



City Council Memorandum

City of Arts & Innovation

TO: HONORABLE MAYOR AND CITY COUNCIL **DATE: NOVEMBER 5, 2024**

FROM: PUBLIC WORKS DEPARTMENT **WARDS: ALL**

SUBJECT: SEPTIC RECEIVING STATION RECEIPT OF DOMESTIC AND COMMERCIAL SEPTIC WASTE AND TIPPING FEES; INTRODUCE AND ADOPT AN ORDINANCE AMENDING SECTIONS 14.12.120 AND 14.12.295 OF THE RIVERSIDE MUNICIPAL CODE

ISSUES:

Receive an update on the Liquid Waste Hauler Program and Septic Receiving Station; introduce and adopt an Ordinance to amend the Riverside Municipal Code (RMC) Title 14, Public Utilities, and Discharge of Wastes into the Public Sewer and Pollutants into the Storm Drain Systems, Sections 14.12.120 and 14.12.295 to allow receipt of specific non-industrial/non-automotive commercial septic waste; and adopt a Resolution to update septic receiving station tipping fees and repeal Resolution 20976.

RECOMMENDATIONS:

That the City Council:

1. Receive and file an update on the Liquid Waste Hauler Program and Septic Receiving Station;
2. Introduce and adopt an Ordinance to amend the Riverside Municipal Code Title 14, Public Utilities, and Discharge of Wastes into the Public Sewer and Pollutants into the Storm Drain Systems, Section 14.12.120 Definitions, to include definitions for Commercial Septic Waste and Commercial Wastewater;
3. Introduce and adopt an Ordinance to amend the Riverside Municipal Code Title 14, Public Utilities, and Discharge of Wastes into Public Sewer and Pollutants into the Storm Drain Systems, Section 14.12.295 (M) Liquid Waste Haulers, to include Commercial Septic Waste; and
4. Adopt a Resolution to update septic receiving station tipping fees and repeal Resolution 20976.

BACKGROUND:

The City of Riverside Public Works Department, Wastewater Division, is responsible for the collection, conveyance, and treatment of wastewater for over 93,000 customers within City limits.

The facilities consist of over 800 miles of gravity sewers, 400 miles of City laterals, 20 wastewater lift stations, 16,000 sewer manholes, and the Riverside Regional Water Quality Control Plant (RWQCP) which has the capacity to treat 46 million gallons per day. Additionally, under agreements with the City, the RWQCP provides wastewater treatment for the Edgemont, Jurupa, and Rubidoux Community Services District.

RWQCP also operates and maintains a septic receiving station in which permitted liquid waste haulers dispose of domestic septic waste. This domestic septic waste comes from residential septic tank systems in which quantities and constituent loading are similar to household septic waste conveyed through the collection system. The septic receiving station is located at the Headworks area of the Water Quality Control Plant and consists of a card reader, receiving hopper, pH and conductivity meters, and automated open/close valve. The septic receiving station is open to any domestic septic waste from any of the 24 permitted liquid waste haulers.

Acceptance of Domestic and Non-Industrial/Non-Automotive Commercial Wastes

Riverside Municipal Code Title 14, Public Utilities, and Discharge of Wastes into Public Sewer and Pollutants into the Storm Drain System, section 14.12.295, only permits liquid waste haulers to dispose of domestic septic waste into the septic receiving station at RWQCP. Domestic wastewater is defined under section 14.12.120 as “wastewater from residences, offices, institutions or from other premises resulting from the use of water for personal washing, sanitary purposes or the discharge of human excrement and related matter.” Additionally, the Liquid Waste Hauler permit issued by Environmental Compliance (EC) staff, under Discharge Requirements (#7) states “name and signature of the driver certifying the information included on the Liquid Waste Manifest Form is accurate and only domestic sewage is being dumped at the City of Riverside’s dump station.”

Upon conclusion of the Septic Receiving Station audit conducted by EC staff in January 2023, instances of liquid waste haulers bringing commercial septic waste to the RWQCP were identified. This is in violation of section 14.12.205 of the Riverside Municipal Code. To protect the RWQCP against illicit discharges to the system, staff immediately gathered samples from these locations and set up a meeting with the Regional Water Quality Control Board, Region 8 (RWQCB-R8) to discuss the findings. RWQCP and RWQCB-R8 staff agreed that additional control measures were needed to maintain compliance and that the best avenue for receiving non-industrial and non-automotive commercial waste was to put those liquid waste haulers delivering commercial septic waste under a Compliance Order.

As of September 2024, one liquid waste hauler has entered into a Compliance Order with City. This Compliance Order will be rescinded upon adoption of a Resolution.

Rate History

In 1997 the Environmental Compliance section of the Public Works Department – Sewer Division created a Liquid Waste Hauler Permit Program to comply with the Federal Clean Water Act and established disposal fees for septic wastewater delivered to RWQCP for disposal and treatment. The initial disposal fee was \$0.013/gallon.

In 2001, the City retained Carollo Engineers to prepare a rate analysis and revenue plan to evaluate charges imposed by the City for sewer service and Carollo issued a report, dated January 2001, entitled “City of Riverside Revenue Plan.” Carollo determined that all three cost measures (flow, chemical oxygen demand (COD) and total suspended solids (TSS)) were inadequate by as much as 213%.

In June 2005, the City Council approved Resolution 20976 establishing a \$0.03/gallon fee for disposal of domestic septic waste.

On January 11, 2024, The Riverside Water Quality Control Plant (RWQCP) initially presented a tipping fee proposal to the Mobility and Infrastructure Committee, which calculated costs for flow, BOD, and TSS using a cost-of service model. The original recommendation included a tipping fee of \$100.60 per 1,000 gallons for domestic septage and \$81.35 for commercial waste, factoring in capital, operations, maintenance, and staffing costs for the septic receiving stations. In response to feedback from external stakeholders, a revised proposal was developed, phasing in the fees over two fiscal years. The new recommendation introduces a smooth fee implementation rate of \$60.00 per 1,000 gallons for domestic septage and \$81.10 for commercial waste starting in January 2025, with incremental increases to \$104.90 and \$84.30, respectively, by July 2025. This phased approach aims to ease the financial burden.

Prop 218 Exemption

Tipping fees are not considered a “tax” under Proposition 26 and do not trigger Proposition 218 vote requirements.

DISCUSSION:

Acceptance of Commercial Septic Waste

Commercial septic waste accounted for 15% of the total septic waste received. RWQCP is capable of receiving and treating approved septic waste from non-industrial/non-automotive commercial sources, pursuant to the above-mentioned Municipal Code amendments and additional safeguards put in place to deter illegal and illicit discharges to protect the wastewater treatment process. These safeguards include:

- 1) Initial and quarterly sample analysis for Oil & Grease, Biochemical Oxygen Demand (BOD), and TSS taken from each commercial site, paid for by the Liquid Waste Hauler.
- 2) Initial and annual submittal of the Grease Interceptor Inspection Form for all commercial sites not within the City’s jurisdiction. The inspection form must be signed by a licensed contractor who is a subject matter expert in the field and will describe the condition, maintenance schedule and list of recent repairs made.
- 3) Initial and annual submittal of a self-certification statement stating that to the best of their knowledge no hazardous waste or chemicals have been dumped or disposed of into their septic system. The self-certification form must be signed by the commercial business owner and the liquid waste hauler.
- 4) Staffing the Septic Receiving Station during normal operating hours.

To verify compliance with the Liquid Waste Hauler permit, random samples will be taken by EC staff and analyzed against the permit’s pollutant limitations. Septage and Commercial wastes are both held to the same pollutant and concentration limits. The Pollutants and Concentration Limits listed in the Liquid Waste Hauler Permit are displayed in Table 1.

Table 1 – Pollutants and Concentration Limits

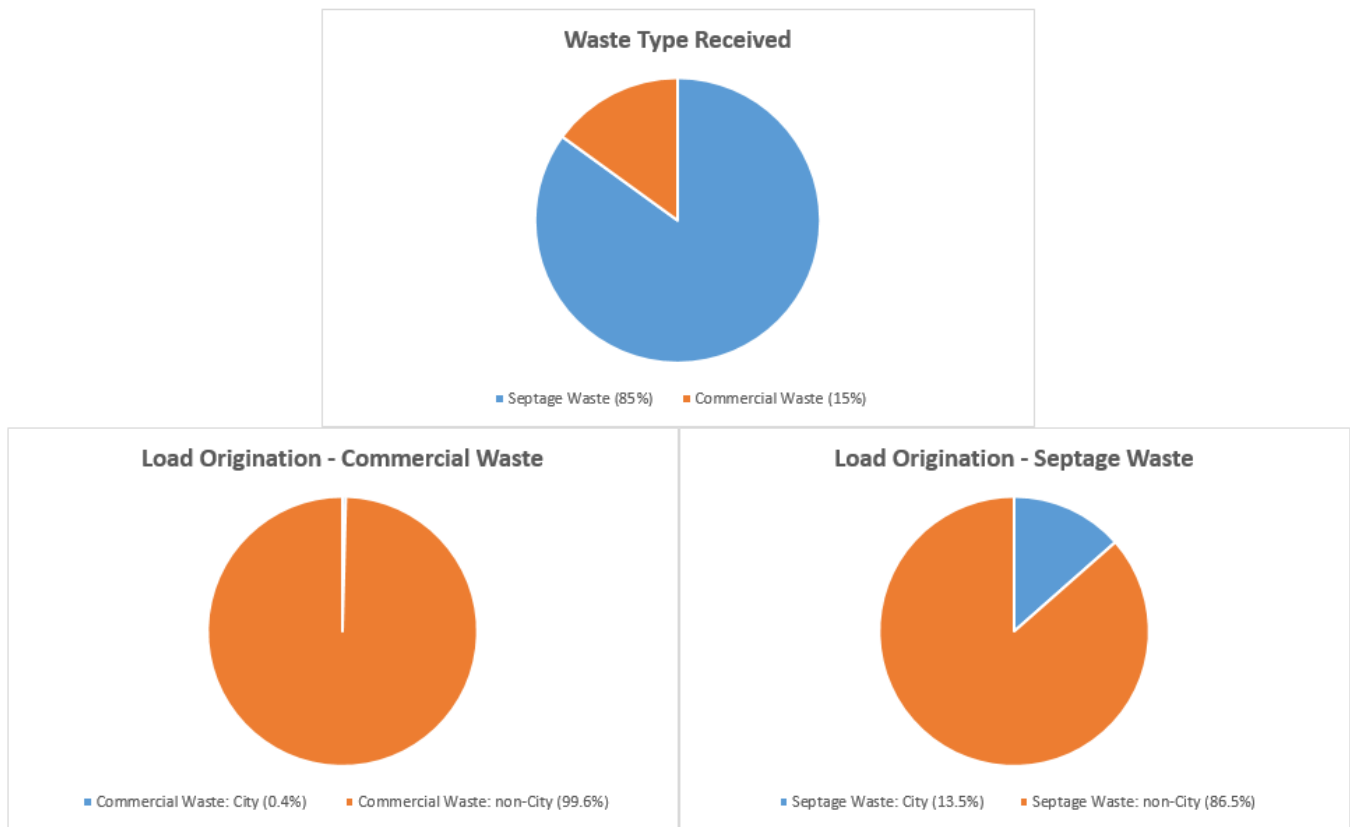
Pollutant	Concentration Limit
pH	6.0 – 9.5
Electrical Conductivity	3,000 umhos/cm ³
Chromium	1 mg/L
COD	10,000 mg/L

Copper	3.3 mg/L
Lead	0.75 mg/L
Oil/Grease	500 mg/L
Oil/Grease (Total Petroleum Hydrocarbons)	100 mg/L
TDS	1,210 mg/L
TSS	8,700 mg/L
Zinc	12.5 mg/L

Waste Type and Load Origination

The RWQCP is one of only three wastewater treatment plants in the Inland Empire that accepts domestic septic waste from inside and out of its service area. Chart 1 demonstrates the percentages of septage vs commercial waste volume and the comparison of where the loads originated from information identified in septic receiving station manifests for 2023.

Chart 1 – Origination of Loads



Rate Study

The RWQCP currently receives an average of 1.06 million gallons of septage and commercial waste per month, equivalent to 12.7 million gallons a year. In June 2024, the RWQCP subcontracted with Carollo Engineers to analyze the septic receiving station influent loading characteristics and tipping fees. Carollo issued a technical memorandum, dated September 2024, entitled “Septage and Commercial Waste Tipping Fees.” Within this document it specifies the specifics behind the results and the proposed rates.

In the completed study, the proposed tipping fees are calculated by determining the City’s unit costs to treat septage or commercial waste at the RWQCP plant per gallon of flow, pounds of biochemical oxygen demand (BOD), and pounds of Total Suspended Solids (TSS). This calculation is also used to determine wastewater treatment costs for the Edgemont, Jurupa, and

Rubidoux Community Service Districts. Those unit costs are applied to the assumed BOD and TSS concentrations for septage or commercial waste to determine a tipping fee per 1,000 gallons.

Table 2 – Septage and Commercial Waste Volume and Concentrations

Description	Value
Septage and Commercial Waste Volume	
Gallons per Month	1,060,000
Gallons per Day	34,850
MG per Year	12.72
Septage Concentrations	
BOD (mg/L)	5,400
TSS (mg/L)	12,000
Commercial Waste Concentrations	
BOD (mg/L)	4,000
TSS (mg/L)	8,900

Table 3 – Treatment Unit Costs

	Flow	BOD	TSS
Allocated Rev Req (\$1,000s)	\$16,659	\$21,677	\$10,208
Annual Units – Riverside Customers	9,026	27,375	24,601
	MG	klbs	klbs
Unit Cost	\$1,846	\$0.79	\$0.41
	per MG	per lb	per lb

The analysis used in Carollo’s study utilizes the financial model and the performance-based budget model that were developed during the 2019 master planning effort. The performance-based budget model is used to allocate those revenue requirements to the functional constituents of flow, BOD, and TSS.

The RWQCP currently operates one septic receiving station. A Business Case Analysis will be conducted to determine future needs of the station, including the possibility of adding a second receiving station.

Two full-time equivalent Septic Receiving Attendants were added to the FY 2024-2026 Public Works Biennial Budget as the septic receiving station is typically operated 7 days a week. Their duties will include things such as logging deliveries, unloading trucks, receiving & documenting manifests, taking samples and verify each delivery is in compliance with Federal, State and Local laws.

Table 4 – Rate Calculations (per 1,000 gal)

	Septage Waste	Commercial Waste
Flow	\$1.77	\$1.77
Treatment of BOD	\$34.32	\$25.42
Treatment of TSS	\$40.06	\$29.71
Capital Costs	\$3.20	\$3.20
Operations & Maintenance	\$0.49	\$0.49
Staff	\$20.76	\$20.76
Total	\$100.60	\$81.35

The actual tipping fee rates are the sum of the treatment costs, Operations & Maintenance, and receiving station staffing costs. The recommended tipping fee for FY 2024/25 is \$101.00 per 1,000 gallons of domestic septage or \$81.10 per 1,000 gallons of commercial waste received at the RWQCP.

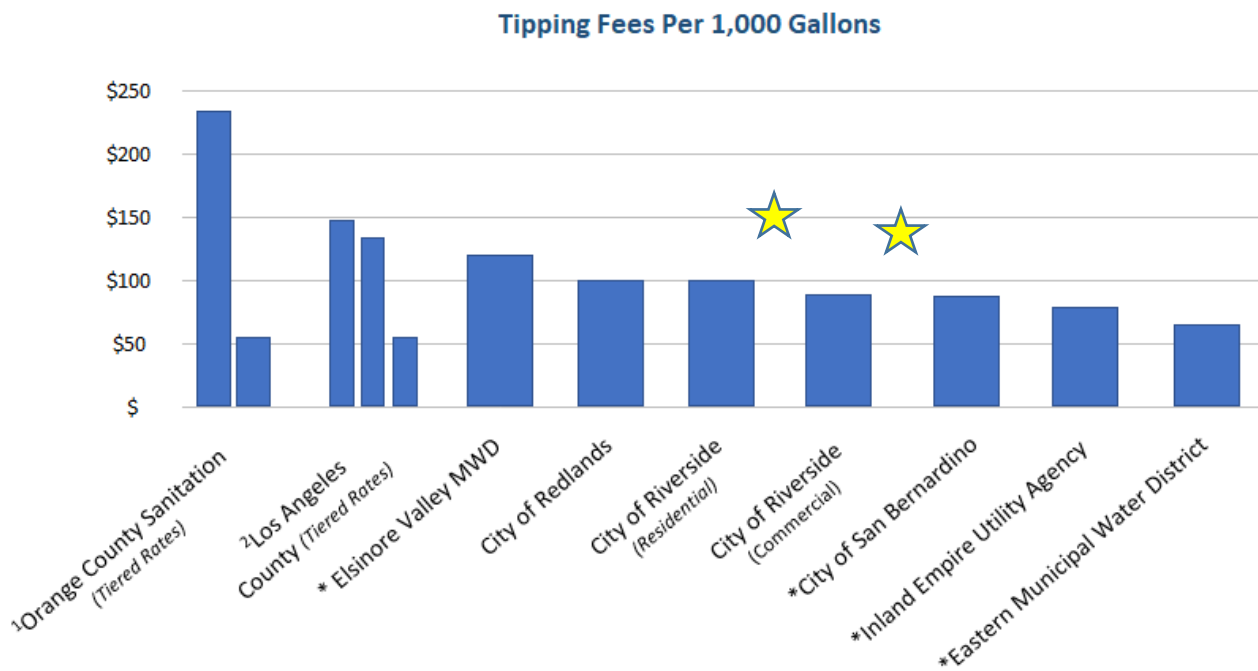
To initiate a smooth fee implementation for Domestic Septage Waste, staff recommends implementing a tipping fee of \$60.00 per 1,000 gallons on January 1, 2025, and \$104.90 per 1,000 gallons on July 1, 2025. Commercial waste will be \$81.10 per 1,000 gallons on January 1, 2025, and \$84.30 per 1,000 gallons on July 1, 2025. Future rates beyond FY 25/26 will be identified in future sewer rate proposals.

Table 5 – Smoothed Fee Implementation (Staff Recommendation) Rates (per 1,000 gal)

	Septage Waste	Commercial Waste
Flow	\$1.85	\$1.85
Treatment of BOD	\$35.56	\$26.34
Treatment of TSS	\$41.41	\$30.71
Operations & Maintenance	\$0.19	\$0.19
Staff	\$21.97	\$21.97
FY 24/25 Tipping Fee	\$60.00	\$81.10
FY 25/26 Tipping Fee	\$104.90	\$84.30

In comparison to other municipalities who accept domestic septic waste, only five, including Riverside, accept waste that originated outside their respective service area, these are Orange County Sanitation District, Los Angeles County Sanitation District, City of Redlands, and City of San Bernardino as demonstrated in Chart 2. Additionally, to be permitted to discharge domestic septic in San Bernardino, the septic company must have one active account within the service area. No local municipality accepts restaurant waste or waste from holding tanks.

Chart 2 – Tipping Fees (per 1,000 Gallons)



* Service Area Restrictions

¹ Tiered Rates: Service Area and Out of Service Area

² Tiered Rates: Location of Disposal Site (Pomona, Santa Clarita & Lancaster)

STRATEGIC PLAN ALIGNMENT:

This item contributes to **Strategic Priority 4 – Environmental Stewardship** and **Goal 4.4 – Implement measures and educate the community to responsibly manage goods, products, and services throughout their life cycle to achieve waste reduction outcomes**, and **Strategic Priority 5 – High Performing Government** and **Goal 5.4 – Achieve and maintain financial health by addressing gaps between revenues and expenditures and aligning resources with strategic priorities to yield the greatest impact.**

This project aligns with each of the five Cross-Cutting Threads as follows:

- 1. Community Trust** – The proposed rates will allow the city to significantly improve the septage receiving station for residents and regional customers on septic systems.
- 2. Equity** – The proposed tipping fee increase provides that every member of the community pays the same rate to treat sewer and that rate payers do not subsidize the cost of septic receiving customers.
- 3. Fiscal Responsibility** – Adopting new rates will minimize revenue losses to the Sewer fund and allow for critical investment in service.
- 4. Innovation** – Adopting the new rates will facilitate innovative technologies to improve septic load delivery and monitor influent streams for illicit and illegal discharges to the sewer treatment system.
- 5. Sustainability & Resiliency** – The new rates will allow the City to continue to meet compliance requirements of federal, state and local permit requirements.

FISCAL IMPACT:

The total fiscal impact of the tipping fee increases is projected to realize revenue in FY 2024/25 of \$650,000. In FY 2024/25, the projected deficit in the septic receiving station operations is approximately \$760,000. Without a rate increase, Riverside rate payers will continue to subsidize the cost of septic receiving for in jurisdiction and out of jurisdiction customers.

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Certified as to availability of funds:	Kristie Thomas, Finance Director/Assistant Chief Financial Officer
Approved by:	Kris Martinez, Assistant City Manager
Approved as to form:	Jack Liu, Interim City Attorney

Attachments:

1. Resolution
2. Septic and Commercial Waste Tipping Fees, October 2024
3. Presentation
4. Ordinance 14.12.120
5. Ordinance 14.12.295