Pennsylvania Department of Environmental Protection

NORTHEAST REGIONAL OFFICE
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0070041**
Facility Type	**Sewage**	APS ID	**545477**
Major / Minor	**Major**	Authorization ID	**1165911**

NPDES PERMIT FACT SHEET ADDENDUM

Applicant and Facility Information

Applicant Name	**Mahanoy City Sewer Authority**	Facility Name	**Mahanoy City Sewer Authority WWTP**
Applicant Address	215 West Centre Street	Facility Address	10 Golden Bear Drive
	Mahanoy City, PA 17948		Mahanoy City, PA 17948
Applicant Contact	Peter Gutsie	Facility Contact	Matthew Lawrence
Applicant Phone	(570) 773-2518	Facility Phone	(570) 773-0899
Client ID	148294	Site ID	257467
SIC Code	4952	Municipality	Mahanoy City Borough
SIC Description	Trans. & Utilities - Sewerage Systems	County	Schuylkill
Date Published in PA Bulletin	November 8, 2025	EPA Waived?	No
Comment Period End Date	December 8, 2025	If No, Reason	Major Facility, Significant CB Discharge

Purpose of Application: Renewal of NPDES permit.

Internal Review and Recommendations

Public notification of draft permit issuance was published in the PA Bulletin on November 8, 2025, and a 15-day extension to the comment period was granted to the permittee. Comments were received from the U.S. Environmental Protection Agency (via 11/20/2025 email), DEP's Clean Water Monitoring & Compliance section (via 12/5/2025 email), and Mahanoy City Sewer Authority (via 12/18/2025 email). The comments and DEP responses are below. Due to changes made to the permit, another draft permit will be issued with a new public comment period.

EPA Comment 1:

As clarified in our discussion on 10/31/25, outfall 002 is a CSO. PADEP noted that it would revise the fact sheet to clarify the classification of this outfall (40 CFR. 124.56(a)) and consider any necessary changes to Part C.II.C.1. of the permit to clarify expectations for the outfall in the Long-Term Control Plan (LTCP) update.

Response:

The Part C.II.C.1 requirement, *"Milestones for ensuring discharges through CSO Outfall 002 attain primary clarification, solids / floatables removal, and disinfection shall be included in the updated LTCP",* is removed from the permit. Those requirements aren't applicable to CSO outfalls as defined in the federal / state regulations and guidance.

EPA Comment 2:

We recommend that PADEP incorporate language in the permit to address the CSO WQBEL requirements. As discussed, the language used for other Northeast Regional Office permits would be appropriate and would identify the minimum expectations for selecting an approach to address water quality in the LTCP update (59 Fed. Reg., 18692 pt. II.C.4.a. and b.).

Approve	Return	Deny	Signatures	Date
X			Brian Burden, E.I.T. / Project Manager	January 2, 2026
X			Edward Dudick, P.E. / Environmental Engineer Manager	January 5, 2026

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Response:

The following wording is added to Part C.II.C.2.:

"CSO Water Quality-Based Effluent Limit

The permittee shall comply with a minimum of one of the following under design conditions:

- A planned control program that has been demonstrated to be adequate to meet the water quality-based requirements of the CWA ("demonstration approach"), or
- A minimum level of treatment that is presumed to meet the water quality-based requirements of the CWA, unless data indicate otherwise ("presumption approach"):

  a. Eliminate or capture for treatment, or storage and subsequent treatment, at least 85% of the system-wide combined sewage volume collected in the combined sewer system during precipitation events under design conditions; or

  b. Discharge no more than an average of [4, 5, or 6] overflow events per year; or

  c. Eliminate or remove no less than the mass of the pollutants identified as causing water quality impairment, for the volumes that would be eliminated or captured for treatment under the 85% capture by volume approach.

- E. coli monitoring must be included in Post-construction compliance monitoring (PCCM) plans to verify compliance with water quality standard and designated uses."

EPA Comment 3:

Since PADEP's proposed seasonal *E. coli* water quality standard became effective in March 2021, PADEP has begun to incorporate *E. coli* monitoring in subsequently reissued NPDES permits. If not already included, EPA recommends PADEP include *E. coli* monitoring as a requirement for the CSO post-construction compliance monitoring (PCCM) plan to verify compliance with water quality standards and designated uses.

Response:

A requirement to incorporate E. Coli monitoring in the PCCM plan is added to Part C.II.C.2.

EPA Comment 4:

We recommend that the WET limit of 2.04 chronic Toxicity Units (TUc) be imposed for the *C. dubia* species, consistent with PADEP's WET SOP and 40 CFR 122.44(d)(1)(ii).

Response:

The draft NPDES permit included limitations for chronic Ceriodaphnia reproduction due to the WET failure described in the previous draft fact sheet. Although the survival endpoint didn't fail for Ceriodaphnia, it's agreed that the intent of the SOP is to impose limitations for both endpoints of a particular species if any of the endpoints showed reasonable potential. The WET limit of 2.04 TUc is added to the permit for Ceriodaphnia survival.

EPA Comment 5:

DEP's Toxic Management Spreadsheet shows that discharge data for the TMDL pollutants of concern (iron, manganese, and aluminum) were below criteria. Please include in the fact sheet a discussion of whether the TMDL assumptions and requirements are being met for these pollutants of concern, see 40 CFR 122.44(d)(1)(vii)(B).

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Response:

Table 3 of the TMDL includes the water quality criteria for aluminum, iron, and manganese:

Table 3. Applicable Water Quality Criteria

Parameter	Criterion Value (mg/l)	Total Recoverable/Dissolved
Aluminum (Al)	0.75	Total Recoverable
Iron (Fe)	1.50 0.3	30-Day Average Total Recoverable Dissolved
Manganese (Mn)	1.00	Total Recoverable
pH *	6.0-9.0	N/A

*The pH values shown will be used when applicable. In the case of freestone streams with little or no buffering capacity, the TMDL endpoint for pH will be the natural background water quality. These values are typically as low as 5.4 (Pennsylvania Fish and Boat Commission).

The maximum reported concentrations from the renewal application modeled with the TMS were: Total Aluminum: 0.05 mg/L, Total Iron: 0.074 mg/L, Total Manganese: 0.026 mg/L.

DEP CW M&C Comment:

Some parameters in A.I.D seem duplicative to parameters in A.I A, A.I.B and A.I.C. Is that intentional?

Response:

Yes, the duplicate parameters in Part A.I.D. are intentional. The Part A.I.D. table is a template table added to the permit by the WMS document generation program for significant Chesapeake Bay dischargers. The table summarizes the Chesapeake Bay parameters of concern and includes the cap loads for Total Nitrogen and Total Phosphorus.

MCSA Comment 1: Addition of Ammonia-N to effluent monitoring; and compliance in three years

It is understood that new effluent Ammonia-N monitoring will be required (2/week, 24-hr composite) from the Permit Effective Date (PED) and reporting will be required. New seasonal effluent limitations will go in effect three (3) years from the PED.

Response:

The comment is acknowledged.

MCSA Comment 2: Addition of influent monitoring for BOD5 and TSS

It is understood that new influent BOD5 and TSS monitoring will be required (1/week, 24-hr composite) from the Permit Effective Date (PED) and reporting will be required. No limits are placed on these influent parameters.

Response:

The comment is acknowledged.

MCSA Comment 3: Addition of effluent monitoring for E. Coli, Total Copper, Total Zinc and Choloform

It is understood that new effluent E. Coli monitoring will be required (1/month, grab) from the Permit Effective Date (PED) and reporting will be required. No limits are placed on this parameter.

It is understood that new effluent Total Copper, Total Zinc, and Chloroform monitoring will be required (1/quarter, 24-hour composite) from the PED and reporting will be required. No limits are placed on these parameters.

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Response:

The comment is acknowledged.

MCSA Comment 4: WET Testing

The Authority recognizes the Department requests annual WET testing during any permit extension period. No annual WET testing has taken place since the three included in the permit renewal application.

The Authority understands that WET testing for the three failed endpoints noted in the permit is required under the new permit. This WET testing is to be conducted quarterly until passage of these endpoints.

Response:

The condition requires testing for all four chronic endpoints (see Part C.IV.A.1.). Note that the 2nd draft permit now includes limitations for all four endpoints.

MCSA Comment 5: Laboratory Costs

The resulting laboratory costs for the new monitoring schedule is $38,288 per year, which is an increase of $17,144 or 81% increase from the previous annual cost of $21,084.

Response:

The comment is acknowledged.

MCSA Comment 6: Page 6, Part A, Additional Requirements No. 4

The only potential bypass at the WWTP would be if a treatment unit(s) was taken offline. Sampling would then occur during the bypass event as specified in the Part A limitations table at Outfall 001 as per our understanding. Please confirm this approach is accurate. We also ask for clarification on which parameters are required to be monitored. Is WET testing required during bypass events?

Response:

The approach described is accurate. All parameters in Part A shall be monitored/reported during bypasses, including the four WET endpoints.

MCSA Comment 7: Page 14, Section III.C.3.

The Authority does not accept any hauled-in waste. They once had a septage receiving station, but that unit has not been used in over fifteen (15) years. The Authority has no plans to accept any hauled-in waste.

Response:

The comment is acknowledged.

MCSA Comment 8: Page 17, Section III.D.

The Authority recognizes an annual $7,500 fee due to PADEP.

Response:

The comment is acknowledged.

MCSA Comment 9: Page 23, Part C.I. – Chesapeake Bay Nutrient Requirements

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The Authority recognizes that the Chesapeake Bay Nutrient Requirements remain in effect as they were under the current permit.

Response:

The comment is acknowledged.

MCSA Comment 10: Page 25, Part C.II. – Combined Sewer Overflows

The Authority recognizes new CSO requirements in the draft permit, including a LTCP Implementation Schedule.

Per your December 15, 2025, email, we understand the "Milestones for ensuring discharges through CSO Outfall 002 attain primary clarification, solids/floatables removal, and disinfection shall be included in the updated LTCP" requirement will be removed from the permit.

Response:

The comment is acknowledged, and it's confirmed that requirement is removed from the LTCP Implementation Schedule.

MCSA Comment 11: Total flow requirements (maximize flow through WWTP)

The original plant was designed with a hydraulic design capacity of 1.38 MGD and a peak flow of 1.75 MGD. These flows were approved in the original WWTP permit as designed by Tracey Engineers, Inc. and approved by PA DER in the late 1970s. The annual average flow for 2024 was 0.6779 MGD. See the following Chapter 94 Report flow table for a five year history.

Monthly Average Flows for Past Five Years (MGD)

Month	2020	2021	2022	2023	2024
January	0.7484	0.6274	0.7596	0.8404	0.8373
February	0.8263	0.6764	0.9366	0.6794	0.6448
March	0.7915	0.8193	0.8712	0.7202	0.7392
April	0.8459	0.7589	0.8722	0.652	0.7638
May	0.8373	0.7583	0.8023	0.6173	0.6751
June	0.8417	0.6652	0.7161	0.6168	0.6529
July	0.7442	0.7067	0.616	0.6514	0.6616
August	0.7216	0.7156	0.6571	0.6119	0.6408
September	0.6215	0.7708	0.6938	0.6773	0.6245
October	0.6715	0.7012	0.7626	0.6427	0.5789
November	0.7094	0.7036	0.7959	0.5581	0.6174
December	0.751	0.682	0.8801	0.7288	0.6985
Annual Avg	0.7592	0.7155	0.7803	0.6664	0.6779
Max 3-Mo Avg	0.8416	0.7788	0.8933	0.8388	0.7404
Max : Avg Ratio	1.11	1.09	1.14	1.26	1.09
Existing EDUs	2,542.0	2,542.0	2,542.0	2,558.0	2,558.0
Flow/EDU (GPD)	298.7	281.5	307.0	260.5	265.0
Flow/Capita (GPD)	85.3	80.4	87.7	74.4	75.7
Exist. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Depending on the MLSS concentration, any WWTP flow that approaches 1.5 to 1.7 MGD causes the sludge blankets to rise and solids lost in the effluent. To maintain compliance, the Authority set the 36-inch influent pump at the hydraulic design capacity of 1.38 MGD.

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The 42-inch pump referenced in the draft permit (Fact Sheet page 4) was geared down to allow a maximum of 1.38 MGD into the plant at initial construction. The WWTP never processed 1.7 MGD or 2.25 MGD. We are working with Schrieber (secondary treatment manufacturers) to determine current flow ranges for their equipment; unfortunately, they could not complete the assessment prior to this response being due.

The current 36-inch primary screw pump was installed in 2009 after failure of the 42-inch pump. It was designed to provide 1.38 MGD through the WWTP. Flows in excess of 1.38 MGD during wet weather conditions trigger one of the 84-inch wet weather screw pumps.

Response:

The comment is acknowledged. The LTCP implementation schedule in the first draft permit included the requirement to submit a WQM permit application for WWTP upgrade(s) to achieve permitted hydraulic capacities within 36 months of the permit effective date. That requirement of the LTCP implementation schedule is revised to read: "Submit WQM permit application to update design hydraulic and organic capacities of the WWTP."

MCSA Comment 12: Affordability Criteria

The Authority raised rates for all customers by approximately 20% in September 2023 and has been in an austerity program since then. Residential customers are billed at a rate of $572.00 per annum, payable at the rate of $143.00 per quarter. Non-residential customers are also billed at a flat rate based on the EDU

Equivalency Chart in their Fee Schedule. An equivalent dwelling unit (EDU) breakdown of the service area is shown below.

MCSA Service EDU Estimate			
	Mahanoy City Borough	Mahanoy Township	Totals
Residential	1,489	16	1505
Commercial	982	9	991
SCI Mahanoy	0	915 (2,161 population)	915 (2,161 population)
Total EDUs	2,471	940	3,411

The Borough populace includes 34% living under the poverty level and its CDBG census tracts are above the low to moderate income trigger of 50%. The Borough's median household income is estimated at $38,047; Mahanoy Township's median household income (MHI) is $59,519. The rate for Mahanoy City customers is 1.5% of the MHI, which is the maximum percentage recommended by EPA for small/rural/challenged systems. The SCI Mahanoy rate is under contract where they pay a percentage of the annual O&M costs based on their contribution to the overall flow of the plant; thus, that rate is set. The Authority observes approximately 20% delinquency.

In 2025, the Authority refinanced debt of $8,475,000 to obtain lower annual payments. That debt is associated with two (2) Guaranteed Sewer Revenue Bonds, Series 2016 and Series 2019 and previously consolidated debt. The Authority's annual audits show that they have lost money in nine (9) of the last ten (10) years. Typically, the goal is to break even; and that is with no capital improvement projects occurring. Despite the 20% rate increase in 2023, the Authority's service area does not have the demographics to support an increase in O&M costs.

As presented, the Authority is not in a financial position to implement all the requirements in this draft permit. Any capital improvements resulting from these permit changes would have to be funded by grants as the Authority has no more borrowing capacity. They have been determined to be "grant eligible" by PENNVEST, but do not have the funds to pay for the engineering services to design and permit any required upgrades.

The Authority has asked Benesch to prepare an application to PENNVEST to obtain engineering design funding from their Advanced Funding Program as Mahanoy City Borough is a distressed community. This program can fund the engineering

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services to enable the many new requirements in this permit. Without that funding, the Authority has no way of raising those funds through simple user rate revenue. The Authority will request a Planning Consultation with your office and PENNVEST once these NPDES negotiations are completed. **Response:** The requirements of the NPDES permit are the minimum requirements to ensure compliance with state and federal regulations. It's recommended for the Authority to seek all available funding to meet requirements of the NPDES permit.