



MEMORANDUM

PUBLIC WORKS DEPARTMENT

To: City Council

Through: City Manager's Office

From: Shane Davis, Deputy Director of Public Works

Date: November 4, 2024

Subject: TRA Pretreatment Program

Residents, businesses, and industries produce wastewater which can be in the forms of sewage or industrial liquid wastes. These liquid materials need to be treated, recycled or reclaimed. Liquid waste flows via gravity through a series of pipes to either a lift station where the material is pumped to a higher elevation and the process starts again or to a publicly owned treatment works (POTW) treatment plant. The entire system used to transport, store, treat, recycle, or reclaim municipal sewage or industrial waste of a liquid nature is a POTW whereas the treatment facility is a POTW treatment plant.

POTW treatment plants are designed to treat the wastewater generated by the area serviced. Bacteria play a large role in the treatment process. Protecting the pipes, treatment plant and bacteria from harmful chemicals is essential to meeting the discharge regulations for the POTW treatment plant and protecting public health and the environment. Chemicals can be harmful in terms of both the amount of chemical discharge and/or due to the toxicity of the chemical. If the chemical can degrade metal components, kill the bacteria at the plant, or cannot be removed by the treatment process, it should not be discharged into the POTW.

The national pretreatment program requires commercial and industrial facilities that introduce pollutants to POTWs to comply with pretreatment standards to ensure the goals of the Clean Water Act are attained. The program also outlines requirements for POTWs to proactively protect its infrastructure while overseeing its management responsibilities.

The objectives of the program are to:

- prevent the introduction of pollutants into a POTW that will interfere with its operation, including interference with its use or disposal of municipal sludge
- prevent the introduction of pollutants into a POTW that will pass through the treatment works or otherwise be incompatible with it
- improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

The national pretreatment program has specific discharge standards and requirements that apply to commercial and industrial wastewater discharged to a POTW. By reducing or eliminating waste at the point of origin (source reduction), fewer toxic pollutants are discharged to and treated by the POTWs, providing benefits to both the POTWs and the industrial users. This is the focus of the City's pretreatment program. The City has a contract with the Trinity River Authority (TRA) to discharge municipal sewage and industrial liquid waste into their POTW.

TRA operates multiple POTW treatment plants. Therefore, they are required to have a pretreatment program that complies with federal and state regulations. Federal and state regulation are complex. City staff does not operate a POTW treatment plant, so this is not an area of expertise. Therefore, the City contracts with TRA for permitting, inspection and sampling of commercial and industrial facilities that due to the nature of the material they could discharge could violate the requirements of the national pretreatment program.