

WARWICK SEWER AUTHORITY INDUSTRIAL PRETREATMENT PROGRAM

Mission of the Program:

The Warwick Sewer Authority's Industrial Pretreatment Program (IPP) was established in 1983 (Public Laws of 1983, Chapter 13) as required by the Federal Government through the provisions of the General Pretreatment Regulations (40 CFR Part 403). The Program oversees the issuance of wastewater discharge permits for of all Warwick based industrial and commercial facilities discharging wastewater, either directly or indirectly (via septage hauler), to the Warwick Sewer System. User compliance with the conditions as set forth in their permit ultimately protects our sewer collection system, the treatment facility, the Pawtuxet River and Narragansett Bay.

Objectives of the Program:

- Identify Users of the system who because of the size and/or nature of their waste could alone, or in conjunction with others, interfere with the operation of the system or contaminate the resulting sludge;
- Prevent the introduction of pollutants into the municipal wastewater system which will interfere with the operation of the system, or contaminate the resulting sludge;
- Prevent the introduction of pollutants into the municipal wastewater system which will pass through the Publicly Owned Treatment Works (POTW), inadequately treated, into receiving waters, or otherwise be incompatible with the POTW;
- Improve the opportunity to recycle and reclaim wastewater and sludge from the POTW;
- Provide for equitable distribution of the cost of the municipal wastewater system;
- Carry out the responsibilities of the Authority as a POTW whose responsibilities are prescribed in the Federal Water Pollution Act, also known as the Clean Water Act (33 United States Code (U.S.C.) § 1251 *et seq.*), the General Pretreatment Regulations (40 Code of Federal Regulations (CFR) Part 403) and subsequent Regulations issued pursuant to said act;
- Establish fees for the cost of the IPP, which cost the Authority, in its discretion, may determine by Regulation, shall be borne either by all Industrial/Commercial Users and Commercial Users Engaged in Food Services, equitably, by all Industrial/Commercial Users and Commercial Users Engaged in Food Services in proportion to the amount and type of discharge, by all Industrial/Commercial Users and Commercial Users Engaged in Food Services of the treatment works generally, or in any manner, deemed appropriate by the Authority; and,
- Enable the Authority to comply with its National Pollutant Discharge Elimination System permit conditions, sludge use and disposal requirements, and any other Federal or State laws to which the POTW is subject.

Activities Performed:

In order to meet our Program's objectives, the following activities are performed on a daily/routine basis:

- **Identify new industrial and commercial Users, as well as changes/modifications to current Users' processes.** Pretreatment personnel routinely interface with other WSA personnel and City Departments, (i.e., Building Department, Tax Collector's Office), as well as, track newspaper announcements/advertisements, phone directory and manufacturing listings to identify new and unpermitted commercial businesses within the City. Modifications/changes to permitted Users' processes are flagged through the Building Department. Business sales/closings are identified by working with WSA usage/assessment personnel, as well as, the Tax Collector's Office.
- **Permit commercial and industrial facilities as identified in our Sewer Use Ordinance.** Our IPP currently permits approximately 650 commercial/industrial facilities throughout the City. The very diverse nature of our permittees' operations and the wastestreams they generate pose a daily challenge for our personnel in ensuring the protection of our system and the environment. Permitting is one of the most effective ways of educating our businesses in pollution prevention and environmental compliance.
- **Inspect and monitor commercial and industrial facilities located within the City of Warwick.** Pretreatment personnel conduct between 750-800 (average) inspections/monitoring events each year. These events provide our User base with an opportunity ask time relevant questions of our Program personnel. They also provide our personnel with an opportunity to ascertain from conversations with employees, visuals of the facility and data results from samplings, the degree of Pretreatment knowledge and commitment to pollution prevention that the permittee demonstrates. We have determined that frequent calls and site-visits, "just to see how the industry/commercial facility is running", above what was required by our Program, provide a reassuring and encouraging message to our permittees. Our permittees have indicated that they are pleased that our Pretreatment personnel have shown a genuine interest in their operations in all instances, not just when there are non-compliance issues. Our steadfast presence in the industrial and commercial community has by far enhanced our relationships with our permittees by demonstrating our commitment to pollution prevention and our commitment to our industries in assisting them to achieve exemplary compliance status.
- **Monitor the levels of pollutants entering and leaving our WWTF, as well as at strategic locations found in the sewer collection system.** Our IPP continues to serve the needs of the community effectively by reducing the toxic loadings to the wastewater treatment facility, the Pawtuxet River and the Narragansett Bay. This reduction is not only a positive reflection on Warwick's IPP, but also a positive reflection on our permittees dedication to environmental compliance. The total metals concentration has been reduced from approximately 1.85 mg/L (1986) to approximately 0.20 mg/L (2022). This tremendous reduction (approximately 89%) in toxic pollutants at our head works undoubtedly stems from the application of local limits (LLMP) through our permitting process. Wastewater discharge limits as derived from our ongoing local limits research maintain head works loadings that facilitate optimum treatment conditions within our plant. Optimum treatment conditions have indeed provided for an effluent compliant with our RIPDES effluent limitations.

- **Collect application, permit, monitoring fees and surcharge fees to support our program's mission.** Pretreatment personnel are ultimately responsible for assessing and collecting fees from our permittees. Fees in turn support our Program's mission and related activities. Applicants pay a "one time" application fee in order to obtain their wastewater discharge permit. Once permitted they pay an annual pretreatment fee which is determined through characterization of their operations/associated wastestream(s). In addition to an annual permit fee, the User may be required to pay monitoring fees. The Warwick Sewer Authority reserves the right to perform periodic monitoring of the Permittee's wastestream(s). Repeat sampling and analyses conducted by the Warwick Sewer Authority may be deemed necessary due to failure to meet effluent limits, change in production processes or expansions or reduction of production and/or discovery of additional information or production not available at the time of permit issue. All costs incurred for sampling events are the sole responsibility of the User. The monitoring fee is calculated based on the frequency of sampling, the number of events and the fee for the parameters evaluated. Discharge of conventional pollutant levels which exceed their respective surcharge limits is subject to an annual surcharge.
- **Provide scholarships and community education through our Public Outreach Fund.** Our Pretreatment Program continuously strives to enlighten other municipal departments with regard to our pollution prevention initiatives. We have in the past worked very closely with the City's building, public works, finance, tax collector's, treasurer's, management information services and school departments on various Pretreatment associated projects. One area of particular interest to our Program is that of education. Pretreatment personnel provide educational tours and laboratory demonstrations for interested academic groups. In 2003, our Pretreatment Program developed, with the assistance and approval of Mayor Avedisian and Superintendent Mr. Robert Shapiro, an annual scholarship fund, the John A. Caruso Scholarship Award, derived from fine monies associated with user non-compliance. Each year, the IPP reserves a portion of the collected fine money for the scholarship program, with annual grants ranging from \$1,000 to \$2,000. From its inception in 2003 to 2022, the John A. Caruso Scholarship Award program has distributed nearly \$77,000 among fifty four of Warwick's most exceptional, and very grateful, high school graduates. In recent years our IPP's efforts to educate the public on environmental issues have expanded beyond Warwick's city limits. Environmentally geared educational sessions and tours have been provided to students of various ages, from several RI communities. Students are enlightened with details of the water cycle and pollution prevention, impressing upon students that "the water we have is the water we've always had and the only water that we'll ever have." A tour of the plant is always followed by a visit to our on-site laboratory where students are provided a microscopic view of our plant's microbes, or "bugs", that work to digest pollutants and clean the wastewater. In addition to outreach for school children, more advanced tours have been provided to college students. These tours focus on plant operations and the engineering involved in treating over 5 million gallons of wastewater every day. Resources obtained through RI Department of Environmental Management, Environmental Protection Agency and RI Pretreatment Coordinator's Association meetings have been shared with our user base and have often resulted in improved compliance records and reduced operating costs for our users. Improved compliance and savings for some of our users have been quite remarkable.