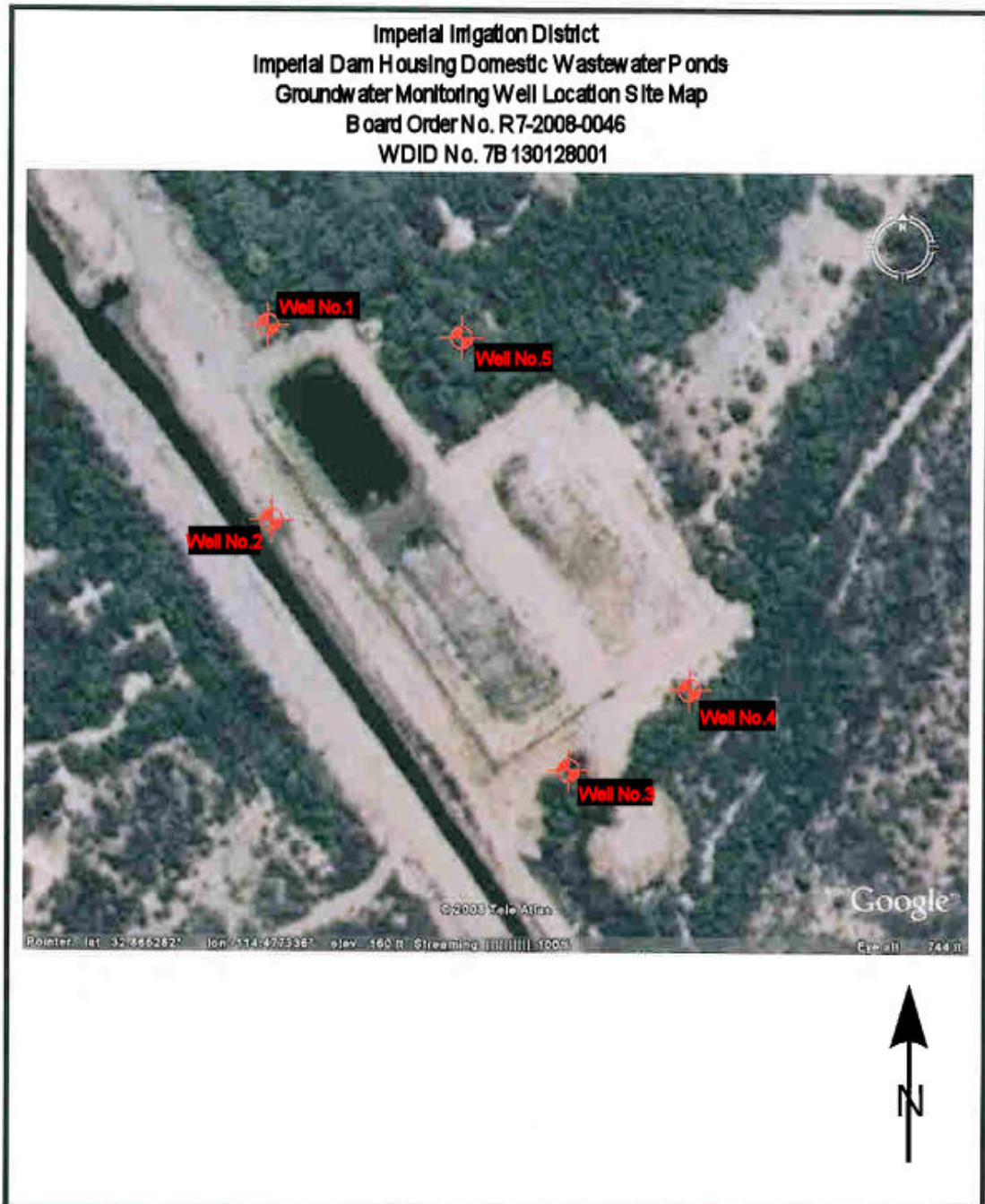
**ATTACHMENT C—PROJECT BOUNDARIES**



No. Revision APPROVED DATE DESIGNED DATE CHECKED DATE PROJECT NUMBER		DRAWN BY REVISED BY EST.		PREPARED UNDER THE DIRECT SUPERVISION OF JAMES G. HOLT, P.E. DATE: 8/20/2008 REG. EXP. 12-31-08		PROJECT TITLE: IMPERIAL IRRIGATION DISTRICT IMPERIAL DAM HOLDING AND OFFICES DOMESTIC WASTEWATER PONDS SECTION 17, TOWNSHIP 15 SOUTH, RANGE 24 EAST PROJECT NUMBER: 883-0002 SHEET CONTENT: EXISTING VICINITY PLAN	SHEET NO. 1 OF SHEETS 3
UNLESS OTHERWISE SPECIFIED, THE ENGINEER ASSUMES RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION PROVIDED TO HIM BY OTHERS. THE ENGINEER'S RESPONSIBILITY IS LIMITED TO THE INFORMATION PROVIDED TO HIM BY OTHERS. THE ENGINEER'S RESPONSIBILITY IS LIMITED TO THE INFORMATION PROVIDED TO HIM BY OTHERS.		THE HOLT GROUP ENGINEERING, ARCHITECTURE, INTERIOR DESIGN, LANDSCAPE ARCHITECTURE, PLANNING, AND CONSTRUCTION MANAGEMENT SERVICES 1000 N. GARDEN AVENUE, SUITE 100 ANAHEIM, CA 92810 TEL: 714.944.4444 FAX: 714.944.4444 WWW.THEHOLTGROUP.COM		PROJECT NUMBER: 883-0002 SHEET CONTENT: EXISTING VICINITY PLAN			



### ATTACHMENT D—GROUNDWATER MONITORING WELLS LOCATIONS



## ATTACHMENT E

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

#### **MONITORING AND REPORTING PROGRAM R7-2020-0014** FOR IMPERIAL IRRIGATION DISTRICT, OPERATOR U.S. BUREAU OF RECLAMATION, OWNER IMPERIAL DAM DOMESTIC WASTEWATER OXIDATION PONDS WINTERHAVEN-IMPERIAL COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267 and describes requirements for monitoring the relevant wastewater system and groundwater quality. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Board or its Executive Officer.

The Discharger owns and operates the wastewater system that is subject to Order R7-2020-0014. The reports required herein are necessary to ensure that the Discharger complies with the Order. Pursuant to Water Code section 13267, the Discharger shall implement the MRP and shall submit monitoring reports described herein.

#### **A. Sampling and Analysis General Requirements**

1. **Testing and Analytical Methods.** The collection, preservation, and holding times of all samples shall be in accordance with U.S. Environmental Protection Agency (USEPA)-approved procedures. All analyses shall be conducted in accordance with the latest edition of either the USEPA's *Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act* (40 C.F.R. part 136) or *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium* (SW-846), unless otherwise specified in the MRP or approved by the Regional Water Board's Executive Officer.
2. **Laboratory Certification.** All analyses shall be conducted by a laboratory certified by the State Water Board, Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP), unless otherwise approved by the Regional Water Board's Executive Officer.
3. **Reporting Levels.** All analytical data shall be reported with method detection limits (MDLs) and with either the reporting level or limits of quantitation (LOQs) according to 40 Code of Federal Regulations part 136, Appendix B. The laboratory reporting limit for all reported monitoring data shall be no greater than the practical quantitation limit (PQL).
4. **Sampling Location(s).** Samples shall be collected at the location(s) specified in the WDRs. If no location is specified, sampling shall be conducted at the most representative sampling point available.

5. **Representative Sampling.** All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the chain of custody form for the sample. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Regional Water Board staff.
6. **Instrumentation and Calibration.** All monitoring instruments and devices used by the Discharger shall be properly maintained and calibrated to ensure their continued accuracy. Any flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices. In the event that continuous monitoring equipment is out of service for a period greater than 24 hours, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.
7. **Field Test Instruments.** Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:
  - a. The user is trained in proper use and maintenance of the instruments;
  - b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
  - c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
  - d. Field calibration reports are submitted.
8. **Records Retention.** The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, for a minimum of five (5) years from the date of the sampling or measurement. This period may be extended by request of the Regional Water Board's Executive Officer at any time. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurement(s);
  - b. The individual(s) who performed the sampling or measurement(s);

- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or method used; and
- f. All sampling and analytical results, including:
  - i. units of measurement used;
  - ii. minimum reporting limit for the analyses;
  - iii. results less than the reporting limit but above the method detection limit (MDL);
  - iv. data qualifiers and a description of the qualifiers;
  - v. quality control test results (and a written copy of the laboratory quality assurance plan);
  - vi. dilution factors, if used; and
  - vii. sample matrix type.

**B. Effluent Monitoring**

1. Effluent from the Facility to the oxidation ponds shall be monitored according to the following schedule:

Constituents	Units	Sample Type	Monitoring Frequency	Reporting Frequency
Total Dissolved Solids (TDS)	mg/L <sup>2</sup>	Grab	Monthly	Quarterly
pH	s.u. <sup>3</sup>	Grab	Monthly	Quarterly
Nitrate as N	mg/L	Grab	Monthly	Quarterly
Dissolved Oxygen (DO)	mg/L	Grab	Monthly	Quarterly
Biochemical Oxygen Demand (BOD)	mg/L	Grab	Quarterly	Quarterly

<sup>2</sup> Milligrams per liter.

<sup>3</sup> Standard Units.

Constituents	Units	Sample Type	Monitoring Frequency	Reporting Frequency
Total Suspended Solids (TSS)	mg/L	Grab	Quarterly	Quarterly
<i>E. Coli</i>	MPN <sup>4</sup> /100 mL	Grab	Quarterly	Quarterly
Ammonia Nitrogen as N	mg/L	Grab	Annually	Annually
Total Nitrogen	mg/L	Grab	Annually	Annually
Orthophosphate as P	mg/L	Grab	Annually	Annually
Total Phosphorus	mg/L	Grab	Annually	Annually
Volatile Organic Compounds (VOCs)	ug/L <sup>5</sup>	Grab	Annually	Annually

### C. Groundwater Monitoring

1. Groundwater monitoring wells shall be monitored according to the following schedule:

Constituent	Units	Type of Sample	Monitoring Frequency <sup>6</sup>	Reporting Frequency
Total Dissolved Solids	mg/L	Grab	Semi-Annual	Semi-Annual
Total Nitrogen	mg/L	Grab	Semi-Annual	Semi-Annual
Nitrate as N	mg/L	Grab	Semi-Annual	Semi-Annual
<i>E. Coli</i>	MPN/100mL	Grab	Semi-Annual	Semi-Annual
Groundwater Elevation	ft (msl) <sup>7</sup>	Grab	Semi-Annual	Semi-Annual

<sup>4</sup> Most Probable Number.

<sup>5</sup> Micrograms per Liter.

<sup>6</sup> After 2 years of groundwater monitoring that show consistent negligible impacts to groundwater, the Discharger may request to have the monitoring schedule revised to annually.

<sup>7</sup> Feet above mean sea level.

Constituent	Units	Type of Sample	Monitoring Frequency <sup>6</sup>	Reporting Frequency
Depth to Groundwater	ft (bgs) <sup>8</sup>	Grab	Semi-Annual	Semi-Annual
VOCs	µg/L	Grab	Semi-Annual	Annually
General Minerals <sup>9</sup>	mg/L	Grab	Annually	Annually

**D. Domestic Water Supply Monitoring**

- The domestic water supply shall be monitored at the water supply production wells, and include notations of which wells are non-operating for a reporting period, in accordance to the following schedule:

Constituent	Units	Type of Sample	Monitoring Frequency	Reporting Frequency
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
General Minerals	mg/L	Grab	Annually	Annually

**E. General Facility Monitoring**

- The Facility shall also be monitored for the following according to the following schedule:

Observation/Inspection	Units	Monitoring Frequency	Reporting Frequency
Estimate maximum daily flow discharged to ponds.	GPD	--	Annual
Identify the number of house(s), commercial/office building(s), and restroom(s) connected to OTWS.	--	--	Annual

<sup>8</sup> Feet below ground surface.

<sup>9</sup> General Minerals shall include: total dissolved solids, calcium, chloride, fluoride, iron, magnesium, manganese, nitrate, potassium, sodium, sulfate, barium, total alkalinity (including alkalinity series), and hardness.

Observation/Inspection	Units	Monitoring Frequency	Reporting Frequency
Inspect and document any operation and maintenance (O&M) problems by inspecting each unit process. O&M reports must contain documentation of maintenance and any updates to the Discharger's wastewater and disposal system. The reports shall note any changes in the operating procedure for the season.	--	Monthly	Annual
Identify any proposed changes in the sewage disposal facility planned for the coming year.	--	--	Annual
Maintain log of field monitoring instrument calibration on a weekly basis or prior to each use (whichever is less frequent).	--	Weekly	Annual
Maintain log of the amount and method of disposal of all sludge for the previous year.	Tons	--	Annual

## F. Reporting Requirements

1. Monthly monitoring shall be included in the quarterly self-monitoring report (SMR). Quarterly SMRs shall be submitted by **January 31<sup>st</sup>, April 30<sup>th</sup>, July 31<sup>st</sup> and October 31<sup>st</sup>**. Semi-Annual SMRs shall be submitted by **January 31<sup>st</sup> and July 31<sup>st</sup>**. Annual SMRs shall be submitted by **January 31<sup>st</sup>** of the following year.
2. SMRs shall include, at a minimum, the following:
  - a. **Cover Letter.** A transmittal letter summarizing the essential points in the report.
  - b. **Maps.** Maps depicting the Facility layout and the location of sampling points.
  - c. **Summary of Monitoring Data.** Tables of the data collected. The tables shall include all of the data collected to-date at each monitoring point, organized in chronological order, with the oldest data in the top row and progressively newer data in rows below the top row. Each row shall be a monitoring event and each column shall

be a separate parameter at a single location (or a single average, as appropriate).

- d. **Graphical Display.** Graphs depicting monitoring parameters through time, with the concentrations being the y-axis and time being the x-axis. Logarithmic scales can be used for values that vary by orders of magnitude. Individual graphs can combine multiple locations or multiple chemicals if that allows the data to be compared more easily.
  - e. **Compliance Summary.** Identification of any violations found since the last report was submitted, and actions taken or planned for correcting each violation. If the Discharger previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. If no violations have occurred since the last submittal, this shall be stated.
3. SMRs shall be certified under penalty of perjury to be true and correct. Each SMR submitted to the Regional Water Board shall contain the following completed declaration:

“I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based 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 for knowing violations.

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_

\_\_\_\_\_ (Signature)

\_\_\_\_\_ (Title)”

4. The SMRs and any other information requested by the Regional Water Board shall be signed by a principal executive officer or ranking elected official. A duly authorized representative of the Discharger may sign the documents if:
- a. The authorization is made in writing by the person described above;
  - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and



- c. The written authorization is submitted to the Regional Water Board's Executive Officer.
5. The results of any analysis performed more frequently than required at the locations specified in this MRP shall be reported to the Regional Water Board.
6. As specified in Standard Provision G.16, technical reports shall be prepared by or under the direction of appropriately qualified professional(s). Each technical report submitted shall contain a statement of qualification of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
7. As specified in Standard Provision G.15, the Discharger shall comply with Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under MRP R7-2020-0014 and any future revision(s) thereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and PDF monitoring reports to the State Water Board's GeoTracker database. Documents too large to be uploaded into GeoTracker should be broken down into smaller electronic files and labelled properly prior to uploading into GeoTracker.