

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**ADDENDUM NO. 1 TO ORDER NO. R9-2009-0072**

**AN ADDENDUM MODIFYING WASTE DISCHARGE REQUIREMENTS  
FOR THE SAN DIEGO COUNTY SANITATION DISTRICT, SAN PASQUAL  
ACADEMY WATER POLLUTION CONTROL FACILITY, SAN DIEGO COUNTY**

The California Regional Water Quality Control Board San Diego Region (hereinafter San Diego Water Board), finds that:

1. The San Pasqual Academy (Academy) is a residential education campus for foster teenage children. The Academy is located in the City of Escondido, near Highway 78 at Academy Drive. The Academy currently has a capacity to serve 184 children. The 238-acre campus includes individual family-style homes, an on-site accredited high school, a cafeteria, a technology and career information center, an auditorium, recreation fields, a gymnasium, a Health and Wellness Center, a Day Rehabilitation Clinic, a swimming pool, Fire Department, and a Water Pollution Control facility. Order No. R9-2009-0072 prescribes waste discharge requirements to the San Diego County Sanitation District (hereinafter the Discharger) for the treatment and disposal of domestic wastewater from the San Pasqual Academy Water Pollution Control Facility (San Pasqual WPCF) located in San Diego County.
2. Order No. R9-2009-0072 establishes an annual average effluent discharge specification for total dissolved solids (TDS) of 800 milligrams per liter (mg/L). The Discharger submitted a Report of Waste Discharge to the San Diego Water Board dated January 26, 2015, requesting revision of the discharge specifications for TDS from 800 mg/L to 1,000 mg/L. The Discharger is requesting the modification because the annual average effluent TDS concentrations from the San Pasqual WPCF have exceeded 800 mg/L four times between 2001 and 2014. The Discharger requested increasing the TDS discharge specification to 1,000 mg/L because this will ensure consistent compliance without installing costly reverse osmosis facilities at the San Pasqual WPCF to remove TDS. A TDS discharge specification of 1,000 mg/L is also not expected to cause receiving groundwater quality to exceed the TDS groundwater quality objective for the San Pasqual Hydrologic Area (San Pasqual HA), which is 1,000 mg/L (not to be exceeded more than 10 percent of the time).
3. The Addendum reduces the permitted monthly average flow rate from 0.050 to 0.025 million gallons per day (mgd), and establishes a permitted annual average flow rate of 0.020 mgd. These changes ensure that the increase in the TDS discharge specification will not cause a net increase in the TDS mass loading from the discharge.

4. The San Pasqual Academy WPCF includes bar screens and a lined aeration pond. The WPCF treats domestic wastewater generated from the Academy campus and has a capacity of 50,000 gallons per day (gpd). Treated effluent from the WPCF is discharged to an onsite percolation/irrigation bed.
5. State Water Resources Control Board Board Resolution No. 68-16, *Statement of Policy With Respect to Maintaining High Quality of Waters in California* (also known as the State Antidegradation Policy) requires that high quality waters of the State be maintained to the maximum extent possible, even when the quality is better than needed to protect beneficial uses, and that changes in water quality only be allowed if the change is consistent with maximum benefit to the people of the State, does not unreasonably affect present and anticipated beneficial uses, and does not result in water quality less than that prescribed in water quality control plans or policies.

Changing the TDS discharge specification from 800 mg/L to 1,000 mg/L, lowering the permitted monthly average flow rate from 0.050 to 0.025 mgd, and establishing a permitted annual average flow rate of 0.020 mgd are consistent with the Antidegradation Policy for the following reasons:

- a. Even with exceedances of the annual average discharge specification of 800 mg/L for some years, the average effluent TDS concentration for the entire 2001-2014 time period was only 788 mg/L. Raising the annual average discharge specification from 800 to 1,000 mg/L is not expected to result in degradation of water quality above 800 mg/L for the long term; will not unreasonably affect present and anticipated beneficial uses or water; and will not result in water quality less than that prescribed in the Basin Plan as the TDS groundwater quality objective for the San Pasqual HA is 1,000 mg/L (not to be exceeded more than 10 percent of the time).
- b. As documented in the San Pasqual Groundwater Basin Salt and Nutrient Management Plan (San Pasqual Basin SNMP), salt loads associated with the discharges from the San Pasqual Academy WPCF make up less than 0.06 percent of the total salt load into the San Pasqual Groundwater Basin. An analysis of estimated recharge to groundwater indicates that the TDS concentration of recharge to groundwater will be in compliance with the TDS water quality objective of 1,000 mg/L at both the actual average flow rate (0.0042 mgd) and the maximum permitted flow rate (0.025 mgd).
- c. Constructing and operating reverse osmosis and brine disposal facilities would be very costly, operate only intermittently, and not result in any discernible improvement in the quality of groundwater in the San Pasqual Groundwater Basin. The San Pasqual Basin SNMP estimates that the discharges from the WPCF comprise only about 0.06 percent of the overall salt load to the San Pasqual Groundwater Basin. As a result, changing the annual average TDS

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discharge specification from 800 to 1,000 mg/L is consistent with maximum benefit to the people of the state.

- d. Lowering the permitted monthly average flow rate from 0.050 to 0.025 mgd, and establishing a permitted annual average flow rate of 0.020 mgd will ensure that the increase in the TDS discharge specification will not cause a net increase in the TDS mass loading over the currently permitted discharge.
6. The Monitoring and Reporting Program for Order No. R9-2009-0072 is issued under authority of Water Code section 13267. The San Diego Water Board Executive Officer may modify the Monitoring and Reporting Program, as appropriate.
7. Adoption of Addendum No. 1 to Order No. R9-2009-0072 (Addendum) is exempt from Provisions of the California Environmental Quality Act (CEQA),<sup>1</sup> pursuant to California Code of Regulations, title 14, chapter 3, article 19, section 15301 because adoption of the Addendum will not involve expansion or modification of the existing facility, and will not result in an increase in flow. As a result, the proposed changes to Order No. R9-2009-0072 will not have any significant impact on the environment.
8. The San Diego Water Board has notified the Discharger and all known interested parties of the intent to modify Order No. R9-2009-0072.
9. The San Diego Water Board in a public meeting heard and considered all comments pertaining to the proposed modifications to Order No. R9-2009-0072.

**IT IS HEREBY ORDERED**, that:

Except as modified or superseded by Order No. R9-2009-0072 set forth below, all of the findings, prohibitions, provisions, specifications, and other requirements of Order No. R9-2009-0072 remain in full force and effect. The following modifications to Order No. R9-2009-0072 are hereby incorporated and immediately effective:

1. Prohibition A.6 of Order No. R9-2009-0072 is replaced with the text below.

The monthly average wastewater flow rate at the San Pasqual Academy Wastewater Treatment Plant shall not exceed 0.025 million gallons per day (mgd), while the annual average flow rate shall not exceed 0.020 mgd, unless the discharger obtains revised waste discharge requirements for the proposed increased flow.

2. Table 7 (Discharge Specifications) of Order No. R9-2009-0072 is replaced with the table below.

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<sup>1</sup> Public Resources Code section 21000, et seq.

**Table 7. Discharge Specifications**

Constituent	Unit	Annual Average <sup>a</sup>
TDS	mg/L	1,000
Chloride	mg/L	200
Sulfate	mg/L	150
MBAS	mg/L	0.5
Flouride	mg/L	1.0
Boron	mg/L	0.5

<sup>a</sup> The annual average shall be calculated once every calendar year and apply to the arithmetic mean of the results of all samples collected during any calendar year.

3. Table B.1 (Effluent Monitoring and Reporting) of Monitoring and Reporting Program No. R9-2009-0072 is replaced with the following text:

Constituent	Units	Type of Sample	Sampling Frequency <sup>a,b</sup>	Reporting Frequency <sup>b</sup>
Flow Rate	MGD	Continuous	Continuous	Semiannually
BOD <sup>5</sup> or CBOD <sup>5</sup> @ 20C	mg/L	Grab	Quarterly	Semiannually
pH	pH Units	Grab	Quarterly	Semiannually
Total Suspended Solids	mg/L	Composite	Annually	Semiannually
Total Dissolved Solids <sup>c</sup>	mg/L	Composite	Quarterly	Annually
Methylene Blue Activated Substances	mg/L	Composite	Annually	Annually
Total Nitrogen	mg/L	Composite	Annually	Annually
Chloride	mg/L	Composite	Annually	Annually
Sulfate	mg/L	Composite	Annually	Annually
Fluoride	mg/L	Composite	Annually	Annually
Iron	mg/L	Composite	Annually	Annually
Manganese	mg/L	Composite	Annually	Annually
Boron	mg/L	Composite	Annually	Annually

- a. The Discharger shall increase the sampling frequency from quarterly to monthly or annually to quarterly for any noted constituent that exceeds the limit specified in Discharge Specification B.1 and B. 3 of Order No. R9-2009-0072. The increased frequency of monitoring shall continue until the Discharger achieves with the limitations for three consecutive periods. After compliance is achieved, the Discharger shall resume sampling at the specified frequency.

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- b. Monthly is defined as a calendar month. Quarterly is defined as a period of three consecutive calendar periods beginning on January 1, April 1, July 1, or October 1. Semiannually is defined as a period of six consecutive calendar months beginning with January or July. Annually is defined as once per calendar year.
  - c. The Discharger must have at least one effluent sample analyzed for TDS during the dry season (May 1-September 30) and at least one effluent sample analyzed for TDS during the wet season (October 1-April 30).
4. Section E.2 (Special Studies) of Monitoring and Reporting Program No. R9-2009-0072 is replaced with the following text:
2. Other Special Studies. Special studies are intended to be short-term and designed to address specific research or management issues that are not addressed by the routine core monitoring program. The Discharger shall implement special studies as directed by the San Diego Water Board Executive Officer.
    - a. Core monitoring may include intake monitoring, effluent monitoring, receiving water monitoring, and groundwater monitoring. This Order includes core monitoring for intake, effluent, and groundwater monitoring. In addition to core monitoring requirements, the Discharger may be required to conduct additional monitoring.
    - b. To better understand the long-term effects of climate change, drought, and increased water conservation measures on the concentration of TDS in the effluent, the Discharger each year shall calculate the arithmetic average of all TDS effluent concentrations measured since Order No. R9-2009-0072 was issued. The Discharger shall report the overall average effluent TDS concentration and graph the overall effluent TDS trend in each successive annual monitoring report. If the overall TDS concentration reaches or exceeds 800 mg/L, the San Diego Water Board may require the Discharger to take actions to reduce the TDS concentration in the effluent.
  3. The Discharger shall submit a written report to the San Diego Water Board within 90 days if the monthly average wastewater flow rate equals or exceeds 0.01875 mgd. The report shall be signed pursuant to Provision E. 20 (Standard Provisions) of Order No. R9-2010-0072. The report shall include the following:
    - a. The Discharger's best estimate of when the monthly average flow rate will equal or exceed 0.025 mgd.
    - b. A schedule for studies, design, and other steps needed to prevent an increase in TDS mass loading to groundwater from the discharge,

and any steps that will be taken to prevent TDS from the discharge from causing the concentration of groundwater to exceed 1,000 mg/L.

5. Section F of Monitoring and Reporting Program No. R9-2009-0072 is replaced with the following text:

Monitoring reports shall be submitted to the Regional Board in accordance with the schedule below.

**Table 3. Reporting Schedule**

<b>Report Frequency</b>	<b>Report Period</b>	<b>Report Due</b>
Annual	January – December	January 30
Semiannual	January – June	July 30
	July – December	January 30

Self-Monitoring Reports should be submitted in text searchable PDF format to the San Diego Water Board via email. The email submittals must include a signed cover/transmittal letter (with the facility name, facility contact information, and reference code), and, unless directed otherwise by the Executive Officer, be sent via email to [sandiego@waterboards.ca.gov](mailto:sandiego@waterboards.ca.gov).

*I, David W. Gibson, Executive Officer, do hereby certify that this Order is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on February 10, 2016.*



David W. Gibson  
Executive Officer