pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST REGIONAL OFFICE
CLEAN WATER PROGRAM

Application Type	**Renewal**	**NPDES PERMIT FACT SHEET**		Application No.	**PA0070386**
Facility Type	**Sewage**	**ADDENDUM**		APS ID	**557578**
Major / Minor	**Major**			Authorization ID	**1395434**

Applicant and Facility Information

Applicant Name	**Shenandoah Municipal Sewer Authority Schuylkill County (SMSA)**	Facility Name	**Shenandoah Municipal Sewer Authority POTW (Treatment Plant & Sewer system including CSOs)**
Applicant Address	15 W Washington Street Borough Hall Shenandoah, PA 17976-1708	Facility Address	5 Mount Olive Boulevard (SR 0054) Shenandoah, PA 17976-1708
Applicant Contact	Andrew Szczylak	Facility Contact	George Meyers
Applicant Phone	(570) 462-1918	Facility Phone	(570) 458-5701
Client ID	39486	Site ID	240446
SIC Code	4952	Municipality	Shenandoah Borough/West Mahanoy Twp.
SIC Description	Trans. & Utilities - Sewerage Systems	County	Schuylkill
Date Published in PA Bulletin	June 15, 2024	EPA Waived?	No
Comment Period End Date	July 15, 2024	If No, Reason	Major Facility; CSOs; Significant CB Discharge; EPA enforcement AOCC

Purpose of Application: Application for a renewal of an NPDES permit for discharge of treated Sewage

Internal Review and Recommendations

This is the Redraft NPDES Permit for the 2.0 MGD Publicly Owned Treatment Works (POTW) with Combined Sewer Overflows (CSOs).

- The previous Draft NPDES Permit was issued on 5/28/2024. See below for received public comments and responses.
- The Redraft NPDES Permit is being issued due to age of previous draft NPDES Permit, updated NPDES Permit template language, new standard PFAS monitoring requirements, etc. The 2024 Chapter 94 Annual Municipal Wasteload Report (Public Upload# 306880, received 3/31/2025, including Annual CSO Status Report) indicated the following information:
  - The Authority is proceeding with design and construction for replacement of the existing WWTP. A new WWTP is planned to be constructed at the site of the existing WWTP. An Environmental Report, Preliminary Engineering Report, and Application for Funding have been submitted and approved by the U.S. Department of Agriculture, Rural Development. USDA is providing a $5,474,000 grant and $12,532,000 loan for the project. All permits for the project are in hand except for a Highway Occupancy Permit from PennDOT. This is expected to be received in the next 30 days. Final Bid Documents have been submitted to the funding agency for approval to bid the project.
  - Primary clarifier was offline. **NOTE**: No mention of previous site practice of using one of its treatment units for sludge holding, reducing peak influent wet weather capacity.
  - In 2024, the Authority inspected the CSOs regularly (no schedule identified). Moved wooden blocks were used to indicate CSO events. CSO Outfall No. 014 (previously buried) and CSO Outfall No. 009 were

Approve	Return	Deny	Signatures	Date
X			James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	February 26, 2026
X			Edward Dudick, P.E. / Environmental Engineer Manager	March 20, 2026

NA			NA – not required for redraft Amy M. Bellanca, P.E. / Program Manager	NA

Internal Review and Recommendations

located. CSO Outfall No. 008 was indicated as capped. A recent inspection found an overflow pipe at Pump Station No. 1, which was investigated and determined not to discharge. The Authority plugged the pipe in 2023. The Annual CSO Status Report did not address implementation of the new Draft NPDES Permit Part C.IV (LTCP Implementation Schedule) requirements, including completion of the DEP Annual CSO Status Report form. The Report included only copies of the CSO DMR Supplemental Forms and a "2024 Annual Data Summary" table that estimated 15,003,148 gallons of CSO discharged to Shenandoah Creek in 2024 (CSO flow estimated based on an old methodology for estimating CSO discharges). **NOTE**: The claimed 94% capture rate was not shown to be sufficient to protect the waters of the Commonwealth.
    - One of the industrial users (Ateeco) ran a Moving Bed Biofilm Reactor (MBBR) pilot project, but it did not work out. Ateeco is being surcharged for high BOD in accordance with Borough ordinance, and is exploring other options.
    - 104.2 tons/year sludge disposal rate in 2024.
- Final NPDES permit action had been delayed because the US EPA was negotiating amendments to the 9/28/2020 US EPA Administrative Order for Compliance on Consent (AOCC) Docket No. CWA-03-2020-0067DN and/or other Consent document. No AOCC modification or other consent document materialized.
    - The AOCC required assorted POTW interim corrective actions and final compliance actions including a replacement WWTP.
    - The 2020 AOCC did not address all POTW compliance issues. See Draft NPDES Permit Fact Sheet for additional compliance information (including CSO-related issues noted in post-2020 DEP CSO Inspection Report and DEP stream sampling). See Compliance History section (below) for more recent compliance history.
    - Nothing in this permit supersedes and/or modifies requirements of the 9/28/2020 US EPA Administrative Order for Compliance on Consent (AOCC) Docket No. CWA-03-2020-0067DN (as amended). In event of a conflict between NPDES/WQM permit requirements and AOCC requirements, the more stringent requirement governs. The NPDES Permit's schedules of compliance were developed to be consistent with concurrent AOCC (as amended) milestones.
- NPDES Permit action is required to protect the public health, safety, welfare, and the environment:
    - The old WWTP is failing, with long-term out-of-service WWTP units and/or equipment, with known contributions to ongoing stream impairments, and with CSO-related issues noted in the Draft NPDES Permit Fact Sheet. The WWTP and sewer system CSOs discharge to Shenandoah Creek (CWF; Stream Code No. 17683; Impaired due to AMD Siltation/metals/habitat alterations; Municipal Point Source Discharges – Organic Enrichment; subject to Mahanoy Creek TMDL (AMD); and Pathogen impairment). Several CSOs discharge to intermittent streams (Kohinoor Creek and Sewer Creek) that ultimately flow into Shenandoah Creek. Shenandoah Creek is a 3.4:1 effluent-dominated stream at Q7-10 low flows. Kohinoor Creek and Sewer Creeks are intermittent/dry streams where nuisances can develop.
    - NPDES Permit Action is required to help resolve the POTW's long-term compliance issues and to protect the public health, safety, welfare, and environment by clarifying existing NPDES Permit requirements, addressing updated NPDES permit/regulatory requirements, incorporating assorted POTW commitments, and addressing assorted CSO-related issues via an NPDES Permit Part C.IV.C.3 Long Term Control Plan (LTCP) Implementation Schedule with enforceable compliance milestones. See the Draft NPDES Permit Fact Sheet for details. The Permittee also chose to address compliance with several proposed Final WQBELs (DO, Ammonia-N, etc.) via the (AOCC required) WWTP replacement project.
    - The 3/25/2024 WQM Permit No. 5422401 (Replacement WWTP) approved the replacement WWTP design, construction, and operation. The replacement WWTP will be constructed on the existing WWTP site. Phased construction with Phase I including new WWTP units/equipment, with Phase II including demolition of old WWTP structures and post-construction stormwater controls. This WQM permit action triggered subsequent AOCC Item 40 milestones relating to WWTP replacement. See attached AOCC document for details, but the AOCC milestones included:
        - AOCC Item 40.b: Within 90 days from the date of issuance of the Part II Permit, the Respondent shall solicit bids for construction of all wastewater, collection, conveyance and treatment facilities as specified in the Part II Permit. **NOTE**: This milestone equates to 6/25/2024 (90 days from WQM Permit issuance date)
        - AOCC Item 40.d (excerpt): If construction of the facilities specified in the Part II permit is not completed within four years from the date Respondent solicits bids for construction, Respondent shall certify to EPA and PADEP the reasons why construction is not complete. **NOTE**: This

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milestone equates to 6/24/2028 unless the AOCC is amended. Assuming 60-day start-up period, the facility would be expected to meet Final WQBELs (tied to start-up) by 9/1/2028.

ShenandoahAOCC.pdf

Changes Made to 5/28/2024 Draft NPDES Permit:

- **General:** The most recent NPDES Permit Template was used to regenerate the permit. Permit regeneration modified some NPDES permit conditions' numbering or re-arranging. Minor editing was also done to clarify language. Some cross-references required updating.
- **Part A.I.A (Outfall No. 001 Interim Toxics WQBELs Monitoring for Aluminum, Copper, Dissolved Iron, Zinc, Acrolein, Bis(2-Ethylhexyl)Phthalate, Indeno (1,2,3-cd) Pyrene, and Vinyl Chloride):** Added cross-reference to Part C.IV (WQBELs for Toxic Pollutants).
- **Part A.I.B (Outfall No. 001 DO, TRC, CBOD5, and Ammonia WQBELs Interim Limits/Monitoring):** Updated "Startup of New or Upgraded Facilities" footnote in case EPA/Permittee negotiations change final WWTP construction date. The POTW chose the WWTP replacement as its means of coming into compliance with the Final WQBELs for these constituents.
- **Part A.I.C (Outfall No. 001 Final Toxics WQBELs on fourth year of permit:** Added cross-reference to Part C.IV (WQBELs for Toxic Pollutants). Cross-referenced Vinyl Chloride to Part C.XI (WQBELs below TQL) with mass loading changed to reporting only (because limits are below TQL, though if they can analyze to better lab QL, then they should do so).
- **Part A.I.D (Outfall No. 001 Final DO, TRC, CBOD5, and Ammonia WQBELs):** Updated "Startup of New or Upgraded Facilities" footnote in case EPA/Permittee negotiations change final WWTP construction date. The POTW chose the WWTP replacement as its means of coming into compliance with the Final WQBELs for these constituents.
- **Part A.I.E (Outfall No. 001, PED to Expiration Date):**
  - Added current minimum major POTW PFAS-related monitoring & reporting requirements per Chapter 92a.61 (Monitoring) with PFAS-specific footnote allowing for cessation of monitoring if ND for four consecutive non-detects at the DEP Target Quantitation Limits (TQLs).
  - Added footnote cross-referencing applicable Part C.X.J (Quarterly WET testing) requirements.
- **Part A.I.F (Outfall Nos. 015, 016, and 017 Existing Stormwater Outfalls)**: Stormwater Outfall monitoring requirements expanded to include additional IW Stormwater General Permit Appendix J (Miscellaneous Facility) stormwater parameters for Chemical Oxygen Demand (with 120 mg/l Benchmark in Part C), Total Nitrogen (TKN plus Nitrate-Nitrite-N measured in same sample), and Total Phosphorus. Part C.VIII benchmarks cross-referencing added.
- **Part A.I.G (Outfall Nos. 018, 019, and 020 Replacement WWTP Stormwater Outfalls)**: Stormwater Outfall monitoring requirements expanded to include additional IW Stormwater General Permit Appendix J (Miscellaneous Facility) stormwater parameters for Chemical Oxygen Demand (with 120 mg/l Benchmark in Part C), Total Nitrogen (TKN plus Nitrate-Nitrite-N measured in same sample), and Total Phosphorus. Part C.VIII benchmarks cross-referencing added.
- **Part A.I.H (Outfall/IMP No. 101, raw sewage influent sampling point)**: Influent BOD5 and TSS sampling explicitly paired with effluent CBOD5 and TSS sampling to allow direct comparison.
- **Part A.I.I (Outfall No. 001 Chesapeake Bay)**: Regenerated table did not include Ammonia-N reporting addressed in other tables, but added back in to ensure Permittee understands Ammonia-N reporting is part of Chesapeake Bay requirements.
- **Part A.I.J (Authorized CSO Outfalls**): Added new template Part A.III.C.4.b(iii) requirements for electronic reporting (of CSOs, SSOs, and bypasses) to cross-referenced conditions.
- **Part C.II (Schedule of Compliance (CBOD5, TSS, TRC, Ammonia-N, DO via WWTP Replacement Project) per Chapter 92a.51 (Schedules of Compliance))**:

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  - Reference to EPA AOCC deleted per EPA request, but the schedule remains coordinated with the AOCC milestones. **NOTE**: The permittee indicated that it intended to meet these Final Permit Limits via construction of the Replacement WWTP. See above for the existing AOCC attachment.
  - Clarified that the construction phases are the WQM Permit's construction phases. Added some additional dates in parentheses based on AOCC milestones and lack of public comment on the Draft NPDES Permit milestone dates (other than that the WWTP Replacement project was going forward).
  - Compliance date for Final Effluent limits moved to 9/1/2028 (from 8/30/2028) to be consistent with NPDES Permit and EDMR reporting requirements.
  - The EPA AOCC construction-related quarterly reporting dates (March 30, June 30, September 30, and December 30) have been explicitly incorporated to avoid conflict and administrative burdens on the permittee. (DEP uses slightly different calendar reporting dates)
- **Part C.III (Maximizing Treatment at the Existing POTW):** Added language to clarify that no secondary treatment bypassing is authorized until after WWTP replacement project, as the existing WWTP has no provisions for secondary treatment bypassing for CSS flows and no present CSO Long Term Control Plan (LTCP) authorization for the existing WWTP.
- **Part C.IV (Combined Sewer Overflow):**
  - **Part C.IV.B.1.a.i**: Deleted "(Response Letter Item 6.aa.v)" as it was an editorial comment on the POTW commitment.
  - **Part C.VI.B.7**: Deleted "(Response Letter Item 6.r)" as it was an editorial comment on the POTW commitment.
  - **Part C.IV.C.2**: Added "Interim LTCP Goal" per EPA comment to keep the previous NPDES Permit 85% LTCP Presumption Goal (corresponding to previous NPDES Permit and 2023 LTCP Update) until an LTCP Goal is justified. Clarified the Draft NPDES language as referring as the "Final LTCP Goal" (required in the next LTCP Update due to potential need to meet more stringent Demonstration LTCP Goal):
    - Interim LTCP Goal: "The elimination or capture for minimum treatment of no less than 85% by volume of the combined sewage collection in the combined sewer system during precipitation events on a system wide annual average basis".
    - Final LTCP Goal: Original Draft NPDES permit language retained here. In practical terms, the ongoing stream impairments (pathogens, metals, and organic enrichment with known IU sources) nullify any presumption that the CSO discharges are not contributing to exceedances of the PA Chapter 93 Water Quality Standards in Shenandoah Creek. The burden falls on the Permittee to show that any presumptive goal can be pursued. In practical terms, the 2024 Chapter 94 Annual CSO Status Report-claimed 92.7% Treated Flow During Wet Weather (capture rate) did not demonstrate that CSOs are not contributing to known stream impairments.
  - **Part C.IV.C.3**:
    - Deleted "(Response Letter Item 6.l AND)" and "(Response Letter Item 6.j.v)" from LTCP milestones as editorial comments on POTW commitments.
    - Added requirement to explicitly address 40 CFR 122.41(m) requirements in next LTCP Update milestone to justify future CSO-related bypassing of secondary treatment (post-WWTP replacement).
- **Part C.V (POTW Pretreatment Program Implementation):** Condition regenerated with most recent NPDES Permit "POTW Pretreatment Program Implementation" template version to address EPA comments (as lead agency for Industrial Pretreatment plus existing EPA AOCC with Industrial Pretreatment Program-related requirements) that the "POTW Pretreatment Program Development and Implementation" condition did not apply to this facility. The condition has also been clarified that the DEP Annual Municipal Wasteload Report and DEP Spreadsheet must be completed per form and instructions, with EPA Annual Report attached.
- **Part C.VII (WQBELs for Toxic Pollutants):** Discrepancy with Part A dates noted (Three Year schedule of compliance) and corrected in the schedule of compliance. Three-year schedule of compliance added to be consistent with other schedules of compliance and WWTP replacement schedule (if they need to optimize or modify WWTP replacement design for these constituents).
- **Part C.IX.G (Stormwater):** Chemical Oxygen Demand (COD) benchmark added.
- **Part C.X.H (O&M Plan)**: Added additional cross-referencing of NPDES permit requirements relevant to high flow management of peak wet weather flows.
- **Part C.X.I (HFMP)**: Standard HFMP language added in case there is a substantial delay in WWTP Replacement (i.e. HFMP would be needed within one year in that event). Added additional cross-referencing of NPDES permit requirements relevant to high flow management of high flows.

Internal Review and Recommendations

- **Part C.X.J (Quarterly WET Testing):** The reporting requirements have been clarified to: "The results shall be reported per Part A.I.E and Part C.VIII requirements".

Public Comments & Responses: Responses are bolded.

The 7/12/2024 EPA (Jennifer Fulton) E-mail contained EPA's public comments on the Draft NPDES Permit. See Communication Log for an EPA/DEP conference call's discussion highlights.

EPA Item 1: PADEP included the pretreatment special condition draft NPDES Permit Part C.V., for developing, operating, and implementing a pretreatment program. Shenandoah Municipal Sewer Authority does not yet have an EPA approved pretreatment program despite the current (2017 NPDES) permit requiring the submission and development of the program. EPA needs PADEP to incorporate the standard pretreatment implementation language that is attached; and omit Part C.V.B (Submission and Implementation Schedule). The attached EPA language included draft Part B.I.D.4 language (with updated DEP E-mail reporting address) and draft Part C "POTW Pretreatment Program Implementation" language.

- **Part B.I.D.4 (General Pretreatment Requirements) language**: **The language has been regenerated to the current DEP NPDES permit template version with the correct DEP reporting link.**
- **Part C.V (POTW Pretreatment Program Development and Implementation) language**: **The language has been regenerated to the current DEP NPDES Permit template version for "POTW Pretreatment Program Implementation". EPA is the lead in terms of Industrial Pretreatment Programs (IPP) and there is an existing enforceable EPA AOCC with IPP development deadlines. DEP is deferring to EPA on IPP issues and enforcement. Please note the proposed EPA language omitted several PA-specific annual reporting requirements found in the current NPDES Permit Template Part C condition.**

EPA Item 2: As requested by EPA, Central Office recently updated the pretreatment template to address a few errors. We request that you make the same edits to the draft permit pretreatment language:

- Part C.V.D. – please revise "NETTPPR: NeT - Pretreatment Program Report" to remove the extra "T" so that it reads "NeT PPR: NeT - Pretreatment Program Report". **The language has been regenerated to the current DEP NPDES Permit template version.**
- Part C.V.I. – the last four digits of EPA's zip is incorrect, please revise the permit to read from "19103-2029" to "19103-2852". **The language has been regenerated to the current DEP NPDES Permit template version.**

EPA Item 3: The draft NPDES Permit Part C.II (SCHEDULE OF COMPLIANCE (CBOD5, TSS, TRC, Ammonia-N, DO via WWTP Upgrade Project) includes a schedule of compliance for wastewater treatment plant upgrades. As discussed on June 13th, it is EPA's position that the references to the US EPA Administrative Order for Compliance on Consent (AOCC) should be removed from Part C.II of the permit. EPA has concerns about cross-referencing the AOCC in the permit instead of specifying permit conditions. The permit should specify permit conditions for the five-year permit term for the purposes of clarity in the permit as well as separation of this permit from the terms of the AOCC, which may be subject to different legal requirements than NPDES permits and may change. The specific language was: "The (attached) September 28, 2020 US EPA Administrative Order for Compliance on Consent (AOCC) Docket No. CWA-03-2020-0067DN (as amended) is incorporated by reference. This condition does not grant any relief from existing interim NPDES Permit Limits (CBOD5, TSS, Ammonia-N, DO)".

- **The DEP has deleted the condition language incorporating by reference the EPA AOCC per EPA request. The deleted language had provided context for several of the Part C.II Chapter 92a.51 Schedule of Compliance milestones (coordinated with it).**
- **The NPDES Permit does specify permit conditions for the 5-year NPDES Permit Term. See the Part A.I.B (Interim), A.I.D (Final) and Part C.II (Schedule of Compliance).**
    - **In this case, the permittee has chosen to come into compliance with the assorted Part C.II Final WQBELs via the Treatment Plant replacement project required by the existing EPA AOCC (with AOCC milestones). The overlapping EPA AOCC milestone dates were explicitly coordinate with the Part C.II milestones and NPDES Permit's Chapter 92a.51 Schedule of Compliance requirements to avoid any conflict.**
    - **The NPDES Permit is an enforceable legal document that can be enforced separately from the EPA AOCC. An NPDES permit amendment would be required to modify the Part C.II schedule of compliance milestone dates after NPDES Permit Effective Date.**

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- **If EPA modifies the AOCC in the future, it would not modify the NPDES permit conditions. In event of a conflict, the permittee would have to meet both the separate NPDES permit and EPA AOCC requirements.**

- **The AOCC is included in this Fact Sheet Addendum for informational (quick reference) purposes.**

ShenandoahAOCC.pdf

EPA Item 4: The draft compliance schedule in Part C.II includes dates for the solicitation of construction bids, construction progress reports, and the end of construction. The schedule does not include a date for the beginning of construction. According to page 22 of the draft fact sheet:

WWTP Upgrade Project Construction	NPDES Permit Part C.II (Schedule of Compliance is incorporated by reference)	NPDES permit and AOCC commitment overlapping with CSO requirements. The POTW assumed immediate approval with public bidding within 182 days and new construction within 518 days (2023 – 9/30/2025). New WWTP rain gage to be installed in 91 days (2023).

Based on the highlighted portion of the fact sheet, does PADEP believe it can include a date by which construction is to begin within the compliance schedule? **No.**

- **The Schedule of Compliance gives maximum construction schedule flexibility to the permittee(s), consistent with Final WQBELs effective date and overlapping EPA AOCC compliance milestones (AOCC Item 40) under Chapter 92a.51. The 2024 Chapter 94 Annual Municipal Wasteload Report (submitted 3/31/2025) indicated financing and all required permits/authorization (except PennDOT Highway Occupancy Permit expected within 90 days) had been obtained.**
- **Tentative project schedules are not necessarily permittee commitments for construction start. The Department has not been kept up-to-date on the POTW's tentative schedule/status for construction (including financing arrangements).**
  - **No alternate schedule of compliance milestones proposed by the permittee or EPA.**
  - **No comparable EPA AOCC construction start interim milestone was found. (See AOCC Item 40.)**

EPA Item 5: According to the compliance schedule, the compliance date for final WQBELs for CBOD5, TSS, TRC, Ammonia-N is "August 30, 2028 or 2 months after Phase 1 substantial construction, whichever is earlier." Draft Permit Part A.I.C. includes the final WQBELs for CBOD5, TSS, TRC, Ammonia-N. The discharge date range begins with "Startup of New or Upgraded Facility*…". EPA recommends that PADEP revise this to be "Startup of New or Upgraded Facilities or August 30, 2028, whichever is earlier" to be consistent with the compliance date for final WQBELs that is in the Draft Permit Part C.II compliance schedule.

- **The Department has updated the NPDES Permit Part A.I.B and D footnote to address potential for EPA to modify or supersede the AOCC Item 40 milestones: * Startup of New or Upgraded Facilities: Second calendar reporting month after WQM Permit No. 5422401 Phase I substantial completion or start of Fourth Year of NPDES permit or US EPA AOCC Docket No. CWA-03-2020-0067DN (as amended or superseded by other EPA Compliance document) final compliance milestone for WWTP replacement construction completion/startup, whichever is earlier.**
- **The Permittee previously indicated that they expected to meet the construction end milestone (coordinated with AOCC requirements), which was the Permittee's chosen means of compliance with these Final WQBELs.**
- **The Final WQBELs will be effective 9/1/2028 (start of EDMR calendar monthly reporting period) if the Permittee meets the Draft NPDES Permit end construction milestone (based on AOCC milestone).unless the Permittee requests an alternate date in response to this Redraft NPDES Permit.**

EPA Item 6 (Regarding CSOs):

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General: EPA offers the following comments related to the CSO requirements of the permit. We note that EPA's Phase 2 e-Reporting rule requires electronic reporting of Sewer Overflow/Bypass Events, and PADEP will need to make modifications to its CSO permit language that will be necessary to address the requirements of the e-Reporting rule that is effective at the time that the permit is issued. In addition, since PADEP's proposed seasonal E. coli water quality standard became effective in March 2021, PADEP will begin to incorporate E. coli monitoring in subsequently reissued NPDES permits and ensure it is included in CSO post-construction compliance monitoring (PCCM) plans to verify compliance with water quality standards and designated uses. Consistent with the CSO Policy, EPA notes that there will also need to be a requirement added to implement a PCCM plan with an established schedule in NPDES permits once a facility begins to implement its approved plan. **The NPDES Permit incorporated the updated NPDES Part A.III.C.4.b(iii) permit template language language regarding electronic reporting. The Part C.IV NPDES language also includes E Coli monitoring as part of the PCCM requirements. The Part C.IV.C LTCP Schedule of Implementation requires LTCP updates including an adequate PCCM.**

Internal CSO-related plant bypassing: The draft NPDES Permit Part C.III authorizes a CSO-related bypass. As discussed on June 13th, EPA believes this condition may not be appropriate at this time because a full evaluation of the bypass does not appear to have been conducted in the 2023 LTCP conditionally approved by PADEP. PADEP should not be authorizing a CSO-related bypass prior to approving an LTCP that includes this evaluation. If PADEP believes this has been adequately addressed by the permittee, the fact sheet would need to document this for the permit record. Section II.7 (Maximizing Treatment at the Existing POTW Treatment Plant) of the EPA CSO policy on page 18693 (Federal Register Vol. 59 No. 75 (April 19, 1994)) includes, "This provision [to authorize a CSO-related bypass] would apply only to those situations where the POTW would ordinarily meet the requirements of 40 CFR 122.41(m) as evaluated on a case-by-case basis. Therefore, there must be sufficient data in the administrative record (reflected in the permit fact sheet or statement of basis) supporting all the requirements in 40 CFR 122.41(m)(4) for approval of an anticipated bypass."

To clarify the administrative record:

Regulatory Requirements for CSO-related bypasses: Chapter 92a.41 (Conditions applicable to all permits) incorporates 40 CFR 122.41(m) by reference, with the 40 CFR 122.41(m)(4) (Prohibition of bypass) language mirrored in the NPDES Permit Part A.II (definitions for "bypass" and "severe property damage"), Part B.I.G (Bypassing), and Part C.III (Maximizing Treatment at the Existing POTW). Several additional Part C High Flow Management Plan (HFMP) conditions have overlapping requirements in terms of potential washout scenarios.

- **NPDES Permit Part C.III (Maximizing Treatment at the Existing POTW)**:
  - A CSO-related bypass of the secondary treatment portion of the POTW treatment plant is authorized only when (1) the permittee is implementing Nine Minimum Controls and a Long Term Control Plan and the bypass is part of the operational plan for implementing Nine Minimum Controls and the Long Term Control Plan, (2) it is in accordance with the provision of 40 CFR 122.41 (m) and (3) the flow rate to the (post-WWTP upgrade) POTW treatment plant, as a result of a precipitation or snow-melt events, exceeds 5.83 MGD (post-WWTP Upgrade daily max flow) via using SBR "storm mode" peak daily flow set forth in an approved High Flow Management Plan/Wet Weather Operating Plan. Bypasses that occur when the flow at the time of the bypass is less than the above specified flow rate are not authorized under this condition.
    - **The condition has been expanded to include: "**No bypasses are authorized by this condition prior to WWTP replacement". **The replacement WWTP will include provisions allowing for "bypassing" in terms of a "storm mode" that might not allow for secondary treatment in the SBRs if the WWTP receives >5.83 MGD peak daily max flows and to update the LTCP as needed in Part C.IV.C.**
    - **This NPDES Permit approves the Long Term Control Plan (including Nine Minimum Controls) along with CSO-related Part A.I.J, Part C.III and C.IV conditions:**
      - **The LTCP Update did not request or justify CSO-related bypassing at >2.0 MGD in the existing failing WWTP. Therefore, the previous 2017 NPDES Permit Part C.II CSO-related bypass authorization ceases upon the Final NPDES Permit Effective Date. Site-specific conditions do not allow for existing WWTP CSO-related bypasses per the EPA CSO Policy including: Inadequate O&M; no allowance for wet weather flows above and beyond the 2.0 MGD hydraulic capacity/dry weather capacity; no existing bypass line for the existing secondary treatment aeration tanks; etc.**

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- **The Replacement WWTP project (and concurrent new NPDES Permit Conditions including O&M Plan requirements; High Flow Management Plan requirements, etc.) will address the POTW's history of inadequate WWTP O&M, substantially increase the WWTP capacity to handle peak wet weather daily flows (to 5.83 MGD), and allow for an SBR storm mode ensuring minimum treatment of >5.83 MGD peak wet weather flows.**

- **Related Information for the Administrative Record:**
  - **8/16/2023 Response Letter Item 6.b.iv (LTCP)**: The new WWTP design includes a storm mode and super storm mode to allow for increased wet weather flows. The new WWTP is designed for a peak hourly flow of 8.0 MGD. Full treatment will be provided up to that point. Beyond that the flow will pass through the WWTP with partial treatment, but considering the flow is diluted due to the wet weather event this should not be an issue and effluent discharge limits should still be met.
  - **Per the 5/22/2022 WQM Permit Application Response Letter Item 5.b.ii**: The actual peak daily flow design is 5.83 MGD as shown in the DER calculations. Hydraulically the plant can handle the 8.0 MGD indefinitely without overflowing, however, biologically the plant will only be able to accommodate 8.0 MGD for one hour (Peak Hourly Flow). Beyond that flow rate there won't be enough time to provide biological treatment or settling. The proposed headworks screen is designed to handle a peak flow of 9.0 MGD, the grit collector is designed to handle a peak flow of 8.0 MGD, proposed raw wastewater pumps are designed to handle 8.2 MGD, and proposed CSBR tanks are designed to handle a peak flow of 8.0 MGD. The proposed CSBR tanks will decant at a peak rate of 8,102 GPM (11.67 MGD). The UV disinfection unit has a peak capacity of 11.7 MGD to accommodate the decant rate of the CSBR tanks and the existing Chlorine Contact tank (now utility water holding tanks) have a peak flow rate of 11.7 MGD.
  - **Per the 5/22/2022 WQM Permit Application Response Letter Item 6**: The proposed treatment basins are designed based on the Intermittent Cycle Extended Aeration System (ICEAS), which is a modification of the sequential batch reactor (SBR) process. The influent flow enters a pre-react zone of the treatment basin and then travels to the reactor where intermittent aeration, settling, and decanting processes occur. Three cycle timings shall be utilized depending on influent flow. A normal cycle of 288 minutes will be used during normal flow, and a storm cycle of 216 minutes will be used during storm events. A further description of the process design criteria and details are discussed in the Design Engineers Portion of the permit submission.
  - **Per the 5/22/2022 WQM Permit Application Response Letter Item 10.c:** WWTP upgrades should not need bypassing due to high flows at the WWTP in the future. Proposed WWTP allows for increased flows up to 5.83 MGD maximum day during storm cycle mode while still providing full treatment. This is a significant increase over the existing 2.0 MGD while maintaining full treatment.
  - **WQM Permit Application Information**: The POTW (in the WQM Permit No. 5422401 Permit Application) has committed to sewer separation projects in event that the facility is required to capture/treat greater flows than its replacement WWTP treatment system's design flows (2.0 MGD hydraulic design capacity; 5.83 MGD daily max flow while achieving secondary treatment; 8.0 MGD peak wet weather flows).
  - **LTCP Sections 1.3, 2.2, and 3.4**: This new WWTP will increase peak daily capacity from 5.0 MGD to 5.83 MGD. It will also increase peak instantaneous capacity to 8.0 MGD. This will allow for more flow at the WWTP. While the new WWTP is designed for the ADF of 2.0 MGD, this is due to the organic loading. Hydraulically the new WWTP can pass 8.0 MGD while still providing primary treatment and disinfection. Population projections show no projected net increase based on historical records for the foreseeable future.
  - **LTCP Section 7.2**: Based on the EPA CSO Model for Small Communities, it is estimated the SMSA collection system would receive a total peak day flow of 16.63 MGD for the 100-Year Storm. The collection system would convey 8.65 MGD to the WWTP and 7.98 MGD would overflow at the CSOs.
  - **LTCP Section 7.5**: The WWTP is badly in need of replacement. Since it is being replaced, SMSA is increasing the hydraulic capacity to accept higher flow rates during wet weather. The new WWTP design flow is still 2.0 MGD since the organic capacity is the limiting factor. Increasing the organic design capacity would have a detrimental effect on the treatment during normal dry weather flows. Expensive treatment facilities would be sitting idle. The new WWTP design incorporates flow equalization into the treatment tanks by oversizing them and providing automatic level adjustment in the tanks based on flow. The cost for this alternative is approximately $24,400,000 with user rates of $65/month including O&M depending on the financing.
  - **LTCP Section 7 (Alternatives for CSO Control) and LTCP Attachment P (Alternatives Funding Analysis)**: Included additional information regarding the listed considered alternative projects' costs and discussed affordability criteria.

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- **Related NPDES Permit Requirements:**
  - **Part A.II (bypass)**: Bypass means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i)). **In the replacement WWTP, there is no bypassing of the two SBR units per se, but the SBR units' operational mode will change at >5.83 MGD daily max flows (from secondary treatment to primary treatment of up to 8.0 MGD flow (with subsequent disinfection)). The Part C.III condition explicitly authorizes this operational mode as a secondary treatment "bypass" subject to all applicable permit conditions.**
  - **Part A.II (Severe Property Damage)**: Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii)). **The EPA CSO Policy Section II.C.7 states:** "For purposes of applying this regulation to CSO permittees, "severe property damage" could include situations where flows above a certain level washout the POTW's secondary treatment system" with the caveats that the secondary treatment system is properly operated and maintained, that the system has been designed to meet secondary limits for flows greater than the peak dry weather flow, plus an appropriate quantity of wet weather flow, and that it is either technically or financially infeasible to provide secondary treatment at the existing facilities for greater amounts of wet weather flow.
    - **The NPDES Permit Part C.X.H.4 requires a High Flow Management Plan (HFMP) a.k.a. Wet Weather Operating Plan that minimizes or eliminates the wash-out of solids from the treatment system while maximizing the flow through the treatment plant. The 5.83 MGD peak daily flow will be re-evaluated in future LTCP Updates.**
    - **The replacement Treatment Plant will initially be in good maintenance condition with NPDES Permit Part B.I.E (Proper Operation and Maintenance), Part C.IV (CSO), and Part C.X.H (New WWTP O&M Plan) to ensure proper operation.**
    - **See above regarding design flows and affordability analysis.**
  - **Part B.I.G.2 (Other Bypassing)**: In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:
    - A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." (40 CFR 122.41(m)(4)(i)(A)). **See above discussion of "severe property damage".**
    - There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. (40 CFR 122.41(m)(4)(i)(B)). **See above and Part C HFMP-related conditions.**
    - The permittee submitted the necessary notice required in paragraph G.4 below. (40 CFR 122.41(m)(4)(i)(C)). **The approved LTCP (with conditions) and CSO-related monitoring & reporting requirements address necessary notice requirements.**
  - **Part B.I.G.3**: DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in paragraph G.2 above. (40 CFR 122.41(m)(4)(ii)).
    - **The Part C.III Condition is the NPDES Permit authorization for in-plant CSO-related bypasses (with conditions) after construction of replacement WWTP.**
    - In the event of a CSO-related bypass authorized under this condition, the permittee shall minimize the discharge of pollutants to the receiving water. At a minimum, the CSO-related bypass flows must receive primary clarification, solids and floatables removal, and disinfection. The bypass may not cause the effluent from the POTW either to exceed the effluent limits contained in its permit or to cause or contribute to a violation of water quality standards. The permittee shall report any substantial changes in the volume or character of pollutants being introduced into the POTW or that may be present in the CSO-related bypass. Authorization of CSO-related bypasses under this provision may be modified or terminated when there is a substantial change in the volume or character of pollutants being introduced to the POTW or in the bypassed flow. The permittee shall provide notice to the permitting authority of bypasses authorized under this condition within 24 hours of occurrence of the bypass. Related requirements:

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- Provisions to achieve minimum treatment: The new headworks will address initial screening with SBRs providing primary clarification (at >5.83 MGD peak daily flows) and UV disinfection.
- Bypass Sampling: NPDES Permit Part A.I Additional Requirements Item 4 requires sampling during any bypassing event. Any exceedances of NPDES Permit limits would be reported as an exceedance in EDMR.
- Bypass Reporting: NPDES Permit Part C.III reporting requirement (above). A DEP bypass report form has been included with the other DMR/EDMR report forms. Standard NPDES Permit Part A.III, B.I.C, and Part C.IV monitoring & reporting requirements also apply.
- Stream Monitoring: The LTCP requirements includes a Stream Water Quality Monitoring Plan to determine any site contribution to any exceedance of Chapter 93 Water Quality Standards (WQS).
- Changes in volume or character of pollutants: The NPDES Permit Part A.III.C.2 (Planned Changes to Waste Stream) notification requirements pertain to any substantial changes to the waste streams going into the POTW.

  - **Part C.X.H.4 (New WWTP O&M Plan: HFMP)**: For treatment plants that are impacted by wet weather flows, the permittee shall develop and implement a wet weather operations strategy a.k.a. High Flow Management Plan (HFMP) a.k.a. Wet Weather Operating Plan that minimizes or eliminates the wash-out of solids from the treatment system while maximizing the flow through the treatment plant. **(Underlining added.)**
    - The HFMP shall contain a process for treating the maximum amount of flow through the plant while protecting the components of the treatment plant and minimizing the potential impact to the receiving stream. The HFMP shall include measures to be taken when wet weather is predicted to prepare the plant for the high flow conditions as well as operational activities to be undertaken when high flows actually occur. The HFMP shall identify peak instantaneous flow that can be handled by the limiting plant unit and indicate how long that flow can be maintained without a bypass or overflow. The HFMP shall explicitly identify the CSBR "superstorm mode" and "storm mode" flows and operational requirements.
    - The HFMP shall comply with all NPDES permit (as amended) requirements including but not limited to:
      - Handling of 8.0 MGD peak instantaneous/hourly wet weather flows sustained over a 24-hour day period.
      - Part A.I Additional Requirements bypass sampling requirements; Part B.I.G (bypassing); and Part A/C CSO-related conditions including maximizing horizontal flat weir plate manhole/regulator openings to maximize capture/storage of wet weather flows. **(Underlining added.)**
  - **Part C.X.I (High Flow Management Plan)**: The High Flow Management Plan (HFMP) a.k.a. Wet Weather Operating Plan shall be submitted to DEP upon Phase I substantial construction of the WWTP Upgrade Project (WQM Permit No. 5422401). Thereafter, the HFMP shall be reviewed and updated as part of each NPDES permit renewal application. **(Underlining added.)**

- **Additional Administrative History for context**:
  - **This is an aged failing Treatment Plant that is a known cause of receiving stream impairment, with substantial CSO-related issues (including limited sampling evidence that the POTW CSOs are contributing to stream impairment).**
    - **The POTW is subject to the September 28, 2020 US EPA Administrative Order for Compliance on Consent (AOCC) Docket No. CWA-03-2020-0067DN (see above) which required major site corrective actions to restore nonfunctional WWTP units to service, a Part II WQM Permit Application for a replacement Treatment Plant as a major requirement for bringing the site into compliance, requirements for further investigation of specific issues, and assorted O&M corrective measures (with some overlapping CSO-requirements).**
    - **The scope of any consent document is limited, by necessity, to those documented compliance issues then known, and cannot substitute for NPDES or WQM permitting. This permit action is required to help resolve the POTW's long-term compliance issues (explained in the Draft NPDES Permit Fact Sheet) and to protect the public health, safety, welfare, and environment by clarifying existing NPDES Permit requirements, addressing updated NPDES permitting requirements, incorporating assorted POTW commitments, and addressing**

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assorted CSO-related issues via an NPDES Permit Part C.IV.C.3 Long Term Control Plan (LTCP) Implementation Schedule with enforceable compliance milestones.

- **The March 25, 2024 Shenandoah Municipal Sewer Authority (SMSA) Part II Water Quality Management (WQM) permit No. 5422401 was issued to address the replacement Treatment Plant design and its future operation.**

Previous 85% Capture by Volume LTCP Presumptive Goal: Based on our conversation on June 13th and draft NPDES Permit Part C.IV.C.1., EPA's understanding is that the August 2023 LTCP is partially approved. EPA understands that the permittee is required to submit a revised LTCP that includes a revised performance standard. However, since the current permit requires a minimum of 85% capture by volume, EPA believes that the same 85% capture standard should be imposed in the permit in addition to the permit requiring the LTCP revision. Any revised performance standard in the LTCP update can be imposed in the permit after the LTCP update is approved. **The Department has made this change to address the apparent EPA concern. The 85% Capture LTCP Presumption Goal has been included as the "Interim LTCP Goal" (previously in the 2017 NPDES permit and 2023 LTCP Update) with the "Final LTCP Goal" to be identified in the next LTCP Update.**

- **The August 2023 LTCP will be approved with conditions upon the Final NPDES Permit Effective Date.**
- **The October 6, 2017 NPDES Permit Part C.III.C.5 included the "85% Presumption Approach" without specifying if it meant reduction by volume or mass.**
- **The 2023 LTCP Update Section 5 (Implementation of Water Quality Based Long-Term Control Plan) noted the options for LTCP Demonstration Goal and the three (3) LTCP Presumption Goals, but did not explicitly choose one of the options. The LTCP Section indicated the permittee's belief that the facility was met the 85% capture Presumption Goal by achieving 90% capture, but the Draft NPDES Permit Fact Sheet concluded that the permittee capture estimates were unsupported with evidence of CSO-contribution to ongoing stream impairment (potentially triggering the more stringent LTCP Demonstration Goal requirement). The 2024 Annual CSO Status Report estimated 92.77% capture (uncertain validity), but there are known stream impairments (pathogens, metals, organic enrichment with known IU sources discharging to the combined sewer systems) that the CSO discharge can contribute to the effluent-dominated stream.**

Shenandoah Public comments:

NPDES Permit Part A.I.C: Change in average monthly effluent concentration limitations for Carbonaceous Biochemical Oxygen Demand (CBOD5) from 25.0 mg/L during Permit Effective Date through Startup of New or Upgraded Facility to 10 mg/L during Startup of New or Upgraded Facility through Permit Expiration for Outfall #001: Per the PADEP Technical Deficiencies – NPDES Permit Renewal Response letter dated August 16, 2023, this decrease in concentration is due to ongoing stream organic enrichment impairment. SMSA has since identified and corrected the expected cause of this organic enrichment. CSO #006 was found to have a missing weir plate that is utilized to prevent unnecessary combined sewer discharges. This has been replaced and has resulted in reduced discharges. Refer to attached photographs of damaged CSO. SMSA is requesting that the monthly effluent concentration limitations for CBOD5 remain at 25.0 mg/L through Permit Expiration. **The Department cannot concur at this time. The known causes for organic enrichment include the major Treatment Plant's loadings on the effluent-dominated stream and other CSO discharges. Shenandoah previously indicated that the replacement Treatment Plant (required by EPA AOCC and NPDES Part C.II Schedule(s) of Compliance for the final CBOD5 WQBELs) will be able to achieve the new limits and would be the means of coming into compliance. Alternatively, if the Shenandoah can show that the ongoing stream organic enrichment impairment has been mitigated prior to the new WQBEL effective date, then Shenandoah can request relief prior to the new WQBEL effective date via Major NPDES Permit Amendment. (See concurrent Part C.VII process for general guidance.) After that time, the regulatory anti-backsliding prohibition might prevent any relief.**

NPDES Permit Part A.I.D: Increased minimum measurement frequency for Aluminum, Copper, Iron, Zinc, Acrolein, Bis(2-Ethylhexyl) Phthalate, Indeno (1,2,3-cd)Pyrene, and Vinyl Chloride from 1/month during Permit Effective Date through Third Year of Permit to 1/week during Fourth Year of Permit through Permit Expiration Date for Outfall #001: Due to costs associated with this testing, SMSA is requesting that the testing remains1/month through Permit Expiration Date. **The Department cannot concur at this time. The standard minimum monitoring frequencies for toxic pollutants (with**

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limits) is weekly. NPDES Permit Part C.VII includes the process by which Shenandoah can make a technical case for relief from proposed Final WQBELs and/or monitoring requirements prior to their effective date.

Compliance History:

- There are thirty-six (36) open violations for this client per a 2/26/2026 WMS query (Open Violations by Client Number).
  - The 3/19/2024 WMS Query (Open Violations by Client Number) identified 34 open violations. See 5/28/2024 Draft NPDES Permit Fact Sheet for previous compliance history and known issues.
  - The two new open violations were:

INSP PROGRAM	VIOLATION ID	VIOLATION DATE	VIOLATION CODE	VIOLATION
WPC NPDES	927083	08/22/2024	92A.61(F)1	NPDES - Failure to properly document monitoring activities and results
WPC NPDES	927084	11/01/2023	92A.41(A)5	NPDES - Failure to properly operate and maintain all facilities which are installed or used by the permittee to achieve compliance

- 9/13/2024 Shenandoah public comment letter indicated CSO #006 was found to have a missing weir plate that is utilized to prevent unnecessary combined sewer discharges. This has been replaced and has resulted in reduced discharges. (Shenandoah thought this would reduce stream organic enrichment issues but provided no supporting data or analysis, given multiple other CSO discharges plus WWTP plant issues until replacement WWTP is replaced.)
- The 7/15/2025 DEP Sewage Inspection Report & 2024 Chapter 94 Report indicated the primary clarifier remained offline. The Inspection report noted the listed noncompliance would not be corrected “since there will be a new WWTP erected starting the end of this year or in the beginning of 2026”. The 3/25/2024 WQM Permit was referenced for the new WWTP. The Inspection report noted No. 2 secondary clarifier was back in service, and that the chlorine gas detection system was replaced during the previous year. Aeration Basin No. 2 was indicated to be in use as a sludge storage tank.
- The 8/22/2025 Notice of Violation (NOV) indicated late/missing 1st Quarter 2024 WET Test results.
- Effluent Violations for Outfall 001, from: January 1, 2025 To: November 30, 2025:

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	09/30/25	IMAX	2420*	No./100 ml	1000	No./100 ml

*Facility blamed exceedance on “probable lab error” with TRC stated to be at 0.99 mg/l, with later samples said to be within limits.

- Status of Compliance with existing EPA AOCC Requirements: Unknown at this time.

Communications Log: This communications log is limited the Draft NPDES Permit, and does not address separate Compliance-related communications.

- **4/12/2024**: DEP (Berger) informational E-mail to Technical consultant (McCoach, Alfred Benesch) forwarding the 4/3/2024 EPA E-mail clarifying EPA position that the EPA CSO Model’s 85th percentile storm event should not be conflated with attainment of the 85% Capture CSO LTCP Presumptive Goal.
- **5/28/2024:** Draft NPDES Permit issued.
- **6/3/2024:** SMSA (McCoach) E-mail confirming receipt of Draft NPDES Permit

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- **6/13/2024:** EPA E-mail and follow-up phone call (Rebecca Crane, Dana Hales) regarding clarifications on regarding Draft NPDES Permit CSO language highlights:
  - **Part C.IV.C.3 (Performance Standard)**: Specifically we are seeking clarity on whether PADEP approved a CSO performance standard when it approved the August 2023 LTCP. In our review of the August 2023 LTCP thus far it would seem as though 90% volume for capture/treatment is the standard they are achieving; however it might not be the standard by which to achieve water quality. There is a line item in the schedule to submit a LTCP update. Does PADEP anticipate a revised performance standard with that submission?
    - **2023 LTCP Update was not approved to date of telephone call. Final NPDES permit action will include conditional approval (meeting statutory, regulatory, and permit conditions), including identifying the performance standard per the LTCP Schedule of Implementation. They may be required to meet the Demonstration Goal in the future. The LTCP schedule requires gathering the information needed to make such a determination.**
    - **The permittee claimed 90% capture/treatment is likely invalid. It was based on ~20-year old spreadsheet model (based on 3 months of data collection) with no present supporting CSO quantitative/qualitative flow data, and major CSO O&M issues also rendered the old model predictions unsupported. They did not calibrate the more recent EPA CSO Model (in the NPDES Renewal Application), and DEP had previously passed on the EPA comment that the 85 percentile storm should not be equated with the 85% LTCP Presumptive Goal.**
    - Concern over potential backsliding from existing 85% to determining new goal in the future LTCP Update, It might require either keeping the previous 85% goal as an interim requirement or Fact Sheet antibacksliding analysis if the Goal was in effect now. **The Department will review the previous NPDES Permit to determine if the 85% capture/treatment presumption goal had to be met now. NOTE:**
      - The October 6, 2017 NPDES Permit Part C.III.C.5 stated: The permittee shall implement, inspect, monitor and effectively operate and maintain the CSO controls identified in the LTCP pursuant to the LTCP implementation schedule, which is incorporated herein by reference. **Upon completing implementation of the LTCP**, the permittee shall achieve the following performance standards:
        - The 85% Presumption Approach has been chosen.
        - Submit an updated Long Term Control Plan, one year from the effective date of this permit.
        - The Part C.III.G (Combined Sewer Overflow Compliance Schedule) did not specify date of compliance for the LTCP.

  - Additionally, we have some questions regarding CSO-related bypass in Part C.III. As of yet we have not come across an adequate evaluation of a bypass in the August 2023 LTCP Update. We'd like to discuss with you the authorization of a CSO related bypass in the permit. EPA indicated that the EPA CSO Policy Section 7 includes LTCP Assessment requirement for authorization of a CSO bypass as an anticipated bypass that must be met (including no feasible alternatives), referencing the original Federal Register page number 18693.
    - **Existing NPDES Permit had Part C.II CSO-related bypass language but there is no bypass proposed for the existing WWTP in the 2023 LTCP Update and no secondary treatment bypassing shown on application process flow schematic (existing WWTP), so no authorization in the Draft NPDES Permit. The existing facility has been bypassing WWTP units (such as the out-of-service primary clarifier) for non-CSO-related issues but not the secondary treatment aeration units, with the replacement WWTP SBR process as a proposed corrective action. EPA Enforcement is involved with an AOCC for corrective actions in regard to out-of-service WWTP units, and were copied on the NPDES Permit.**
    - **The proposed future bypass is when the (future) SBRs go into a "superstorm" mode when they cannot maintain adequate secondary treatment but will be trying to maintain minimum treatment. The 5.83 MGD value is based on new WWTP daily max flows plus claim facility can handle a 8.0 MGD peak hourly flow for 1 hour prior to washout (when it would no longer achieve secondary treatment).**
    - **The Department noted that the WWTP upgrade project was originally required by the EPA Enforcement AOCC (which required a WWTP Upgrade project and WQM Permit application),**

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so it is unclear what level of feasibility analysis was done before the replacement SBR design was selected.

- **Part C.V (POTW Pretreatment Program Development and Implementation):** EPA will comment on the Part C IPP language. They do not believe that any additional time should be given for submittal of the required IPP, since that would be like backsliding. They believe the language is unneeded here, given the EPA AOCC can be used to legally require submittal of the overdue IPP Plan. **The Department will review the EPA-suggested language changes when it arrives.**
- **Part C.II (Schedule of Compliance) reference to EPA AOCC:** EPA believed the Part C.II (Schedule of Compliance) language should not incorporate the EPA AOCC by reference, as the AOCC language can be amended outside the permitting process (potentially creating confusion). **The Department will review the EPA-suggested language changes when it arrives.**
- **Part C.VIII (Whole Effluent Toxicity)**: EPA noted that a Toxic Reduction Evaluation (TRE) has not been done for previous WET Test failures due to WWTP upgrade project, and asked for clarification of DEP expectation in event of future WET Test failure (prior to WWTP Upgrade project completion). **DEP expects any WET test failure to trigger the Part C.VIII requirements, including TRE requirements. The scope of the TRE can be limited to exclude the old WWTP (being replaced), but would have to address potential offsite sources and contaminants such as Zinc.**
- **Part C.X.J (First Year Quarterly WET Testing):** EPA commented that the condition appeared inconsistent with the Part C.VIII (WET) requirements in terms of required reporting (NOEC versus TST method). EPA's understanding was that the TST method replaced the NOEC method. **DEP will check with the DEP Biologists and update the language as needed for consistency.**
- **Other:** DEP asked for clarification whether the EPA Enforcement section would be commenting separately on the Draft NPDES permit (due to overlapping issues with the EPA AOCC). EPA NPDES permit thought not, but will ask.

- **6/24/2024**: EPA (Rebecca Crane) E-mail asking for extension for EPA comments to 7/12/2024.
- **6/25/2024**: DEP (Berger) E-mail granting requested extension for EPA comments.
- **7/12/2024**: EPA (Jennifer Fulton) Public comments E-mail on Draft NPDES Permit.
- **9/13/2024**: Shenandoah (Alfred Benesch) Public comment E-mail letter on the Draft NPDES Permit.