

A. Narrative Statement

The approval of Newark's Industrial Pretreatment Program in March 1985 was the beginning of what has been a continuously successful program. Cooperation between the City and its industrial dischargers has been very good. Each industrial discharger who has a pretreatment system is monitored, as well as other significant industries who discharge directly to the POTW without treatment. Newark is currently in compliance with federal, state and local regulations, and Newark's WWTP is operating in compliance with its most recent NPDES permit, 4PE00001*MD.

B. State and Federal Regulation Changes

Newark's Industrial Pretreatment Program is current with federal and state regulations. The most recent Industrial User Permits (Administrative Orders) have an effective date of April 1, 2013 through March 31, 2017. The laboratory analysis methods used to regulate the City of Newark's Industrial Users are in compliance with the latest 40 CFR Part 136 update published May 18, 2012. The City of Newark Wastewater Treatment Plant is operating under NPDES permit 4PE00001*MD with an effective date of August 1, 2011 until July 31, 2016. Our industries continue operating under the last permit in force as well. Industrial permits will be updated when a new NPDES permit is issued to the WWTP, and a Technical Justification study is required by OEPA.

C. Adequacy of the Sewer Use Ordinance

The authority of the City to issue Industrial User Permits (Administrative Orders) to Newark's industrial dischargers is contained in the Newark Codified Ordinance, Chapter 1040, Section 25, Part C (Sewer Use Ordinance) and amendments thereto. The authority to administer the FOG program is contained in Chapter 1047. The City approved the most recent Sewer Use Ordinance in 2013. The current Industrial User Permits (Administrative Orders) were issued that same year. Many pollutants of concern are addressed specifically in the Sewer Use Ordinance, and discharge limits have been determined through background studies and plant removal efficiencies. The limits that are published in the Sewer Use Ordinance have proved successful in protecting the wastewater treatment plant, and ultimately the Licking River, from high levels of toxicity. One of the limitations of the Sewer Use Ordinance is regulation of certain parameters that the WWTP has had difficulty treating that are not specifically listed in the SUO under Section 13: Limitations on Wastewater Strength. Compounds that have created difficulty are excess nitrates, phosphorus, sulfates and residual color in landfill leachate wastewater. We have relied on Section 12, Item O of the SUO, as well as language in the individual Industrial User permits (Administrative Orders), to regulate these compounds on a case by case basis for each industry.

Newark Sewer Use Ordinance, Section 12, Item O: Any water or wastes which cause a detrimental environmental impact or cause the quality of the Wastewater Treatment Plant effluent to violate the NPDES permit limitations or applicable water quality standards.

D. Industrial Pretreatment Operating Procedures

Newark's categorical and significant IU's are inspected annually; insignificant IU's are inspected tri-annually. We maintain continuing surveillance of all our significant and categorical

industrial users. Five (5) significant IU's submit monthly self-monitoring reports. Data from in-house and self-monitoring analyses are reviewed to ensure that all regulated parameters are within limits. All data is maintained in the Allmax Synexus database.

The WWTP Influent, Effluent and Cake have been analyzed for Priority Pollutants, and two of our industrial dischargers (Anomatic and Owens Corning) routinely self-monitor Total Toxic Organics. The Priority Pollutant data for the WWTP has been submitted to the online eBiz Priority Pollutant Report form. There were no significant findings in either of the industrial TTO reports.

E. Industrial Pretreatment Program Financing

In 2013, Newark began a “stepped” approach to increasing industrial user fees and wastewater strength surcharges. The final increase was in July 2016. Strength surcharges are assessed on all industries discharging higher than background concentrations of suspended solids, CBOD and ammonia. This additional fee helps to recover the City's increased waste treatment costs associated with higher strength waste (electricity to run blowers, trucking costs to remove biosolids, etc.). Surveillance charges are assessed on the industries based on the number of scheduled sampling events per week; higher surveillance frequency results in a higher charge. This charge is used to recover the cost of collecting samples, testing, and reporting analytical results. The 2013 adjustment to the industrial user fees and strength surcharges updated the previous rates that were established in 1999.

The WWTP also uses fee-based trucked waste disposal as a capital-building measure to meet the demands of its operating budget.

F. Local Limits

The most current Local Limits Study was completed in 2011, and was the basis for the latest Industrial User Permits (Administrative Orders) issued in 2013. An updated Local Limits study for background constituents will be scheduled when our new NPDES Permit arrives.

In the past, we have not included nitrate or nitrite in the background study required to establish Local Limits for our industrial users. We plan to include these parameters as well as sulfate in the next background study. By establishing a limit for nitrate+nitrite and sulfate, we will be able to regulate industrial discharge of these parameters through updated Industrial User Permits (Administrative Orders).

G. Program Accomplishments

Anomatic:

Anomatic continues to reclaim as much phosphoric acid as possible from its production process. The efficiency of this reclamation has improved dramatically over the years and has allowed the City of Newark to reach the OEPA required goal of < 331.5 kg/day (avg) total phosphorus discharged from the Newark WWTP to the Licking River. The phosphorus discharge from the WWTP during Jan 2017 to April 2017 averaged 372.82 kg/day. This number fell to 190.70 kg/day for the period May 2017- mid Oct 2017.

Some accidental slugloads have been released by a variety of other industries, but the notification protocols in place have proved to be protective of the WWTP. The only industry that received an NOV during this reporting period was Universal Veneer for discharging low pH process water during the month of January 2017. Other slugloads that have been discharged during this reporting period, but have not triggered an official Notice of Violation are; sour cream and milk from Tamarack Dairy, out-of-spec pH wastewater from Arboris, and landfill leachate from Owens Corning. No violations of the WWTP's NPDES permit occurred as a result of these releases.

H. Problem Areas of Industrial Pretreatment Program

We are currently working to determine a numerical limit for industrial discharge of nitrate+nitrite and sulfate. Scrubber waste discharge from one of our industries is high in these compounds, and it creates problems at the WWTP. High nitrate waste does not effectively decompose in the collection system before it reaches the WWTP, and the subsequent denitrification in the clarifiers has created settling issues. Sludge from the blankets is disturbed and raised into the water layer as nitrogen gas is released. High sulfate has also shown an interference at our WWTP. Sulfate-reducing bacteria have flourished in our digesters due to the abundance of sulfate, and they are out-competing the methanogen organisms in our digesters. As a result, there has been higher than normal corrosion of equipment and less methane gas produced during the anaerobic digestion process. As a part of the next background study, we will test for nitrate+nitrite as well as sulfate (see Item F in this document). We have also retained an engineering firm to determine the amount of nitrate+nitrite, sulfate and phosphorus that the WWTP can effectively process. The control mechanism we will use to limit these compounds in industrial wastes will be written into each industry's Industrial User Permits (Administrative Orders).

I. Program Modifications

None

J. Special Considerations

Most of the industries in our pretreatment program take their role in the prevention of pollution very seriously. They are generally receptive to any modifications to their system that we request. Without their cooperation, Newark's pretreatment program would be almost impossible to administer. The City of Newark also recognizes Ohio EPA's ongoing assistance with the effective implementation of this Program. OEPA has been very helpful in creating a stronger Industrial Pretreatment Program for the protection of both our citizens and the environment.

General Monitoring Information - Data Entry Spreadsheet

Permit Number	4PE00001*MD		
Facility Name	Newark Wastewater Treatment Plant		
Reporting Period	From:	9/1/2016	To: 9/30/2017

IU Classification or General Permit Name	POTW Industrial User Monitoring		Industrial User Self-Monitoring	
	Inspection Frequency	Sampling Frequency	Sampling Frequency	Reporting Frequency
Anomatic Corporation	1	312	365	12
Universal Veneer	1	52	365	12
Tamarack Dairy	1	312	365	12
Holophane	1	0	0	0
Arboris LLC	1	312	365	0
Owens Corning	1	365	365	12
Star Wipers	1	52	365	12
International Paper	1	52	0	0
PCA	1	52	0	0
Buckeye Linen	1	52	0	0
Licking Memorial Hospital	1	52	0	0
MPW	1	312	0	0
Modern Welding	1	0	0	0
The Ohio State University	1	0	0	0
Tectum Corporation	1	0	0	0
Contour Forming/Flo-Form	1	0	0	0

