

HAMLTON TOWNSHIP WATER POLLUTION CONTROL



ANNUAL REPORT

2024

HAMILTON TOWNSHIP
DEPARTMENT OF WATER POLLUTION CONTROL
2024 Annual Report

January 2025

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Hamilton Township Department of Water Pollution Control 2024 Annual Report

“No water, no life. No blue, no green.”

- Sylvia Earle

Mission

The primary mission of the Hamilton Township Department of Water Pollution Control (WPC) is to protect the public and the environment by providing high quality wastewater utility service. WPC is dedicated to serving the residents of Hamilton Township, Robbinsville Township and the commercial ratepayers of the WPC service area.

Facilities Overview

The Hamilton Township WPC was initially constructed in the late 1930's and underwent substantial upgrades in 1953, 1968, and 1975. WPC operates a regional wastewater treatment facility and collection system with an New Jersey Pollution Discharge Elimination System (NJPDES) permitted capacity of sixteen (16) million gallons per day (MGD), and a 2024 actual average daily flow of 7.7 MGD. Wastewater treatment plants are also known as water resource recovery facilities. The utility has been in operation for over 80 years and is currently serving over 100,000 residents from three municipalities; namely, Hamilton Township (Mercer County), Robbinsville Township and a few specific facilities in West Windsor Township. The facilities in West Windsor include the Mercer County Community College, the adjacent park facility and related outparcels. The Hamilton Township wastewater collection system includes 350 miles of sewer pipes and 27 pumping stations in its 40-square mile service area. Additionally, there are 23 privately owned and operated pump stations in Hamilton. WPC also provides the licensing, and operational and maintenance responsibilities for the ten (10) Robbinsville Township pump stations and receives compensation from Robbinsville for this service. Refer to the Fast Facts on page 5.

The approved Mercer County Wastewater Management Plan (WMP) includes a chapter for Hamilton Township wastewater management. In 2019, Mercer County submitted the updated draft of the WMP to the New Jersey Department of Environmental Protection (NJDEP). WPC's

facilities reside in the Assunpink, Crosswicks and Doctors Creek Watershed. Wastewater cleaned by the treatment plant, also known as effluent, is discharged to the Crosswicks Creek. The plant produces secondary effluent using both trickling filter and rotating biological contactor processes. To reduce volume and thus save money, sludge is thickened, digested and then dewatered using belt filter presses. The sludge cake/grit/screenings are then hauled to the GROWS North Landfill located in Morrisville, Pennsylvania. Hamilton does not have a combined sewer system (CSS) in its collection system. A CSS occurs when stormwater and wastewater combine in the collection system before reaching the treatment plant.

WPC continues to be environmentally proactive by capturing methane to heat digesting sludge, replacing all lighting within the plant to energy efficient lighting and converting mowed lawn to natural vegetation.

Overall Progress

The wastewater industry is an essential service where employees are required to be on-site around the clock to operate and maintain the treatment plant and collection system.

The sewer rate study completed in 2022 concluded among other things, that it could more accurately predict rate increases when the Master Plan is completed. The Wastewater Master Plan has been started and is expected to be completed in 2025. WPC infrastructure, operation and maintenance are funded almost entirely by sewer taxes plus a small amount received from connection fees. Before 2020, Hamilton's sewer service rate had not increased since 2008, yet still remains among the lowest in the region.

The Master Plan will include not only inspections of our facilities, but it will also produce an estimated cost for each upgrade/replacement anticipated to be needed over the next twenty (20) years, including the evaluation of alternatives.

In 2024, WPC continued its efforts toward optimizing plant operations, performing capital improvements and fortifying asset management. WPC followed the recommendations established by the New Jersey Clean Water Council, which included a mandate for sustainable asset management by using the United States Environmental Protection Agency (USEPA) Capacity Assurance, Management, Operations and Maintenance (CMOM) approach to achieve this mandate. WPC continued to comply with the requirements of a large list of local, county, state and federal regulations.

Like the rest of the United States relative to water and wastewater services, WPC faces the issue of an aging workforce and hiring personnel with suitable skills. Hamilton believes strongly in investing in jobs. With this in mind, WPC continues to provide career and annual safety training, foster a great-place-to-work environment, offer paid internships and examine

succession planning alternatives. The Township works toward a diversified and inclusive workforce, with training to end harassment and discrimination in the work place.

Also like the rest of the United States, WPC faces aging infrastructure issues. With part of the plant and piping facilities still in operation since their original startup in the late 1930's, it is no wonder certain infrastructure needs to be replaced. While some have been replaced, it is time for some to be replaced again. The replacement or upgrade of aging infrastructure requires substantial money, thoughtfully planned over time, prioritizing our most critical needs first. Being proactive, is the safest and less expensive alternative. While emergency response is sometimes unavoidable, it is much more expensive, carries potential NJDEP fines and does not help instill public trust.

TRAI SR is one of the digitized tools WPC used daily to manage and map its assets, in addition to tracking work orders.

WPC infrastructure includes the piping collection system, some of it being over 80 years old. Age is only one factor used in prioritizing the need to repair, line or replace a pipe. Meanwhile, WPC continued to inspect, televise and test pipes to verify integrity.

WPC continued efforts to reduce spending where possible. This included improving labor efforts, reducing energy and chemical use when possible, and evaluating methods to reduce paperwork by conducting more work electronically. For the last couple of years, electricity consumption at the treatment plant continued to go down but the cost did not due to the increased electricity rates.

Using the extensive data submitted to the Delaware River Basin Commission (DRBC) over the past few years, the DRBC continued to refine their modeling analyses of the Delaware River and subsequent reports of findings and recommendations. The possible tightening of our NJPDES permit appears to pertain primarily to ammonia removal and is based on the on-going dissolved oxygen modeling of the Delaware River, and affordability studies, both by the DRBC. If or when more stringent permit limits are required, connection fees and user charges will be re-evaluated to confirm they include the costs related to the required capital improvements and additional wastewater utility operations and maintenance. This, while discussions about PFAS (per- and polyfluoroalkyl substances) regulations and associated treatment crisscross the country.

In order to comply with environmental regulations, all aspects of WPC plant operations must be continuously monitored. One aspect of this monitoring includes taking wastewater and sludge samples from critical locations throughout the treatment plant and analyzing them in-house. WPC continued to perform the required analyses to determine compliance with permit requirements in addition to the daily process bench tests performed 365 days per year. Except

for wastewater bioassays, metals, oil and grease, and sludge analyses, all other wastewater sampling and conventional pollutant analyses are completed at WPC in our State certified laboratory.

For projects within the 208-sewer service development areas, WPC continued to perform development reviews for new applications proposing to connect to the sewer collection system. This year, over 100 construction projects in the Township were reviewed for pump station and collection system capacity, estimated wastewater flow and their technical specifications, and if needed, NJDEP Treatment Works Approval submissions.

WPC received and responded to 328 Hamilton Township HamStat Q-Alerts and direct phone calls in 2024. This work included residential and main line sanitary sewer blockages, storm drainage issues, and a few odor concerns.

The Department of WPC is budgeted for 70 employees who are unionized and follow civil service requirements. Efforts continued to improve the skill level of the entire work force with a variety of technical and management training classes. WPC also continued its cross-training program to develop employees' knowledge in all work areas.

WPC efforts are divided into two (2) primary categories, "inside" and "outside" work tasks. "Inside" includes the operation and maintenance of the treatment plant. "Outside" includes the operation and maintenance of the pump stations and maintenance of the collection system (jetting, vacuuming and televising).

Safety continued to be a primary goal throughout the entire WPC Department. Safety meetings with supervisors were held regularly and periodically with individual groups in order to focus attention on the varying safety issues. In addition, safety suggestions were received from employees in the "safety suggestion box".

WPC continued its award-winning Educational Outreach Program in which environmental scientists from WPC presented a program on Water Pollution and the Environment to various Township schools, and conducted numerous on-site tours for a variety of community groups.

Refer to the Hamilton Township Department of Community Planning and Compliance for stormwater and flood mitigation initiatives and accomplishments. In recent years, Rutgers Cooperative Extension - Water Resources Program has made tremendous strides in developing and implementing solutions to flooding and storm water issues facing Hamilton Township.

FAST FACTS for 2024	
Hamilton Households & Commercial Users	30,721 (2024)
Robbinsville Households & Commercial Users	5,096 (2024)
Total Households & Commercial Users	35,858
Hamilton Permitted Industries	5
NJPDES Permitted Plant Capacity	16,000,000 gallons per day
Total Plant Average Daily Flow	7,700,000 gallons per day
Robbinsville: Average Daily Flow	1,511,209 gallons per day
Total Cumulative Flow Treated per Year	2,818,200,000 gallons
Hamilton: Collection System	350 miles of sewer pipe
Hamilton: Pump Stations	27
Hamilton: Manholes	8060
Robbinsville: Collection System	73 miles of sewer pipe
Robbinsville: Pump Stations	10
Robbinsville: Manholes	1,512
For Hamilton WPC:	
WPC Plant Electric Consumption	3,817,538 kilowatts
Pump Stations Electric Consumption	1,256,828 kilowatts
Sludge Cake Disposed	4903 tons
Grit & Screenings Disposed	91 tons
Approved Operating Budget – CY2024	\$25,498,830
Approved Capital Budget – CY2024	\$0
Acreage of Treatment Plant	35.9 acres
Acreage of Pumping Stations	7.9 acres
Number of Buildings	50
Number of Pumps	288
Number of Valves	974
Number of Motors	495
Number of Heating Systems	21

Wastewater Treatment Plant – Major Projects for 2024

In a continuing effort to maintain the efficiency of treatment operations and improve overall infrastructure condition, WPC has initiated and/or completed the following significant plant improvement projects during 2024:

Grit Chamber Outlet Structure Rehabilitation

The construction contract for the rehabilitation of the deteriorated grit removal chamber outlet structure and isolation sluice gates was bid and subsequently awarded in late 2022. The project has been completed and full plant bypass pumping was removed. During the project, WPC took the opportunity to inspect the normally submerged pipes and chambers associated with the bypass and discovered areas in need of repair. The appropriate steps were taken to affect the necessary repairs while under bypass, resulting in substantial financial savings.

Replacement of Six Rotating Biological Contactors (RBC's)

The heart of the biological treatment employed at WPC are 48 Rotating Biological Contactors (RBC's). This is a fixed film biological process that employs 100,000 to 150,000 square feet of corrugated plastic, per contactor, mounted to a shaft that rotates within the wastewater stream. The plastic media acts as a surface for the growth of the biological film that treats the wastewater as it flows over the rotating contactors. In April of 2023 a resolution was adopted authorizing the Township to obtain financing through the New Jersey Water Bank (NJWB). Design was completed, the construction contract awarded and the preconstruction meeting held by the end of 2023. A change order was approved to add another RBC unit to the contract, providing a total of six (6) units. Most of 2024 consisted of the fabrication of the RBCs, with three (3) being delivered by the end of 2024.

Master Plan

Preparation of the Master Plan continued in 2024 with physical condition assessments and an assessment of plant unit processes. With this information, the consultant began the twenty-year horizon Capital Improvement Plan (CIP).

Pump Stations and Collection System – Major Projects for 2024

Efforts this year focused on pump station upgrades, piping repairs, and rehabilitation. In a continuing effort to maintain the efficiency of the pump stations and collection system and improve overall infrastructure condition, WPC has initiated and/or completed the following significant improvement projects during 2024:

NJDOT Pump Station Replacement

The existing NJDOT Pump Station on Kuser Road was installed originally to serve the low volume of wastewater flow from the NJDOT maintenance facility near Route 130. In order to serve projected new development in the area, the pump station and force main pipe were replaced with ones that have more capacity.

Yardville-Groveville Force Main Rehabilitation/Replacement

An engineering evaluation, design, and bid document preparation for rehabilitation or replacement of the remaining portion of the Yardville-Groveville Force Main was awarded in 2024.

Melody Estates and Middleton Drive Pump Station Replacements

In September of 2022 a resolution was adopted authorizing the Township to obtain financing through the New Jersey Water Bank (NJWB) for this project. Engineering design and contract document preparation continued in 2024 for replacement of the Melody Estates and Middleton Drive Pump Stations. It is anticipated that this project will move into the bid phase in 2025.

Pump Station Emergency Generators

This project consists of the installation of three new and one replacement emergency generators at our Pump Stations. Three of four new generators became operational in . It is anticipated that this project will be completed in early 2025.

Klockner Road Pump Station Rehabilitation

Engineering design, bid document preparation, and contractor bidding was completed for this project in 2024. The project scope of work primarily includes wet well and foundation concrete rehabilitation which requires bypass pumping of the station during the concrete work. Portions of the interior of the pump station will also be painted. It is anticipated that this project will be completed in 2025.

Various Pump Station Wet Well Rehabilitation

In 2024, a concrete condition assessment was conducted at pump stations with concrete wet wells in order to prepare a scope of work for the project. The project was awarded to a consulting engineer for the preparation of bid documents and construction administration.

Collection System Evaluation

A comprehensive evaluation of the collection system continued in 2024 by a consulting engineer to properly operate, maintain, and accommodate future growth for the next 20 years. This evaluation involves the review of existing data and mapping, rehabilitation work completed and planned, known and suspected sewer capacity issues, and future sewer needs in

both Hamilton and adjoining Townships. It is anticipated that this evaluation will be completed in 2025.

Sanitary Sewer Rehabilitation

A contract for Cured In Place Pipe (CIPP) lining of approximately one and a quarter mile of smaller diameter sanitary sewer pipe was completed in 2024. A summary of collection system piping projects since 1997 is shown on Page 10.

Asset Management

The TRAIRS system, used for asset management and Geographic Information System (GIS) information, service requests, and work orders, continued to be enhanced each year with more data. These data include linking scanned lateral connection information, and completed collection system repairs and rehabilitations (lining/coating). The data collected from the gravity main inspections are directly linked to the TRAIRS database which streamlines review and prioritization of necessary rehabilitation and/or repairs.

Routine Maintenance of Sanitary Sewer Lines

Routine maintenance of sanitary sewer lines continued in 2024. This included cleaning of sewer pipes with high velocity water jetting and root and grease cutting as needed.

Inspection and Cleaning of Sanitary Sewer Lines

WPC conducted sewer cleaning and televising inspections using Closed Circuit TV (CCTV) of 589 pipe segments totaling over 113,000 linear feet, or 21 miles, of gravity pipe in 2024. Hamilton Township's jet-vac trucks, jet trucks and a CCTV truck were used to accomplish this.

Underground Infrastructure Repair Projects

WPC was required to make numerous repairs to underground sewer piping and manholes in need of repair. The projects completed in 2024 are shown on page 11.

Sanitary Sewer Connection Permits

A summary of the total number of sanitary sewer connection permits and fees since 2008 is shown on page 11.

Collection System Piping Projects Summary Since 1997

Project Name	Year	Approx. Linear Feet	Diameter of Pipe (in)	Manhole Rehab included?
E. Park Ave Replacement	1998	2,500	48	
W. Park Ave Lining	1998	500	48	
S. Broad St Lining	1999	1,800	24-27	
Route 130 Replacement	2001	800	18	New
Bowhill-Schiller Replacement/Lining	2004	3,750	15-21	
Wilson Ave Replacement	2005	2,575	8	New
Emeline Ave Replacement	2005	370	24	
Arena Dr Replacement	2006	1,930	8	New
Independence-Emeline Lining	2006	3,600	48	
W. Park-Independence Lining	2010	3,000	48	Yes
I-195 Headworks Slip-Lining	2010	350	78-66	
Yardville-Groveville Force Main Lining	2010	4,000	18	
Nottingham Way-Hamilton Ave Lining	2010	6,000	24-36	
Various Lining	2010	5,000	8-24	
North Branch of Pond Run Slip-Lining	2011	5,200	42-36	
Wert Ave Lining	2011	7,400	48	Yes
Bowhill Ave Replacement	2012	1,500	8-12	Yes
Various-Phase I Lining	2013	2,800	8-15	
Various-Phase II Lining	2013	14,000	8-21	Yes
Park Ave Force Main Replacement	2014	2,000	6	
Various-Phase II Lining	2014	28,000	8-21	Yes (184 MHs)
Hamilton Ave Lining	2014	5,000	24-30	Yes
Newkirk Ave Lining	2014	5,000	42	Yes
Cedar Lane Lining	2014	1,000	12	
Church St Lining	2016	600	12	
Various Pipe Lining	2018	25,000	6-15	
Various Pipe Lining	2019	30,000	6-15	
Crestwood Force Main Replacement	2019	600	18	
Yardville-Groveville Force Main Replacement	2020	1,900	6	
Various Pipe Lining	2020	3,250	8-10	
Various Pipe Lining	2024	6,800	8-12	
Total		176,225		

UNDERGROUND REPAIR PROJECTS COMPLETED IN 2024

Date	Location	Repair Activity
1/4/2024	26 Macon Dr	Lateral Repair
1/5/24,1/8/24	379 Whitehorse Ave	Lateral Repair
2/8/2024	34 Tettermer Ave	Lateral Repair
2/14/2024	65 Saybrook Ave	Lateral Repair
2/15/2024	20 Berkshire Rd	Lateral Repair
3/15/2024	Bradford Ave	Easement clearing
3/21/2024	Whitehead PS	Water Line Relocation
4/8/2024	330 Randall Ave	Lateral Repair
4/9/2024	331 Randall Ave	Lateral Repair
4/11/2024	30 Kerr Dr	Lateral Repair
4/22/2024	100 Julia Ave	Lateral Repair
5/14/2024	1719 Roberts Ave	Lateral Repair
5/16/2024	1721 Roberts Ave	Lateral Repair
5/17/2024	1725 Roberts Ave	Lateral Repair
5/20/2024	1723 Roberts Ave	Lateral Repair
5/21/2024	1731 Roberts Ave	Lateral Repair
5/22/2024	1729 Roberts Ave	Lateral Repair
5/28/2024	1737 Roberts Ave	Lateral Repair
5/29/2024	1727 Roberts Ave	Lateral Repair
5/30/2024	1739 Roberts Ave	Lateral Repair
6/24/24-6/28/24	Kuser Rd-Sweet Briar Ave	Casting Replacements
7/29/24-7/30/24	2871 Quakerbridge Rd	Riser Repair
8/7/-8/8/24	S. Broad St	YG FM Repair
8/13/24-8/21/24	Rt 156/130	Main Replacement
9/6/2024	75 Regina Ave	Cleanout Repair
9/10/24-9/12/24	249 Dancer Dr	Main/Wye/Lateral Repair
11/4/2024	226 Samdin Blvd	Cleanout Repair
11/12/2024	970 S. Olden Ave	Wye Replacement

SANITARY SEWER CONNECTION PERMITS				
Year	Commercial		Residential	
	Count	Fees	Count	Fees
2008	52	\$660,504	11	\$27,500
2009	54	\$246,975	32	\$80,000
2010	27	\$171,350	129	\$322,500
2011	85	\$212,500	31	\$77,500
2012	21	\$137,648	78	\$195,000
2013	31	\$266,853	179	\$418,375
2014	34	\$458,184	106	\$265,000
2015	32	\$665,650	97	\$242,500
2016	32	\$393,072	124	\$308,250
2017	37	\$278,811	11	\$51,917
2018	21	\$320,525	99	\$169,500
2019	21	\$282,850	54	\$132,500
2020	21	\$540,525	70	\$191,875
2021	38	\$475,279	74	\$240,303
2022	26	\$269,347	12	\$58,325
2023	25	\$329,274	80	\$185,750
2024	23	\$430,563	54	\$400,225

Wastewater Treatment Plant – Work Proposed for 2025

Replacement of Six Rotating Biological Contactors, call this Phase I

Project construction continues with the remaining three (3) RBCs expected to be delivered early in the year. Anticipated project completion is the spring of 2025. This is an NJ IBank Infrastructure Trust low-interest rate funded project.

Replacement of Eight Rotating Biological Contactors, Phase II

The design for the replacement of eight more RBCs including drives and motors began at the end of 2024. The award for construction is expected this year. Upgrades in the building including electrical replacement, air blower replacement, and ventilation improvements will be included in future phases. This is planned to be an NJ IBank Infrastructure Trust low-interest rate funded project.

Sludge Dewatering Improvements

WPC will be working with consultants to prepare a preliminary design report to narrow the project scope prior to soliciting proposals for design and bid documents for the replacement of the existing belt filter presses and associated piping, sludge pumps, and cake conveyance systems.

Master Plan

Preparation of the Master Plan will continue in 2025 with compilation of the twenty-year horizon Capital Improvement Plan (CIP) broken into near term (0-10 years), long term (11-20 years), and event driven capital project prioritization. Budgetary cost estimates will be generated and projects will be logically grouped for construction phasing.

1968 Digesters

The digesters are in need of draining and cleaning to remove accumulated grit and rags which accumulate over time. The grit and rags reduce volume and digestive capacity and cause pump clogging issues in the downstream dewatering process. Coincident with the tank cleaning we will be undertaking the replacement of the four valves that isolate the digester tanks from the downstream pumps and piping within the building. These valves are difficult to operate, rendering pump service challenging, and which require the tanks to be empty to facilitate replacement.

Headworks Bar Screen Replacement

To help in the reduction of rags in the downstream plant processes, a new bar screen is proposed to replace the existing one. Rags aggravate many processes, impeding operation and

increase maintenance needs. The bars in the screen will be closer spaced to capture more rags and debris.

Chemical Tank and Process Pump Replacement

As tank, pump and other equipment reach their useful life, they are evaluated. Several chemical tanks and process pumps are slated for replacement in 2025.

Pump Stations and Collection System – Work Proposed for 2025

Inspection and Cleaning of Sanitary Sewer Lines

WPC will continue its Capacity, Management, Operations and Maintenance (CMOM) efforts to accurately assess the overall condition of the collection system infrastructure through use of zoom and CCTV camera inspections, and from ongoing maintenance activities. This information is linked to the Traisr GIS system, and used to document maintenance activities and prioritize capital projects.

Sanitary Sewer Rehabilitation

As WPC receives data from sanitary sewer inspections that are continuously completed in-house and by contractors, defects within the system are prioritized and put on work-to-be-done lists based on category or type of work. WPC will continue to prioritize and issue contracts as needed for the excavation and repair of mains and laterals, and the rehabilitation of manholes and sanitary sewer piping. In 2025, a contract to rehabilitate approximately one mile of smaller diameter sewer mains via CIPP lining is scheduled to be completed.

Yardville-Groveville Force Main Rehabilitation/Replacement

An engineering evaluation, design and bid documents will be prepared for the rehabilitation or replacement for the remaining portion of the Yardville-Groveville Force Main. The project is anticipated to go out to bid and construction initiated in 2025.

Melody Estates and Middleton Drive Pump Station Replacements

It is anticipated that the final engineering design and contract award to replace these two pump stations using funding from the NJWB will be completed in 2025.

Route 130 Pump Station Upgrades

In 2025 it is anticipated that the engineering design and bid document preparation to upgrade the pumps, piping configuration, and driveway will be completed for this 25 year old pump station.

Klockner Road Pump Station Rehabilitation

It is anticipated that this project, consisting of building and wet well concrete work as well as

interior painting, will be completed in 2025.

Various Pump Station Wet Well Rehabilitation

This project will be designed and awarded to a contractor in 2025 to rehabilitate the concrete of the wet wells at four different pump stations.

Various Pump Station Roof Replacement

The replacements of four asphalt shingle roofs on pump station buildings are scheduled to be completed in 2025.

Pump Station Odor System Carbon Replacement

The replacement of odor-absorbing activated carbon at pump stations with odor control system is scheduled to be completed in 2025.

Collection System Evaluation

This evaluation is expected to be completed in 2025 and will assist in preparing a capital spending plan for the next 20 years.

Regulatory Agency Review

WPC is a highly regulated facility and is subject to oversight by the following regulatory agencies and more.

1. US Environmental Protection Agency (USEPA)
 - Capacity Assurance, Management, Operations & Maintenance (CMOM)
 - Pretreatment
 - Sludge
 - Laboratory Certification
2. NJ Department of Environmental Protection (NJDEP)
 - Water Quality/NJPDES Regulations
 - Surface Water Quality Standards
 - Secondary Treatment Standards
 - Sludge Quality
 - Hazardous Waste
 - Air Quality
 - Lab Certification
 - Bioassay
 - Treatment Works Approvals
 - Underground Storage Tanks
 - Groundwater Monitoring
 - Backflow Preventer Permits
 - Pretreatment
 - Enforcement

- Wetlands
 - Water Allocation
 - Stormwater
 - Site Remediation and Waste Management
3. NJ Integrated Water Quality Monitoring and Assessment
 4. NJ Department of Health - Right to Know
 5. NJ Department of Labor- Safety
 6. NJ Department of Transportation - Road Opening
 7. NJ Board of Public Utilities - One Call
 8. Delaware River Basin Commission (DRBC)
 9. Mercer County Soil Conservation District
 10. Municipal Fire Inspections
 11. Statewide Water Quality Management Plan
 12. Interstate Environmental Commission
 13. Federal Emergency Management Agency (FEMA)
 14. Federal Highway Administration - CDL Testing
 15. Federal Communications Commission
 16. Nuclear Regulatory Commission

Workplace Safety

Because the WPC employees work in an industrial environment, workplace safety is of utmost importance. Proper training as well as the issuance of proper Personal Protection Equipment (PPE) is imperative for the safety of all workers. The operation and maintenance of wastewater treatment plants, pump stations and its associated collection system routinely include potential hazards such as pathogens, chemicals, confined spaces, hazardous atmospheric and environmental conditions, excessive heat, electrical voltage, moving parts, heavy machinery, traffic, and challenging weather.

Annual safety training, including, for example, confined space, forklift and Right-To-Know, is mandatory for all operation, maintenance and collection system personnel in order to review and simulate possible hazards. The identification of potential hazards and the review of the WPC proper safety procedures help in keeping all utility employees safe.

Management continues to regularly stress good safety practices to the plant and collection system supervisors and workers. These discussions facilitate the resolution of pending and previous safety issues and the monitoring of required training. In addition, they encourage an open dialogue between employees and management, as well as aid in lowering worker's compensation injuries. The following are types of safety training provided to WPC employees:

Types of Safety Training

- Personal Protective Equipment
- Right-To-Know
- Confined Space Training
- Lock Out/Tag Out
- Arc Flash Safety
- Forklift
- Back Safety and Proper Lifting
- Slips, Trips and Falls Avoidance
- Air Monitoring Equipment
- Self-Contained Breathing Apparatus
- Snow Removal Safety
- Supervisor Training for Commercial Driver's License Holders
- Traffic Safety
- Accident Reporting for Supervisors
- Job Safety Analysis
- Respiratory Fit Testing
- Respiratory Medical Testing
- Blood-Borne Pathogen Training
- Hepatitis Training and Vaccine

Technical Training

Operating the Hamilton Township wastewater utility requires being continuously updated in the knowledge of biology, chemistry, mechanics, computers, regulatory issues, health/safety and human resource issues. Training staff in proper operation and maintenance procedures, as well as compliance with our operating permit, is important to our success in a dynamic environment. Many employees in the department hold wastewater operating and collection system licenses which require that continuing education credits be earned during a three-year cycle. The Township endorses higher training/education for all employees. WPC is committed to providing the required continuing education credits for license holders in order for them to remain current with the NJ Department of Environmental Protection.

WPC encourages employees to undertake online technical training through the California State, University of Sacramento, Water Programs as an option for obtaining NJDEP operator licensing. Personnel organization continued to improve through promotions and out-of-title assignments to fill open positions and temporary work assignments.

WPC also continued to promote training for employees that work within the electrical trade. Courses are also recommended for supervisors and professional engineers. Additionally, WPC

offered training in computer software, asset management and Geographic Information System/TRAISR programs.

In 2024, the utility resumed hosting training sessions on safety issues at the plant. WPC also provided individual training sessions via internet webinars which allowed employees to learn without the travel and registration expenses. In addition, WPC continued to reduce costs by using in-house employees and vendors with specific expertise to provide cross-training to employees. The following is a list of training offered during the year:

Training/Seminars in 2024

Month	Course /Title	Trainer	Location
March	Technical Transfer	NJWEA	Eatontown
March	CPR	JIF	Library
May	Annual Conference	NJWEA	Atlantic City
May/June	Confined Space & LO/TO	Certified Health	WPC Plant
July	PACP Recertification	NASSCO	On-line
August	Respiratory Fit and Bloodborne	NJ Satiety Services	WPC Plant
August	Hydrant Testing	NJ Water Assoc.	WPC Plant
September	Valves Training	NJ Water Assoc.	WPC Plant
October	Technical Transfer	NJWEA	Eatontown
October	Confined Space & Lockout/Tagout	Certified Health	WPC Plant
October	Lab Bench Testing Procedures	In-house	WPC Plant
November	Annual Conference	AEA	Atlantic City
November	New Employee Safety	JIF	Nott. ire House
December	Respiratory Medical Testing	PHS	WPC Plant

Educational Outreach

In 2024 and because the schools resumed in-person classes, WPC was able to present its award-winning Educational Outreach Program in which environmental scientists from WPC present a program on Water Pollution and the Environment to elementary, middle and high school students. The program, which consisted of a computer-enhanced multi-media presentation and visual demonstrations, motivated students to participate. By learning how wastewater is formed and treated, as well as how we can all help protect and preserve water quality, the students became an integral part of Hamilton’s environmentally aware community.

In the recent past, WPC conducted numerous on-site tours for a variety of students and/or interest groups including but not limited to:

- Students from the Plumber Apprentice Class at Mercer County Vocational Technical School
- Regional High School Students

- New Jersey Department of Environmental Protection
- Association of Environmental Authorities
- Rider University Hydrology Students
- TCNJ Environmental Biology Students
- Hamilton Township Employees from Different Departments
- Local Fire Departments



New wet well for the upgraded NJDOT Pump Station

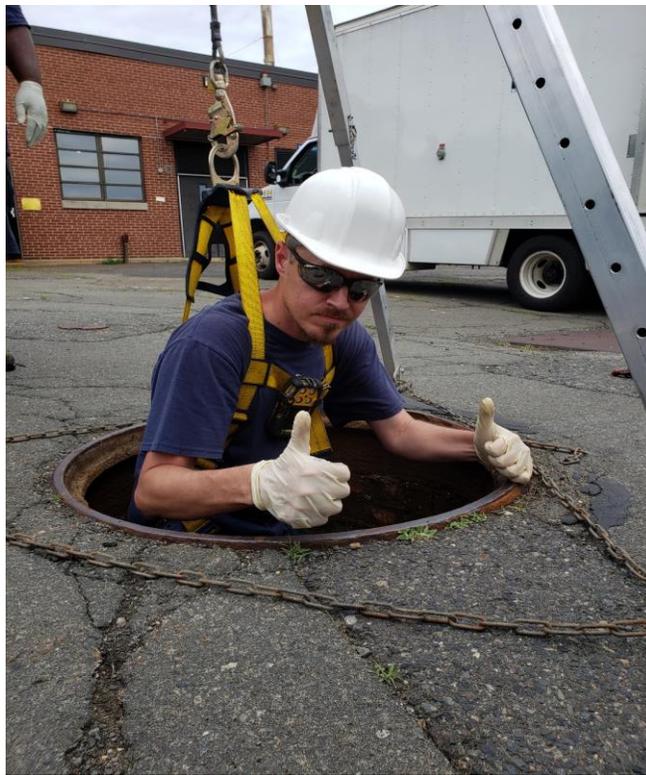


Control panel (above) and excavation (below) for new NJDOT Pump Station





Hamilton Township WPC employees practicing confined space entry procedures.



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Rotating Biological Contactor (RBC) discs being delivered for installation.

