

CITY OF SANTA ROSA
BOARD OF PUBLIC UTILITIES

TO: BOARD OF PUBLIC UTILITIES

FROM: MARTIN ST GEORGE
ENVIRONMENTAL COMPLIANCE SUPERVISOR
SANTA ROSA WATER DEPARTMENT

SUBJECT: DEVELOPMENT OF A REVISED LOCAL LIMITS FOR THE CITY
OF SANTA ROSA LAGUNA REGIONAL WATER RECLAMATION
FACILITY

AGENDA ACTION: NO ACTION REQUESTED

RECOMMENDATION

This item is provided to inform the Board of the results of the City of Santa Rosa Laguna Regional Water Reclamation Facility Local Limits Study, provide an opportunity to receive their input and describe the next steps in the process. No formal action will be taken.

EXECUTIVE SUMMARY

As a recommendation of the North Coast Regional Water Quality Control Board, and a National Pollutant Discharge Elimination System Permit condition, the City of Santa Rosa Water Department working with RMC Water and Environmental, performed a Local Limits Study for the City of Santa Rosa Laguna Regional Water Reclamation Facility (LTP).

As background, a Local Limits Study (Study) evaluates conventional pollutants and pollutants of concern discharged by industries to a Publicly Owned Treatment Works (POTW) to determine contributing sources that could impact the POTW's ability to comply with water quality discharge objectives. In the City's case, the recent Study evaluated the extent to which pollutant loadings from local residential and business sectors have changed, based on variations in flows and loadings in the system since the last local limits study. The initial evaluation suggests the LTP's industrial sector discharge allocations warrant adjustment. The draft Study results indicate that some pollutant loadings may be reallocated in a manner that would position the City of Santa Rosa and the Regional partners to be more competitive in attracting certain business sectors into the area while maintaining the LTP's ability to comply with applicable regulatory requirements.

Environmental Compliance Staff will present the results and recommendations of the Local Limits Study (Attachment A). A brief explanation of the local limits process and

source control strategy will be included in the presentation. “Next Steps” in the process required to adopt the recommendation changes will be discussed with an opportunity for the Board of Public Utilities to provide input.

BACKGROUND

The City of Santa Rosa (City) owns and operates the Laguna Regional Water Reclamation Facility (LTP), a publicly-owned treatment works (POTW) regulated under NPDES Permit Number CA0022764. To fulfill the requirements of the NPDES permit, the City operates an Industrial Pretreatment Program that was initiated in 1975 and approved by the US Environmental Protection Agency (USEPA) and Regional Water Board in 1983. Local Limits for conventional pollutants and pollutants of concern provide an important aspect of Source Control strategy in Water Department’s Pretreatment Program. Local limits, in addition to surcharge fees for industrial and commercial discharges with wastewater loadings above average residential wastewater loadings and Best Management practices, help to protect the LTP from industrial discharges that may interfere with LTP treatment processes or cause pass through at the LTP. Local limits also help to support compliance with NPDES permit and other regulatory requirements.

The local limits that are the subject of this report have not undergone a complete update in more than 25 years, although the City has performed periodic checks and implemented partial updates during that time. The Local Limits draft report includes a description of the process used to assess the appropriateness of the City’s current local limits, and recommendations for maintaining, modifying, or removing the current local limits.

The local limits evaluation is based on the USEPA’s July 2004 *Local Limits Development Guidance* (833-R-04-002A) (Local Limits Guidance), and takes into consideration the following changes and other factors since the City’s last local limits re-evaluations were conducted for pollutants of concern in 1990 and conventional pollutants in 2000:

- Implementation of corrosion control measures by Sonoma County Water Agency has resulted in reduced corrosion of water pipes, significantly reducing the metals loading to the Facility.
- The LTP’s current NPDES Permit has water quality-based effluent limitations that significantly differ from the conditions under which the current local limits were developed. For example, the LTP NPDES Permit no longer contains water quality-based effluent limitations for copper, lead, nickel or cyanide, although the Basin Plan’s water quality objectives for these constituents are still applicable.
- Removal efficiencies through the Laguna Treatment Plant may have changed since the current local limits were developed.
- Industrial flows are significantly lower than when the current local limits were developed.
- Remaining industrial facilities have implemented Best Management Practices and product substitutions within their operations to further minimize loadings to the sewerage system and the LTP.
- The local limits for some constituents that are unlikely to be present in industrial wastewater and are not USEPA pollutants of concern (USEPA, 2004) -- for

example, antimony, beryllium, and thallium – may be appropriate to delete at this time.

- The LTP now provides recycled water to recharge the Geysers steam fields, with concomitant water quality standards.

The industrial users who currently discharge into the LTP comply with federal and local limits more than 99% of the time. The recalculated local limits as recommended in the Study will be implemented for continued compliance with NPDES discharge requirements.

PRIOR BOARD OF PUBLIC UTILITIES REVIEW

No

ANALYSIS

Local limits are part of an overall strategy to maintain source control of conventional pollutants and pollutants of concern for industrial sectors. The EPA has promulgated federal categories for Categorical Industrial Users with mandatory discharge limits for various industrial groups like Metal Finishing. However, some impacted watersheds dictate more prohibitive limits or “Local Limits” be developed to comply with local receiving water limitations or alternative discharge usages. An industry may use pretreatment units for pollutant removal to lower discharge concentrations or use product substitution with green chemistry to lower discharge concentrations to meet a local or a federal limit. The City can use local limits, Best Management Practices and/or fees for above average pollutant loadings to control industrial discharges. In the LTP, surcharge fees are used to encourage pretreatment and discourage higher than average loadings of the following conventional pollutants: Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS) and Total Kjeldahl Nitrogen (TKN). Various strategies are employed by the City to assure compliant discharges. This in turn helps the LTP to meet discharge objectives. LTP’s anticipated loadings for each Pollutant of Concern (POC) have been recalculated to reflect current conditions.

The Local Limits Study re-evaluated industrial discharges to the LTP and offered recommendations to address the changes in industrial loadings that have transpired since the last Local Limits Study was implemented in 1992. Corrosion control implemented by the Sonoma County Water Agency significantly lowered nickel and copper loadings from supply water leaching metals from industrial water pipelines. The proportion of industrial flow to residential flow heading to the LTP has been approximately cut in half. In 1992, agriculture lands primarily received the recycled water produced by the LTP. Now, users of recycled water also include urban irrigation sites and the Geysers steam fields recharge system - each with its own set of water quality objectives. The Regional Water Board has changed how LTP discharges are monitored as is evident in the current LTP NPDES permit. The most stringent of the applicable discharge or water quality requirements for each pollutant was used for the

calculations and decisions in the Study. The LTP removal efficiency has also been reviewed to determine any changes that should be considered in determining local limit updates. Updated calculations for conventional pollutants and pollutants of concern have been compared to actual influent loading and industry discharge trends to determine which pollutants may be applicable for revised local limits. Considering the fledgling Source Control program of 1992 compared to LTP's current industrial loadings, the local limits determined for LTP at that time now seem overly cautious and include many limits which may or may not be necessary. As the LTP historical data indicates, a handful of the LTP's existing local limits do not currently apply to dischargers in the system. Select metals or organic compounds are not found in local industrial dischargers because of the exclusive nature of the constituents. Other constituents included in LTP's initial local limits study were not based on calculations from LTP data, but were justified based on other discharge criteria. As a result, the Study proposes raising some local limits when industrial data shows historical discharge values may allow for such discharges with a high level of confidence of continued compliance. Other local limits, like mercury, have data to support an increase but will remain the same due to ongoing watershed concerns related to mercury.

This presentation is being given to the BPU before the Study is shared with the Regional Partners and then reviewed the Regional Water Quality Control Board with the Environmental Protection Agency. Once those reviews occur, industrial stakeholder workshops may be held. Staff intend to come back to the BPU and City Council for final review and approval of the Study. The final steps to implementation of the new local limits are codifying the new limits into the Santa Rosa Sewer Use Code and overseeing the Local Limits inclusion in the Regional Partners Sewer Use Ordinances.

FISCAL IMPACT

No direct budgetary impact is anticipated as a result of the Local Limit Study recommendations. However, the City may see an economic increase in certain business sectors such as low water use machine shops, metal fabrication, metal finishing or chip manufacturing with the enactment of local limits that are comparable to other agencies in the area. The LTP has experienced a decrease in the number of certain business types or had prospective businesses opt out of coming to the area, partially due to restrictive local limit discharge requirements for certain metals.

ENVIRONMENTAL IMPACT

This action is exempt from the California Environmental Quality Act (CEQA) because it is not a project which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to CEQA Guideline section 15378.

BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

Not Applicable

ATTACHMENTS

- Attachment 1 – “Re-Evaluation of Local Limits for the Laguna Subregional Water Reclamation System Industrial Pretreatment Program” Revised Draft April 2018, prepared by: RMC Water and Environment.

CONTACT

Martin St George, Environmental Compliance Supervisor

mstgeorge@srcity.org

(707) 543-3409