

City Council Memorandum

City of Arts & Innovation

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: MARCH 20, 2018

FROM: PUBLIC WORKS DEPARTMENT WARDS: ALL

SUBJECT: RESOLUTION TO REDUCE TOTAL DISSOLVED SOLIDS LEVELS FROM

2,500 MG/L TO 1,210 MG/L FOR REGULATED INDUSTRIES THAT DISCHARGE

INTO THE CITY'S PUBLICLY OWNED WASTEWATER SYSTEM

ISSUE:

Adopt a Resolution to update the Riverside Municipal Code Title 14, Public Utilities, and Discharge of Wastes into the Public Sewer and Pollutants into the Storm Drain Systems, Industrial Waste, and Section14.12.350 Local Limits, to reduce total dissolved solids levels from 2,500 mg/L to 1,210 mg/L for regulated industries that discharge into the City's publicly owned wastewater system.

RECOMMENDATION:

That City Council adopt the attached Resolution to update Riverside Municipal Code Title 14.12.350, Discharge of Wastes into the Public Sewer and Pollutants into the Storm Drain Systems, Industrial Waste, Local Limits.

COMMITTEE RECOMMENDATION:

On May 18, 2017 the Development Committee unanimously voted to recommend that the City Council approve by resolution changes to Riverside Municipal Code Title 14.12.350 Discharge of Wastes into the Public Sewer and Pollutants into the Storm Drain System, Industrial Waste, Local Limits to reduce total dissolved solids levels from regulated industries that discharge into the wastewater system.

BACKGROUND:

The City's Regional Water Quality Control Plant (RWQCP) provides treatment of domestic and industrial wastewater generated within the City and the Rubidoux, Jurupa, and Edgemont Community Service Districts and community of Highgrove. This entails the operation of primary, secondary and tertiary treatment processes to produce high quality effluent that complies with all State and Federal requirements prior to discharge to the Santa Ana River or reused as recycled water.

The RWQCP National Pollutant Discharge Elimination System Permit (NPDES Permit) issued by the Santa Ana Regional Water Quality Control Board requires implementation of an Industrial

Waste Pretreatment Program that is authorized under Riverside Municipal Code (RMC) Title 14 Public Utilities, Chapter 14.12. The RMC Section 14.12.350 Local Limits regulates by resolution the discharge of pollutants from industrial users of the wastewater system to keep levels below that which could impair RWQCP treatment processes or cause pass-through to the Santa Ana River.

The RWQCP wastewater treatment process is not designed to remove total dissolved solids (TDS), thus TDS is considered a pass-through pollutant (mostly dissolved salts). Therefore, TDS is regulated through the RWQCP Pretreatment program where water quality limits must be established for discharges into the wastewater collection system. The current Local Limits for TDS was established in 2002 at 2,500 mg/l.

The TDS Local Limit must be updated periodically in order to maintain compliance with the NPDES Permit requirements. Staff retained the services of Krieger & Stewart, Inc. in May of 2015 to evaluate the TDS Local Limit using protocols developed by the Environmental Protection Agency.

DISCUSSION:

To complete the TDS development report, a sampling plan was implemented by the Environmental Compliance staff over a three-month period in the summer of 2016. In total, 69 separate samples from sewer manholes were taken by Environmental Compliance staff and Laboratory staff performed the sample analyses in-house at the RWQCP Laboratory facility. Completing the sampling and analysis in-house saved the City approximately \$75,000 versus contracting for these services.

The collected TDS Sampling Plan data was provided to Krieger & Stewart who used established EPA methods and protocols to develop the proposed TDS Local Limits concentration of 1,210 mg/L. The results of this effort is documented in the attached report entitled, "Total Dissolved Solids Local Limits Development Report – March 2017". Based on the report results, staff is recommending that the City of Riverside's new TDS Local Limits concentration be set at 1,210 mg/L and replace the current limits of 2,500 mg/L.

<u>Implementation of Proposed TDS Local Limits</u>

- Staff recommends that special consideration be given on establishing TDS discharge Mass Limits (lbs/day) for existing industrial users if they discharge above the new concentration of 1,210mg/L. The mass loading method will create an upper cap and not require existing businesses to immediately reduce TDS concentrations to the wastewater system.
- 2. Staff recommends a resolution for TDS Local Limits concentration of 1,210 mg/l be applied to all new regulated industries discharging wastewater into the City of Riverside's Publicly Owned Wastewater system.

For a smooth transition and to assist existing and future business, staff has taken the following steps:

1. Chamber and Business Outreach – As suggested by the Development Committee staff reached out to the Riverside Chamber of Commerce to provide information on the changes and proposed outreach to affected businesses. Subsequently, staff met with all existing

industrial businesses that may be impacted to review and discuss the proposed changes and new TDS Mass Limits.

2. Sewer Public Benefit Program (Commercial) – The City's Sewer Public Benefit Program was approved in 2010 and is funded through the City's adopted sewer service changes. This program is available to assist new and existing businesses with complying with the TDS Local Limits. The program offers Riverside business reimbursements for up to fifty percent of the cost of City approved wastewater treatment equipment that reduces pollutant levels. The reimbursement is capped at \$150,000 per customer.

Community Service District's Wastewater Service

The Rubidoux, Jurupa and Edgemont Community Service Districts are required to adopt and comply with City Municipal Code requirements consistent with our Regional Wastewater Service Agreements. With this municipal code change each agency with need to do the following:

- 1. Adopt and implement the proposed Local Limits within their respective service area jurisdictions.
- 2. Continue to deliver a quality of wastewater to the Regional Water Quality Control Plant which independently complies with the City NPDES permit requirements.

Staff has contacted each of the respective community service districts to provide assistance, as needed, to adopt and implement the municipal code TDS Local Limits as approved.

FISCAL IMPACT:

There is no General Fund fiscal impact associated with this report. There should be no financial impact to existing industrial users unless they expand and increase wastewater TDS loading beyond their upper cap. New industrial users may need to invest in treatment systems to reduce TDS process loading to the wastewater system. The level of investment required is site specific based on the type and size of the industrial business.

Prepared by:

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Certified as to

availability of funds: Adam Raymond, Chief Financial Officer/City Treasurer

Al Zelinka, FAICP, Assistant City Manager Approved by:

Approved as to form: Gary G. Geuss, City Attorney

Concurs with:

Councilmember Gardner, Chair

Development Committee

Attachments:

- 1. Resolution
- 2. Total Dissolved Solids Local Limits Development Report March 2017
- 3. Presentation