CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER R7-2019-0031

WASTE DISCHARGE REQUIREMENTS FOR COLLEGE OF THE DESERT, OWNER/OPERATOR COOLING TOWER BLOWDOWN WASTEWATER DISPOSAL FACILITIES Palm Desert – Riverside County

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

- College of the Desert (Discharger), located at 43-500 Monterey Avenue, Palm Desert, California 92260, owns and operates a cooling tower system used for temperature control on the college campus. The Discharger combines wastewater generated from the cooling tower system (blowdown) with irrigation well water for use in landscaping around its 130-acre campus via a cooling tower system disposal system (Facility).
- 2. The Facility is located in Palm Desert at Assessor's Parcel Numbers (APNs) 622-160-051, 622-160-050, 622-160-049, 622-160-038, and 622-160-045. The latitude and longitude coordinates of the Facility are 33.7325° north and 116.391° west. The Facility's location is shown in **Attachment A** Site Map, which is incorporated herein and made part of this Order by reference. The Facility is assigned California Integrated Water Quality System (CIWQS) No. CW-215643, Waste Discharger Identification (WDID) No. 7A330131001, and GeoTracker Global Identification No. WDR100029050.
- 3. The discharge from the Facility was most recently regulated by Waste Discharge Requirements (WDRs) prescribed under Order R7-2003-0125, adopted on November 5, 2003.
- 4. On September 27, 2018, the Discharger submitted an updated Report of Waste Discharge (ROWD) to the Colorado River Basin Water Board for the Facility.
- 5. This Order updates the WDRs to reflect changes in the Facility's operation and to implement the most current laws and regulations applicable to the discharge. Accordingly, this Order supersedes Order R7-2007-0053 upon the effective date of this Order, except for enforcement purposes.

Cooling Tower System and Wastewater Discharge

6. The Discharger's cooling tower system utilizes (4) large cooling towers with a total of approximately 2,300 tons of cooling capacity. The cooling towers act as pre-

coolers which disburse heat from the central plant that provides air conditioning to the campus of 560,000 square feet of buildings.

- 7. The cooling towers dissipate heat from recirculating water used to cool process equipment to the ambient air; heat is rejected to the environment from the cooling towers through the process of evaporation. A conductivity controller monitors the recirculating water to prevent the total dissolved solids (TDS) concentration from exceeding 998 mg/L by limiting the number of cycles of re-circulation in the tower basins prior to discharge. Currently, the towers are operating on a schedule of approximately four cycles of concentration prior to discharge.
- The recirculating water is treated at low dosage rates with a combination of a phosphate mixture and chlorine or (in the form of high test hypochlorite or "HTH") as biological growth and corrosion inhibitors.
- 9. The blowdown—i.e. the wastewater ultimately discharged from the cooling towers—feeds into a common pipe with a college-owned irrigation well. Pressure from the well pump pushes the cooling tower discharge into a 730,000-gallon holding tank, where it is blended with well water and eventually discharged to land via the college's existing landscape irrigation system. The irrigation tank serves all of the landscaped areas on the 130-acre site, including: softball, baseball, football, and soccer fields, as well as the college's golf driving range. There is a check valve that prevents wastewater from the cooling towers from feeding back into the well.

 Attachment B Flow Diagram, which is incorporated herein and made part of this Order by reference, contains a schematic depicting the disposal system.
- 10. According to billing information from 2016, the college-owned irrigation well produces an average of 182,000 gallons per day (gpd) of water, which is mixed with the blowdown from the cooling towers. Per calculations of running the cooling towers at a 50% load for 365 days per year, the volume of blowdown that is eventually mixed with irrigation well water is estimated to be approximately 13,500 gpd on average.
- 11. The Discharger's Self-Monitoring Reports (SMRs) from January 2015 through December 2018 characterize the blended blowdown and well water effluent as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
TDS ¹	mg/L ²	340	370	330
Total Chromium	mg/L	ND^3	ND	ND

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¹ Total dissolved solids

² Milligrams per Liter

³ Not detected

12. The Discharger's SMRs from January 2015 through December 2018 characterize the irrigation well water (prior to blending with the blowdown) as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
TDS	mg/L	230	255	218

13. The Discharger is currently installing a new irrigation water supply well and rehabilitating the existing irrigation well. As part of this project, flow meters will be installed which monitor the water supply to the towers, the discharge (blowdown) from the towers, and the water distributed to the campus irrigation from the holding tank. The project is tentatively scheduled to be completed by the end of 2019.

Hydrogeologic Conditions

- 14. Annual precipitation in Palm Desert area averages approximately 3.6 inches and annual evapotranspiration is approximately 72 inches.
- 15. The Whitewater River Stormwater Channel is approximately one-half mile to the north of the Facility.
- 16. Water is supplied to the cooling towers from a domestic line served by Coachella Valley Water District (CVWD). The Discharger's monitoring reports indicate that the water supply has an average TDS concentration of approximately 230 mg/L.
- 17. Data submitted by the Discharger indicates that depth to groundwater in the vicinity of the campus is 215 feet below ground surface. Groundwater pumping has resulted in groundwater level declines of about 1 to 3 feet per year from 1985 to 2015. The soil texture below the plant ranges from fine sand to gravel.
- 18. According to a technical report prepared for the Coachella Valley Water District by Todd Groundwater Consultants dated April 2019, TDS concentrations in the area of the campus are significantly higher in the shallow aquifer than in deeper aquifers (435 to 683 mg/L in the upper aquifer). Similar to TDS trends, groundwater monitoring in the area indicates that the nitrate-NO3 concentrations in the shallow aquifer is generally higher than in deeper aquifer zones. Nitrate concentrations in the shallower area monitoring wells range from 20 to 75 mg/L.
- 19. The dominant structural feature in the region is the San Andreas transform system. The San Andreas Fault Zone is composed of a series of fault zones. The Garnet Hill Fault and South Branch San Andreas Fault are located approximately eight miles to the north of the college campus.

Basin Plan, Beneficial Uses, and Related Regulatory Considerations

20. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), which was adopted on November 17, 1993 and amended on March 7, 2017, 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), waste discharge requirements 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.

- 21. The discharge is located within the Whitewater Hydrologic Unit, Coachella Hydrologic Subunit. Beneficial uses of groundwater in the Coachella Hydrologic Subunit are:
 - a. Municipal and dosupply (MUN),
 - b. Industrial supply (IND), and
 - c. Agricultural supply (AGR).
- 22. 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).
- 23. These WDRs implement numeric and narrative water quality objectives for groundwater and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply include the maximum contaminant levels (MCLs) specified in California Code of Regulations, title 22, section 64421 et seq. and bacteriological limits set in section 64426.1. 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.
- 24. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
- 25. Water Code section 13267 authorizes the Colorado River Basin Water Board to require technical and monitoring reports. The monitoring and reporting requirements in Monitoring and Reporting Program (MRP) R7-2019-0031 are necessary to determine compliance with this Order. The State Water Board's electronic database, GeoTracker Information Systems, facilitates the submittal and review of Facility documents. The burden, including costs, of this MRP bears a reasonable relationship to the need for that information and the benefits to be obtained from that information.
- 26. 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.

State Antidegradation Policy

- 27. 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 Colorado River Basin 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.
- 28. Constituents in cooling tower blowdown discharge that have the potential to degrade groundwater quality include total dissolved solids (TDS) and dissolved metals. Each of these is discussed below:
 - a. <u>Dissolved Metals</u>. The cooling tower system has the potential to concentrate dissolved metals through the evaporative process. Although no degradation from dissolved metals is expected, this Order requires continued monitoring of dissolved metals to ensure that no degradation is occurring.
 - b. <u>TDS</u>. The soils beneath the disposal areas are highly permeable and may allow some limited groundwater degradation by TDS from the wastewater. TDS concentrations are 435 to 683 mg/L in the upper aquifer. The typical blowdown discharge has a TDS concentration of 340 mg/L after blending with irrigation well water, which is less than the TDS concentration of areal groundwater. It is also well below the "recommended" Secondary Maximum Level for TDS of 500 mg/L found in California Code of Regulations, title 22, section 24449.
- 29. The discharge of wastewater from the cooling towers, as permitted herein, reflects BPTC. The controls ensure the discharge does not create a condition of pollution or nuisance, and that water quality objectives will be maintained, which is consistent with the antidegradation provisions of Resolution No. 68-16. 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. An operation and maintenance manual;
 - d. Staffing to ensure proper operation and maintenance; and
 - e. A standby emergency power generator of sufficient size to operate the Facility

and ancillary equipment during periods of loss of commercial power.

30. Degradation of groundwater by some of the typical waste constituents associated with the discharge of cooling tower blowdown, i.e. TDS, after effective control measures are implemented, is consistent with the maximum benefit to the people of the state. The reuse of the blowdown wastewater for landscape irrigation is consistent with statewide policy in favor of recycled water use. State policy promotes the use of recycled water to the maximum extent in order to supplement existing surface water and groundwater supplies to help meet water needs. (Water Code, §§ 13510-13512.) The discharge also provides an important public service to a local higher education institution and contributes to the economic development in the area. All of these provide sufficient justification for allowing any limited groundwater degradation that may occur pursuant to this Order.

CEQA and Public Participation

- 31. In accordance with 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.
- 32. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to update the WDRs for this discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 33. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Order R7-2003-0125 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 California Water Code and regulations adopted thereunder, the Discharger shall comply with the following:

A. 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. No wastewater other than wastewater from the cooling tower system, as described in Finding 9 above, shall be discharged into the wastewater disposal system.

- 3. The discharge of any wastewater from the Facility to any surface waters or surface drainage courses is prohibited.
- 4. The discharge of waste to land not owned or controlled by the Discharger is prohibited.
- 5. There shall be no surface flow of wastewater away from the designated disposal areas.
- 6. No blended wastewater shall be applied to irrigation areas during periods when soils are saturated.
- 7. The storage, treatment, or disposal of wastes from the Facility shall not cause contamination, pollution, or nuisance as defined in section 13050, divisions (k), (l), and (m) of the Water Code.

B. Discharge Specifications

- 1. Adequate measures shall be taken to ensure that flood or surface drainage waters do not erode or otherwise render portions of the disposal facilities inoperable.
- 2. The concentration of total dissolved solids (TDS) in the blended wastewater discharged from the landscape irrigation system shall not exceed 400 mg/L.
- 3. The maximum discharge of cooling tower wastewater shall not exceed 13,500 gpd.

C. Groundwater Limitations

 Discharge from the Facility shall not cause groundwater to exceed 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 section 64426.1 for bacteriological constituents; section 64431 for inorganic chemicals; section 64444 for organic chemicals; and section 64678 for lead and copper action levels).

D. Standard Provisions

- 1. Noncompliance. The Discharger shall comply with all of the terms, requirements, and conditions of this Order and Monitoring and Reporting Program R7-2019-0031. 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 Colorado River Basin 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 Colorado River Basin 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 Colorado River Basin 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 Colorado River Basin Water Board's office voicemail. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. All other forms of noncompliance shall be reported with the Discharger's next scheduled SMRs, or earlier if requested by the 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 Colorado River Basin Water Board, and if required by the Colorado River Basin Water Board, obtain revised requirements before any modifications are implemented.
- **7. Familiarity with Order.** The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order, and shall maintain a copy of this Order at the site.
- 8. Inspection and Entry. The Discharger shall allow the Colorado River Basin 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;
- 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.
- 9. 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.
- 10. Change in Ownership. This Order is not transferable to any person without written approval by the Colorado River Basin Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Colorado River Basin 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 Colorado River Basin 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.
- 11. 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 chapter 30, division 3, title 23 of the California Code of Regulations, as groundwater raw data uploads electronically over the Internet into the State Water Board's GeoTracker database. https://geotracker.waterboards.ca.gov/. Documents that are normally mailed by the Discharger, such as regulatory documents, monitoring reports, materials, data, and correspondence, to the Colorado River Basin Water Board shall also be uploaded into GeoTracker in the appropriate Microsoft Office software application, such as Word or Excel, or as a Portable Document Format (PDF) file. Large documents shall be split into manageable file sizes appropriately labelled and uploaded into GeoTracker. The Facility is assigned GeoTracker Global Identification No. WDR100027526.

- 12. 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, 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 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.
- 13. 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 gather 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.
- **14. Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.
- 15. 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, Colorado River Basin Water Board (including revisions to the Basin Plan), or federal government.
- **16. 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.
- I, Paula Rasmussen, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 13, 2019.

Original signed by
Paula Rasmussen
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2019-0031 FOR COLLEGE OF THE DESERT, OWNER/OPERATOR COOLING TOWER BLOWDOWN WASTEWATER DISPOSAL FACILITIES Palm Desert – Riverside County

A. General Monitoring Provisions

- 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 Colorado River Basin Water Board or its Executive Officer.
- 2. The Discharger owns and operates the wastewater system that is subject to Order R7-2019-0031. 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 the monitoring reports described herein.
- 3. The collection, preservation, and holding times of all samples shall be in accordance with U.S. Environmental Protection Agency (USEPA)-approved procedures. Unless otherwise approved by the Colorado River Basin Water Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Water Board, Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP). All analyses shall be conducted in accordance with the latest edition of the *Guidelines Establishing Test Procedures for Analysis of Pollutants* (40 C.F.R. part 136), promulgated by the USEPA.
- 4. Samples shall be collected at the location specified in the WDRs. If no location is specified, sampling shall be conducted at the most representative sampling point available.
- 5. 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 sample chain of custody form. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Colorado River Basin Water Board staff.
- 6. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated, as necessary, to ensure their continued accuracy. 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 (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. 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, copies of all reports required by the Order and this MRP, and records of all data used to complete the application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Colorado River Basin Water Board's Executive Officer at any time.
- 9. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling, and/or measurements;
 - 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.

10. If the Facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Colorado River Basin Water Board indicating that there has been no activity during the required reporting period.

B. Irrigation Supply Water Monitoring

1. Water from the irrigation supply wells (prior to blending with cooling tower wastewater) shall be monitored as follows:

Constituent	<u>Unit</u>	<u>Sample</u>	<u>Frequency</u>
Total Dissolved Solids	mg/L ⁴	Grab	Annually
Flow ⁵	gpd ⁶	Flow Measurem	ent Monthly

C. Blended Wastewater Monitoring

1. The blended wastewater in the disposal system (i.e., the blended irrigation well water and cooling tower blowdown wastewater) shall be monitored as follows:

Constituent	<u>Unit</u>	Type of <u>Sample</u>	Sampling <u>Frequency</u>
Flow	gpd	Flow Measurement	Monthly
Total Dissolved Solids	mg/L	Grab	Quarterly
Total Phosphate	mg/L	Grab	Quarterly
Total Chromium	mg/L	Grab	Quarterly
Volatile Organic Compounds (VOCs) (EPA Methods 624, 625	ug/L)	Grab	Annually

D. Operation and Maintenance

1. The Discharger shall monitor and report the following:

<u>Activity</u>	<u>Reporting</u>
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⁴ mg/L – milligrams per Liter

⁵ Sampling for flow shall commence upon the Discharger's installation of flow meters.

⁶ gpd – gallons per day

The Discharger shall inspect and document any operation/maintenance problems by inspecting each unit process. Operation and Maintenance reports shall be submitted to the Colorado River Basin Water Board Office annually, containing documentation showing the calibration of flow meters and equipment as performed in a timely manner, modifications and updates to the Operation and Maintenance Manual, and modifications and updates to the Discharger's wastewater ordinance or rules and regulations. The Discharger shall also provide an operator certification status update including number of staff and grade certification.

Annually

E. Reporting

- 1. The Discharger shall submit quarterly Self-Monitoring Reports (SMRs), **due by January 15, April 15, July 15, and October 15 each year**, on the following:
 - a. All monthly, quarterly, and/or annual monitoring data from the past quarter.
 - b. A list of any proposed changes in the wastewater disposal facilities during the upcoming year.
 - c. A report on any failures in the system and maintenance work performed during the past quarter.
 - d. An estimate of maximum daily flow (gpd) of wastewater discharged to the campus irrigation system.
- 2. The Discharger shall attach a cover letter to SMRs. The information contained in the cover letter shall clearly identify violations of the WDRs, discuss corrective actions taken or planned, and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.
- 3. In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the Facility is operating in compliance with the WDRs. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).
- 4. The results of any analysis taken more frequently than required at the locations specified in this MRP shall be reported to the Colorado River Basin Water Board.
- 5. SMRs shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this MRP.

Each report submitted to the Colorado River Basin Water Board shall contain the following completed declaration:

"I certify under the penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. 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 a fine and imprisonment.

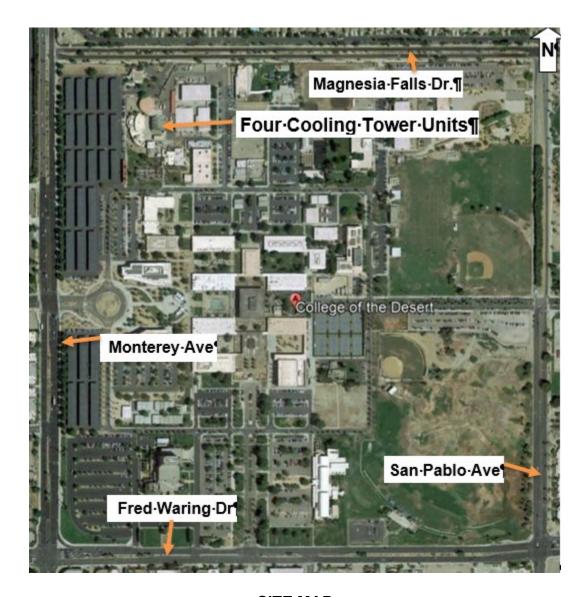
Executed on the	day of	at	
			(Signature)
			(Title)"

- 7. The SMRs and any other information requested by the Colorado River Basin 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 Colorado River Basin Water Board's Executive Officer.
- 8. The Discharger shall report immediately any failure in the waste disposal system as specified in Standard Provisions D.4. Results of any sampling or other analysis performed as a result of a failure of the Facility shall be provided within fourteen days after receipt.
- 9. As specified in Standard Provisions D.12, technical reports shall be prepared by or under the direction of appropriately qualified professional(s). Each technical report submitted 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.
- 10. As specified in Standard Provisions D.11, the Discharger shall comply with Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under MRP R7-2019-0031 and future revisions 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 that are 2.0 MB or larger should be broken down into smaller electronic files, labelled properly, and uploaded into Geotracker.

Ordered By:	Original signed by		
-	Paula Rasmussen		
	Executive Officer		
	<u>June 13, 2019</u>		
	Date		

ATTACHMENT A

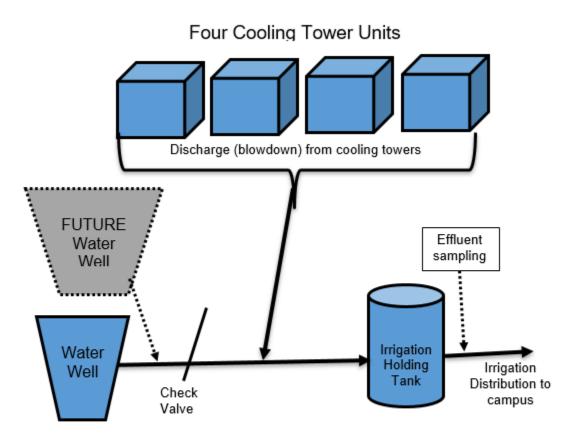


SITE MAP

COLLEGE OF THE DESERT, OWNER/OPERATOR
COOLING TOWER BLOWDOWN
WASTEWATER DISPOSAL FACILITIES
Palm Desert – Riverside County

APNs: 622-160-051, 622-160-050, 622-160-049, 622-160-038, and 622-160-045

ATTACHMENT B College of the Desert Cooling Tower Blowdown Flowchart



Description: The four cooling tower units are supplied by a domestic water line. The discharge, from the four cooling tower units, feeds into a common line from the campus well. The pressure from the well pump pushes the cooling tower discharge into the irrigation holding tank, where it is diluted with the well water. There is a check valve that prevents flow from the cooling towers to back feed into the well. All mixed water from the holding tank is distributed to the campus through the irrigation system.

FLOW DIAGRAM

COLLEGE OF THE DESERT, OWNER/OPERATOR
COOLING TOWER BLOWDOWN
WASTEWATER DISPOSAL FACILITIES
Palm Desert – Riverside County

APNs: 622-160-051, 622-160-050, 622-160-049, 622-160-038, and 622-160-045