



Item 6  
Supporting Document No. 5  
February 10, 2016

THE CITY OF SAN DIEGO

July 13, 2015

Mr. Fisayo Osibodu  
California Regional Water Quality Control Board  
2375 Northside Drive, Suite 100  
San Diego, CA 92108

Dear Mr. Fisayo Osibodu:

Subject: Reference 255440: oosibodu, Addendum No. 1 to Order No. R9-2009-0072

The City of San Diego (City) has been actively involved with the preservation and protection of San Pasqual Valley (Valley) as a resource for groundwater production and storage. The groundwater in the San Pasqual Groundwater Basin (Basin) is the primary source of water supply for the residents and agricultural operations within the Valley. Groundwater quality in the Basin has been collected and reported from as early as 1950 and the City continues to collect water quality samples up to the present. Total dissolved solids (TDS) is the primary constituent of concern, and TDS levels have constantly remained high throughout the years. The City has been investigating methods to alleviate the high TDS content of groundwater in the Basin.

The City has reviewed Tentative Addendum No. 1 to Order No. R9-2009-0072, which would change the discharge specification for total dissolved solids from an annual average concentration of 800 milligrams per liter (mg/L) to 1,000 mg/L for the San Pasqual Academy (Academy). The City is strongly opposed to adoption of Addendum No. 1 for the following reasons:

1. In Tentative Addendum No. 1, Item 4-C, it states that "changing the annual average TDS discharge specification from 800 to 1,000 mg/L is consistent with maximum benefit to the people of the state." Allowing increased limits of TDS to be discharged into San Pasqual Basin will not benefit the City, residents and leaseholders in the Basin who rely on groundwater for their domestic and agricultural water needs.
2. For a 13-year period from 2001 to 2014, the average concentration of TDS discharge from the Academy exceeded 1,000 mg/L in only 1 of 111 effluent samples collected (Information Sheet, Tentative Addendum No.1 to Order No. R9-2009-0072, Section IV, Item A). This number is minimal and does not appear to justify the need to increase allowable TDS levels to 1,000 mg/L.

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3. In the same 13-year period from 2001 to 2014, the average effluent TDS concentration collected was 788 mg/L, which is below the limit of 800 mg/L (Information Sheet, Tentative Addendum No.1 to Order No. R9-2009-0072, Section II, Table 2). The request to increase allowable TDS levels to 1,000 mg/L does not appear to be justified.
4. The Academy is permitted to discharge up to 50,000 gallons per day (gpd). Because the average wastewater flows from the Academy between 2009 and 2014 varied from 3,928 gpd to 4,858 gpd (Information Sheet, Tentative Addendum No.1 to Order No. R9-2009-0072, Section II, Item A), with an average annual flow of 4,189 gpd, the discharges are not significant and again do not appear to justify the need to increase allowable TDS levels to 1,000 mg/L.
5. The Basin Plan Groundwater Water Quality Objectives (Information Sheet, Tentative Addendum No.1 to Order No. R9-2009-0072, Section III, Table 4), indicates maximum TDS concentrations of 1,000 mg/L for the San Pasqual Hydrologic Area. Average TDS concentrations in the Academy wells (Information Sheet, Tentative Addendum No.1 to Order No. R9-2009-0072, Section II, Table 3) were 520 mg/L in Well No. 2 and 544 mg/L in Well No. 5. However, groundwater quality in the eastern portion of the Basin where the Academy is located is consistently lower than other parts of the Basin. Water quality deteriorates as the groundwater moves westward, with TDS concentrations well above 1,000 mg/L in the central portion of the basin and 2,000 mg/L and above at the western portion. These concentrations are already well above the State's Water Quality Objectives, and allowing the Academy to discharge TDS at higher concentrations can further deteriorate the overall groundwater quality in the Basin.
6. The City believes that the Academy can continue with their current discharge average of 788 mg/L without the need to install reverse osmosis treatment system equipment, thereby avoiding significant costs in constructing, operating, and maintaining supplemental treatment and disposal facilities. Relaxing maximum TDS levels from 800 mg/L to 1,000 mg/L will result in an overall increase in average TDS from the current average of 788 mg/L to amounts well above 800 mg/L, and will further contribute to the deterioration of the groundwater quality in the Basin. Increases of TDS levels in the Basin are not conducive to the *San Pasqual Valley Groundwater Basin Salt and Nutrient Management Plan* (SNMP) (CH2M Hill, 2014).

Because of the items listed above, the City does not support adoption of Addendum No. 1 to Order No. R9-2009-0072. The City supports maintaining the current discharge specification for TDS at 800 mg/L for the Academy.

In addition to the SNMP, the City has completed numerous studies and investigations to manage groundwater quality and levels in the Basin. Among these are the *San Pasqual Groundwater Management Plan* (MWH, 2007), *San Pasqual Brackish Groundwater Desalination Demonstration Project* (RBF, 2011), and *Installation of Transducers in Monitoring Wells in San Pasqual Valley* (Department of Water Resources, 2012) which includes a basin evaluation that may be used to update DWR's Bulletin 118.

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The City is also the designated monitoring entity for the Basin for the California Statewide Groundwater Elevation Monitoring (CASGEM) program, and continues to monitor the groundwater in the Basin. Allowing increased levels of TDS to be discharged in the Basin will be counterproductive to all efforts by the City and stakeholders of the Basin to reduce TDS levels.

Thank you for allowing the City to comment on the Addendum. If you have any questions, please feel free to contact me at (619) 533-4680.

Sincerely,



George Adrian, P.E.  
Principal Water Resources Specialist

GJA/

cc: Lan Wiborg, Deputy Director, Long-Range Planning & Water Resources Division  
Larry Abutin, Associate Engineer-Civil, Long-Range Planning & Water Resources Division  
Antero Penaflor, Assistant Engineer-Civil, Long-Range Planning & Water Resources Division

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