



State of New Jersey

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Water Quality
Water Pollution Management Element
Bureau of Surface Water and Pretreatment Permitting
P.O. Box 420 – 401 E State St
Trenton, NJ 08625-0420
Mail Code 401-02B
Phone: (609) 292-4860 | Fax: (609) 777-0432

SHAWN M. LATOURETTE
Commissioner

**Via Email Only
February 28, 2025**

John F. Papetti, Director Department of Public Works
City of Elizabeth
50 Winfield Scott Plaza
Elizabeth City, New Jersey 07201

Re: Final Surface Water Renewal Permit Action
Category: CSM – Combined Sewer Management (IP)
NJPDES Permit No. NJ0108782
City of Elizabeth
Elizabeth City, New Jersey 07201, Union County

Dear John F. Papetti:

Enclosed is a **final** NJPDES permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. The City of Elizabeth (City) is served by a combined sewer collection system (CSS) which is hydraulically connected to the Joint Meeting of Essex & Union Counties (JMEUC) Wastewater Treatment Facility (WWTF). The City owns and operates a CSS including 29 Combined Sewer Overflow (CSO) outfalls, which are equipped with solids/floatables controls. These CSO outfalls discharge combined sewage into the Arthur Kill (classified as SE3(C2)), Newark Bay (classified as SE3(C2)), and Elizabeth River (classified as FW2-NT(C2) and SE3(C2)). These water bodies are located within the NY/NJ Harbor Complex Basin and are tributaries to the Lower New York Bay. Minor changes have been made to Part II of the permit, as detailed in an attachment to this cover letter.

The Department is concurrently preparing to issue a final NJPDES DSW permit to JMEUC (NJ0024741). JMEUC does not own or operate any CSO outfalls. This subject renewal permit action is issued to the City of Elizabeth.

Comments were received on the draft permit issued on May 9, 2023. The public comment period began on May 12, 2023 when the Public Notice was published in The Star Ledger, as shown here: <https://www.njpublicnotices.com>. The public notice ended on July 14, 2023, encompassing a total of sixty-three (63) days. A Public Notice was also posted in the DEP Bulletin on May 17, 2023, as shown here: <http://www.state.nj.us/dep/bulletin>. The Department held two virtual public hearings to solicit public comment on the draft permits on June 12, 2023 from 10 a.m. to 12 p.m. and again from 6 p.m. to 8 p.m. A summary of the significant and relevant comments received on the draft action during the public comment period, the Department's responses, and an explanation of any changes from the draft action have been included in the Response to Comments document attached hereto as per N.J.A.C. 7:14A-15.16.

Any requests for an adjudicatory hearing shall be submitted in writing by certified mail, or by other means which provide verification of the date of delivery to the Department, within 30 days of receipt of this Surface Water Renewal Permit Action in accordance with N.J.A.C. 7:14A-17.2. You may also request a stay of any contested permit condition, which must be justified as per N.J.A.C. 7:14A-17.6 et seq. The adjudicatory hearing request must be accompanied by

a completed Adjudicatory Hearing Request Form; the stay request must be accompanied by a completed Stay Request Form. Copies of these forms can be downloaded from the Department's website at https://www.nj.gov/dep/dwq/forms_adjudicatory.htm.

This renewal permit implements the initial five years of the LTCP Implementation Schedule as established by the permittee and as approved in the Administrative Compliance Agreement executed by the Department and the permittees, dated February 27, 2025. The LTCP, as approved by the Administrative Compliance Agreement, also addresses the CSO control measures within the Implementation Schedule that extend beyond the five-year NJPDES permit term for JMEUC and the City of Elizabeth.

As per N.J.A.C. 7:14A-4.2(e)3, any person planning to continue discharging after the expiration date of an existing NJPDES permit shall file an application for renewal at least 180 calendar days prior to the expiration of the existing permit.

All monitoring shall be conducted in accordance with 1) the Department's "Field Sampling Procedures Manual" applicable at the time of sampling (N.J.A.C. 7:14A-6.5(b)4), and/or 2) the method approved by the Department in Part IV of the permit. The Field Sampling Procedures Manual is available at <http://www.nj.gov/dep/srp/guidance/fspm/>.

Questions or comments regarding the final action should be addressed to Josie Castaldo either by phone at (609) 292-4860 or email at Josie.Castaldo@dep.nj.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "B. Callanan", is positioned above the printed name and title.

Brett Callanan, Chief
Bureau of Surface Water and Pretreatment Permitting

Enclosures

cc: Permit Distribution List
Masterfile #: 37448; PI #: 46299

Attachment A

The final permit incorporates changes to the requirements in Part II. The Department has determined that these changes are minor in nature. Only those items in Part II which are affected are listed below, where deletions are shown in strikethrough and additions are shown in underline.

PART II GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

B. General Conditions

2. Permit Renewal Requirement

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. ~~Submit a complete permit renewal application 180 days before the expiration date.~~
Submit a complete permit renewal application at least 180 calendar days prior to the expiration date of the permit.

4. Notification of Facility Changes

- a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.
- b. ~~Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.~~

5. Notification of Change in Ownership and/or Permittee/Operating Entity

- a. As set forth at N.J.A.C. 7:14A-16.2, prior to any change in ownership and/or the permittee/operating entity, the current permittee shall provide written notice to the Department at least thirty (30) days prior to the proposed transfer date.
 - i. Written notice to the Department shall be in the form of a completed Application for Transfer of a NJPDES Permit form, which is available on the Department's website or by contacting the appropriate permitting program.

6. Notification of Changes to the Facility/Permit Contacts

- a. The permittee shall notify the Department within thirty (30) days of a change in contact information for any of the following persons associated with the facility/permit:
 - i. Permittee/Operating Entity Contact;
 - ii. Property Owner Contact;
 - iii. Facility Contact; or
 - iv. Fees/Billing Contact.

- b. Notification to the Department shall be in the form of a completed Contact Information Update form (i.e. NJPDES-2 form), which is available on the Department's website or by contacting the appropriate permitting program.

Table of Contents for the Final Permit

- 1. Cover Letter**
- 2. Attachment A**
- 3. Table of Contents**
- 4. List of Acronyms**
- 5. Response to Comments**
- 6. NJPDES Permit Authorization Page**
- 7. Part I – General Requirements: NJPDES**
- 8. Part II – General Requirements: Discharge Categories**
- 9. Part III – Limits and Monitoring Requirements**
- 10. Part IV – Specific Requirements: Narrative**
- 11. Appendix A: Design Standards for Designed Storm Drain Inlets**

List of Acronyms

ACR	Acute to Chronic Ratio
AL	Action Level
AML	Average Monthly Limitation
BMP	Best Management Practices
BPJ	Best Professional Judgement
CAP	Capacity Assurance Program
CFR	Code of Federal Regulations
CV	Coefficient of Variation
CWEA/CWA	Clean Water Enforcement Act/Clean Water Act
Department	New Jersey Department of Environmental Protection
DGW	Discharge to Groundwater
DMR	Discharge Monitoring Report
DRBC	Delaware River Basin Commission
DSN	Discharge Serial Number
DSW	Discharge to Surface Water
EDP/M	Effective Date of the Permit/Permit Modification
EEQ	Existing Effluent Quality
ELG	Effluent Limitation Guideline
g/d or g/day	Grams per Day
IEC	Interstate Environmental Commission
IPP	Industrial Pretreatment Program
kg/d or kg/day	Kilograms per Day
LTA	Long Term Average
MA1CD10 or 1Q10	Minimum average one day flow with a statistical recurrence interval of ten years
MA7CD10 or 7Q10	Minimum average seven consecutive day flow with a statistical recurrence interval of ten years
MA30CD5 or 30Q5	Minimum average 30 consecutive day flow with a statistical recurrence interval of five years
mg/L	Milligrams per Liter
MDL	Maximum Daily Limitation
MGD	Million Gallons per Day
MRF	Monitoring Report Form
NAICS	North American Industry Classification System
NPDES/NJPDES	National/New Jersey Pollutant Discharge Elimination System
NJR	New Jersey Register
PCB	Polychlorinated Biphenyls
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
RPMF	Reasonable Potential Multiplying Factor
RTR	Residuals Transfer Report
RQL	Recommended Quantification Levels
RWBR	Reclaimed Water for Beneficial Reuse
SIC	Standard Industrial Classification
SIU	Significant Indirect User
SQAR	Sludge Quality Assurance Regulations
SWQS	Surface Water Quality Standards
TMDL	Total Maximum Daily Load
TR	Total Recoverable
TRIR	Toxicity Reduction Implementation Requirements
USEPA TSD	USEPA Technical Support Document for Water Quality Based Toxics Control (EPA/505/2-90-001, March 1991)
µg/L	Micrograms per Liter
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UV	Ultraviolet
WCR	Wastewater Characterization Report
WER	Water Effects Ratio
WLA	Wasteload Allocation
WWTP	Wastewater Treatment Plant
WQBEL	Water Quality Based Effluent Limitation

List of CSO Acronyms

CMP	Compliance Monitoring Program
CSM	Combined Sewer Management
CSO	Combined Sewer Overflow
CSS	Combined Sewer System
DEAR	Development and Evaluation of Alternatives Report
DWO	Dry Weather Overflow
FCA	Financial Capability Analysis
I/I	Infiltration/Inflow
H&H	Hydrologic and Hydraulic
LTCP	Long Term Control Plan
MHI	Median Household Income
NJIB	New Jersey Infrastructure Bank
NJHDG	New Jersey Harbor Dischargers Group
NMC	Nine Minimum Controls
O&M	Operation and Maintenance
PCCMP	Post Construction Compliance Monitoring Program
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RI	Residential Indicator
S/F	Solids/Floatables
SOPs	Standard Operating Procedures
SRF	State Revolving Fund
TWA	Treatment Works Approval

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water and Pretreatment Permitting

RESPONSE TO COMMENTS

Comments were received on the New Jersey Pollutant Discharge Elimination System (NJPDES) draft Surface Water Renewal Permit Actions No. (NJ0108782 and NJ0024741), issued on May 9, 2023, to Joint Meeting of Essex & Union Counties (JMEUC) and the City of Elizabeth. The public comment period began on May 12, 2023, when the Public Notice was published in *The Star Ledger*. It ended on July 14, 2023, encompassing a total of sixty-three (63) days. A Public Notice was also posted in the *DEP Bulletin* on May 17, 2023. The New Jersey Department of Environmental Protection (the Department or NJDEP) held two virtual public hearings to solicit public comment on the draft permits on June 12, 2023 as scheduled from 10 a.m. to 12 p.m. then again from 6 p.m. to 8 p.m.

During the public comment period, the Department accepted written and oral comments from numerous parties and individuals. The Department accepted oral testimony as comments since the public hearings were recorded and transcribed. The public hearings are available to view on the Department's You Tube channel at <https://www.youtube.com/@NewJerseyDEP/videos>. The administrative record includes, but is not limited to, copies of all written comments, testimony given at the public hearings, and any documents identified in this Response to Comments document consistent with N.J.A.C. 7:14A-15.17. The administrative record is available for review and is on file at the offices of the Department, located at 401 E. State Street, Trenton, NJ. It is available for inspection by appointment, Monday through Friday, between 8:30 a.m. and 4 p.m. Appointment for inspection may be requested through the Office of Record Access. Details are available online at www.nj.gov/dep/opra or by calling (609) 341-3121. The full draft permits are available at www.nj.gov/dep/dwq/cso.htm and were posted on May 9, 2023.

The Department has summarized the written comments and public testimony received on the draft NJPDES permits. To the best extent practicable, the Department has grouped the comments according to similar issues then by specific sections of the draft permits. To highlight changes to specific language throughout this document, deletions are shown with strikethrough and additions are shown with underline.

Comments were received from the following persons as identified by the commenter numbers below:

Written Comments		
Person	Title / Affiliation	Commenter Number
Virginia Wong	Chief, Clean Water Regulatory Branch, United States Environmental Protection Agency (USEPA) Region 2	1
Sewage Free Streets and Rivers	<p><i>Advisory Board Members:</i></p> <p>Jose Amarte, SWIM</p> <p>Suzanne Aptman, Program Manager, Sewage Free Streets and Rivers (SFSR) and New Jersey Future</p> <p>Amy Goldsmith, State Director, Clean Water Action</p> <p>Michele Langa, Staff Attorney, NY/NJ Baykeeper</p> <p>Nicole Miller, Co-Chair, NewarkDIG (Doing Infrastructure Green)</p> <p><i>Technical Advisors:</i></p> <p>Rosana Pedra Nobre, New York - New Jersey Harbor & Estuary Program</p> <p>Christopher C. Obropta, Rutgers Cooperative Extension Water Resources Program</p> <p><i>Signed by the following partner organizations and local community organizations:</i></p> <p>Association of New Jersey Environmental Commissions (Statewide)</p> <p>Clean Water Action (Statewide)</p> <p>Embankment Preservation Coalition (Jersey City, NJ)</p> <p>Future City Inc. (Elizabeth, NJ)</p> <p>Hackensack Riverkeeper (Hudson County, NJ)</p> <p>NewarkDIG (Newark, NJ)</p> <p>New Jersey Future (Statewide)</p> <p>NY/NJ Baykeeper (Northern NJ)</p> <p>Passaic River Coalition (Northern NJ)</p> <p>Raritan Riverkeeper (Middlesex, Monmouth and Somerset Counties, NJ)</p> <p>Waterspirit (Statewide)</p>	2
Elise Morrison	Trustee, Hudson River Waterfront Conservancy	3
Patricia Dunkak	Policy and Program Coordinator, New Jersey Future	4

Testimony at Public Hearing on June 12, 2023		
Morning Session		
Person	Title / Affiliation	Commenter Number
Suzanne Aptman	Program Manager, NJ Future	5
	Advisory Board Member, Sewage Free Streets and Rivers	
Michele Langa	Staff Attorney, NY/NJ Baykeeper, Member of Sewage Free Streets and Rivers, Jersey Water Works	6
Rachel Dawn Davis	Waterspirit	7
Nicole Miller	NewarkDIG, Sewage Free Streets and Rivers	8
Tracy Parham	Future City, Inc., Citizen of Elizabeth	9

Testimony at Public Hearing on June 12, 2023		
Evening Session		
Person	Title / Affiliation	Commenter Number
Suzanne Aptman	Program Manager, NJ Future	5
	Advisory Board Member, Sewage Free Streets and Rivers	

Comments submitted on behalf of the permittees, as identified below, are included at the end of this document. See pages 45 through 69 for the permittees' comments and the Department's responses.

Written Comments		
Person	Title / Affiliation	Commenter Number
Daniel J. Loomis, PE	City Engineer, City of Elizabeth	10
Hanifa Johnson	Executive Director, Joint Meeting of Essex and Union Counties	11

To the extent practicable, the Department has grouped the following comments into the following general categories:

<u>Topics</u>	Comment Numbers
General	1-8
Fact Sheet	9
Nine Minimum Control Requirements (Part IV.F)	10-20
Long Term Control Plan Requirements (Part IV.G)	21-91
Custom Requirement (Part IV.H)	92-103
Permittee Comments (City of Elizabeth)	104-107
Permittee Comments (JMEUC)	108-132

Where changes to the permit are specified in the responses below, deleted language is shown in strikethrough and additional language is shown in underline.

GENERAL COMMENTS

- COMMENT:** Thank you to all of the staff at the NJDEP for getting us to this point and valuing the public health and ecosystems of New Jersey's urban communities. Additionally, a sincere note of thanks to Susan Rosenwinkel and Joe Mannick, along with their dedicated staff, for the years of hard work they have put into drafting these permits and the collaborative effort they have shown.

We would also like to acknowledge all of the work that was done by the Combined Sewer Overflow (CSO) permit holders and their consultants to develop these plans, as well as members of the Supplemental CSO Teams, community members, and stakeholders who have worked together over the past several years, some since the issuance of the first CSO Permits in 2015. [2]

- COMMENT:** Thank you to the NJDEP for the opportunity to provide comments on the draft NJPDES CSO permits issued to the City of Elizabeth (NJPDES Permit No. NJ0108782) and the Joint Meeting of Essex and Union Counties (NJPDES Permit No. NJ0024741). We appreciate the opportunity to provide comments that we hope will allow for increased public engagement around CSOs and can be a step towards improving New Jersey's water quality. [4]

3. **COMMENT:** Thank you to the NJDEP for this public hearing on these draft permits. We appreciate the opportunity to provide comments that will allow for increased public engagement around CSOs and are a step towards improving water quality in New Jersey. New Jersey Future appreciates the hard work of the NJDEP and the permit holder on drafting these permits and supports requirements to reduce combined sewer discharges to improve water quality. [5]
4. **COMMENT:** I want to thank the NJDEP. It has been an intense task to develop a long term control plan and review the permits. We are gratified to see the continuous rollout of the permits starting in December. We're already on our third set and so we're happy that the process has been continuing and we thank you for your efforts.

We do want to thank you for listening to advocates. We did review the final Guttenberg North Bergen permit and saw several of our recommendations. We do hope that those recommendations will be seen at the draft stage in future permits when possible. We again thank you for holding this public hearing opportunity and for making it more inclusive with every round. [8]

RESPONSE (1-4): The Department appreciates the commenters' support of the work involved in the development of the NJPDES CSO permits and long term control plans (LTCPs) which has led to the issuance of the draft NJPDES CSO permits for JMEUC and the City of Elizabeth (collectively referred to herein as the permittees). These two permittees submitted a single, coordinated LTCP for the hydraulically connected system in October 2020 as required by the March 12, 2015 NJPDES CSO permits. An LTCP is a plan that CSO permittees are required to develop and evaluate a range of CSO control alternatives to ensure conformance with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. The joint coordinated LTCP submitted cooperatively by the permittees reflects many years of data gathering, evaluation and modeling and included an assessment to determine what level of CSO control measures may be reasonably implemented. The permittees own/operate separate portions of one hydraulically connected system. These subject permit actions serve to renew the 2015 NJPDES CSO Permits and incorporate the findings of the LTCP.

Since the release of the 2015 NJPDES CSO permits, the Department has made a concerted effort to connect with external stakeholders and EPA in order to listen to suggestions at all stages of the LTCP process. Department staff have participated in many meetings including CSO Supplemental Team meetings as well as meetings held by stakeholders where many of those stakeholders have now commented on these two subject NJPDES CSO permits. The Department held four stakeholder sessions on the topics of public participation, environmental justice, climate change and CSO metrics on December 7, 2021, January 13, 2022, February 10, 2022 and February 17, 2022, respectively. The Department also held a stakeholder meeting on Permit Concepts on October 6, 2022 on public input collected in these meetings and as collected in written submissions. The Department acknowledges the ongoing collaborative and cooperative effort by stakeholders and permittees to inform the development of LTCPs to reduce CSOs in the affected communities. The Department agrees that this holistic involvement has contributed to the development of comprehensive permit conditions to address the complex issue of CSOs. Notably, the Department developed a guidance document specific to Public Engagement based on requests from the public as available at <https://www.nj.gov/dep/dwq/cso.htm>. The Department agrees that addressing CSOs is a critical issue and acknowledges that there has been significant public interest in this topic.

Regarding the status of other NJPDES CSO permits referenced in this comment, a final NJPDES CSO permit was issued to the North Bergen Municipal Utilities Authority (NBMUA) and Town of Guttenberg on May 25, 2023, which contains a complete response to comments document. Subsequently, the Department finalized other NJPDES CSO permits including to North Hudson Sewerage Authority Adams Street on February 6, 2024; to Camden County Municipal Utilities Authority, the City of Camden and Gloucester City on November 4, 2024; and to the Borough of Fort Lee, the City of Hackensack; the Village of Ridgely Park and BCUA on January 30, 2025. All of these final permits contain a complete response to comments document and show any changes in permit language as a result of the public comment process.

5. **COMMENT:** Addressing water quality issues by 1) reducing flooding and CSO discharges, and 2) ensuring the proper maintenance of infrastructure are important priorities in protecting public health, the environment, and economic redevelopment. We ask that this final permit, and all future CSO permits, have clear conditions and requirements reflecting the highest standards for design of control measures, implementation, and public engagement.

Overall, New Jersey Future supports this draft permit as it will improve water quality and reduce combined sewer overflows. However, we ask NJDEP to please ensure the shortest timeline practicable for implementation and to strengthen requirements and, where that is not possible, to provide permittees separate guidance documents for the highest design standards, implementation, and public engagement. [4]

6. **COMMENT:** Addressing these water quality issues by reducing flooding and CSO discharges and ensuring proper maintenance of infrastructure are important tools to protect public health, the environment, and economic development. We ask that the final permit, and all future CSO permits, have clear conditions and requirements reflecting the highest standards for design of control measures, implementation, and public engagement. [5]

RESPONSE (5-6): The Department agrees that the reduction and/or elimination of CSOs is a high priority and has strived to create these permits with that goal in mind. The Department also agrees that prescriptive language should be included in NJPDES CSO permits to the extent practicable and has incorporated such where appropriate within the NJPDES CSO permits. Prescriptive permit language is beneficial to all affected parties, including the community, permittees, and government regulators, as predictive permit language ensures that expectations regarding compliance are clear and measurable. Specific suggestions for prescriptive permit language have been provided within many of the public comments and these suggestions are addressed individually in responses for those specific NJPDES CSO permit sections.

While the Department cannot establish requirements for permittees through guidance, the Department agrees that it is advantageous to develop guidance to explain prescriptive permit language where needed. See responses below on specific topics regarding commitments to updating or developing guidance, particularly on the topic of Public Engagement.

7. **COMMENT:** We are pleased that NJDEP clarified in the July 22, 2021 “Review of Section and Implementation of Alternatives of the Long Term Control Plan (LTCP)” for the permittee that “The LTCP must address the elimination of street flooding where this should be the utmost priority in the selection of alternatives.” We applaud the City of Elizabeth for numerous flood abatement projects prior to and in concert with the LTCP. [2]
8. **COMMENT:** The control strategies will impact local flooding. Can you share more details on how the control strategies will impact local flooding, not just the CSOs into the waterbodies? [5]

RESPONSE (7-8): The Department acknowledges the proactive manner in which the City of Elizabeth has moved forward with several CSO control projects and the associated impact on minimizing localized flooding. As referenced in this comment, the importance of addressing flooding is described in the Department’s July 22, 2021 letter which includes technical comments on the October 2020 LTCP where that letter is posted here: [cso_ltcp_commentletter_jmeucelizabeth_07222021.pdf](#). Completed projects that address flooding are as follows:

The Progress Street Stormwater Control Project was completed in 2018 to address flooding in a low-lying industrial area. Flooding was caused by excessive flows in the CSO outfall line, coupled with high water levels at the outlet to the Great Ditch, which then conveyed wet weather flows to Newark Bay.

The Trumbull Street Stormwater Control Project was completed in August 2020. This project was implemented to address localized street flooding at Trumbull Street and Sixth Street that disrupted trucking transportation traffic from the area to nearby highways and impacted the passage of emergency response vehicles. The Trumbull Street Stormwater Control project also included a green infrastructure installation.

The Lincoln Avenue Stormwater Control Project was completed in June 2024 and addressed capacity limitations in a separate storm sewer drainage system that relates to surface flooding along Lincoln Avenue at the intersections with Melrose Terrace, Decker Avenue, and Wilson Terrace.

The South Street Flood Control Project was completed in 2021 and was implemented to address inadequate capacity within the existing combined sewer and the inability to reliably operate the South Street Pump Station. The project included rehabilitation and upgrades to the South Street Pump Station, including new pumps, electrical systems and controls, a backup generator as well as repairs and lining of the existing combined sewer on Fourth Avenue and connecting streets. This project also included installation of separate storm sewers and inlets at various locations including South Spring Street and the dead-end streets of Fourth Avenue between South Street and John Street, as well as the restoration of the Elizabeth River Flood Control ponding areas and outlet structures.

The South Second Street Stormwater Control Project is nearly complete and consists of drainage upgrades to provide a new storm system that drains into the existing ditch at the end of South Second Street. This project also incorporates control improvements to the existing South Second Street Stormwater Pump Station as well as cleaning and enhancement of the existing drainage ditch and headwall to allow unimpeded flow of runoff from the Geneva Street and South Second Street area to the pump station. As of January 2025, the generator was installed and repair work on the South Second Street Pump Station (PS) gates is complete. .

Construction for the CSO Basin 012 sewer separation has been completed and the drainage area is being monitored to prepare for elimination of the CSO.

As stated within the LTCP, the City of Elizabeth has planned additional projects to further address flooding. An update on these projects is as follows:

The Atlantic Street CSO Storage Facility Project proposes to address localized flooding while significantly reducing the overflow volume for Outfall 038A, through the installation of an underground wet weather storage system in excess of 1 million gallons at Atlantic Street and Third Avenue. Construction is underway and completion is estimated by 2025.

A Roselle Park storm sewer connection contributes significant wet weather flow to the upstream end of the large combined sewer drainage basin of the northwestern section of Elizabeth. The City of Elizabeth has been monitoring the flow from the connection on a continuous basis since December 2017 and has been working with Roselle Park to disconnect the storm sewer discharge.

The Park Avenue Stormwater Control Project is underway and will provide additional drainage capacity to address periodic localized street flooding on Park Avenue between Coolidge Road and Springfield Road during significant wet weather events. Flooding in this area will also be mitigated by the disconnection of stormwater from Roselle Park.

The Department agrees that addressing any areas that flood with combined sewage are of the utmost priority since flooding of combined sewage in streets is a public health concern and is not acceptable.

FACT SHEET COMMENTS

9. **COMMENT:** The fact sheets should include the type and quantity of wastes discharged, including CSOs. [1]

RESPONSE (9): The Department agrees that it is appropriate to include the type and quantity of wastes discharged within the fact sheet consistent with N.J.A.C. 7:14A-15.7(b) for both the wastewater treatment plant (WWTP) discharge and CSO discharges. The type and quantity of waste discharged was addressed by including a reference within the Permit Summary Table. This reference, as included in the May 9, 2023 draft permit Fact Sheets for the JMEUC and City of Elizabeth, is shown below:

JMEUC

7 Type and Quantity of the Wastes or Pollutants:

The Permit Summary Table near the end of this fact sheet contains a summary of the quantity and quality of pollutants treated and discharged from the facility and the proposed effluent limitations.

City of Elizabeth

7 Type and Quantity of the Wastes or Pollutants:

The Permit Summary Tables in Section 9 of this Fact Sheet contain a summary of certain parameters discharged from the permittee's CSO outfalls.

NINE MINIMUM CONTROL REQUIREMENTS (PART IV.F) COMMENTS

10. **COMMENT:** EPA strongly supports the enhanced inspection and cleaning requirements, including requirements to inspect, and clean if needed, a minimum of 20% of the system on a yearly basis, thereby ensuring that the entire collection system is inspected, and cleaned as needed, during the term of the permit. EPA notes that certain critical portions of the system, such as regulators, screening/netting facilities, and tide gates, including those associated with Army Corps of Engineering Flood Control Structures, may benefit from even more frequent inspections, due to the likely impacts from climate change. [1]
11. **COMMENT:** What will be the enforcement mechanism to ensure that the permittee implements the system cleaning program? What will the NJDEP do if the permittee does not comply with the annual system cleaning program and/or if they do not meet the 100% inspection and cleaning of the system at the end of the respective five-year permit? Will performance factors and deficiencies be communicated to the public? If so, how will that be communicated to the public? [2]

RESPONSE (10-11): Collection system cleaning is integral to the proper function of the sewer system and specific requirements have been included in these subject renewal permits. Proper operation and maintenance of the collection system is the responsibility of all NJPDES CSO permittees for their respective collection system that they own/operate. The 2015 NJPDES CSO permits contain Proper Operation and Regular Maintenance Program Requirements in Part IV.F.1 which have been carried forward in this renewal permit. The extensive language included in this section of the permit specifically states that the collection system, CSO outfalls, solids/floatables facilities, regulators, and related appurtenances that are owned/operated by the permittee must be operated in a manner to function properly and minimize CSO-related street flooding.

As part of external outreach leading up to the development of the LTCPs, the Department received multiple requests to include specific, measurable system cleaning requirements within the NJPDES permits to ensure proper maintenance of the combined sewer system (CSS). As a result, and upon consultation with several CSO permittees, the Department expanded upon the Proper Operation and Regular Maintenance Program permit requirements by developing the System Cleaning Program requirements in Part IV.F.1.f which is shown below for the NJPDES CSO permit for the City of Elizabeth. Based on these comments and the specific suggestion provided by EPA, the Department is further enhancing the requirements of Part IV.F.1.f regarding the System Cleaning Program. Note that Part IV.F.1.f.ii contains the length of the system for the City of Elizabeth which varies from the length for JMEUC and is not shown below. The revised language is as follows:

- f. The permittee shall include in the O&M Program and corresponding Manual, a System Cleaning Program to address the following:

- i. The System Cleaning Program shall be designed to ensure the entire collection system, including, but not limited to, tide gates, outfalls and regulators, is sufficiently clean in order to function properly and minimize CSO-related street flooding.
- ii. The System Cleaning Program shall be designed to ensure that the entire collection system is sufficiently clean which can be accomplished through regular inspection and, if necessary, cleaning. Such inspection and cleaning should be done, such that within five years, the entire system has been covered. Such inspection and cleaning should be done, such that within five years, the entire system has been covered. Specifically, for the City of Elizabeth, the total system is 200 miles long. Critical portions of the system, such as regulators, solids/floatables facilities, and tide gates, may benefit even more from frequent inspection.
- iii. The System Cleaning Program shall include an annual certification that a minimum of 20% of the system (by linear feet/miles) shall have been inspected and, if necessary, cleaned, within the last year. Alternatively, if less than 20% of the system has been completed within the last year, the certification shall include a statement of how much of the system was inspected and, if necessary, cleaned, within the last year and a plan to ensure that 100% of the system is inspected and if necessary cleaned, by the expiration date of the permit. This is an annual requirement based on the calendar year, due February 1 of the following year and is part of the Operation and Maintenance Manual. The total length of the system in linear/feet shall also be defined. Updates on the System Cleaning Program shall also be provided in Progress Reports.

As noted in this permit requirement the permittee is required to submit Progress Reports at Part IV.D.2 with a specific condition customized for the System Cleaning Program at Part IV.D.2.a.ii. A template for the progress report is available at <https://dep.nj.gov/dwq/combined-sewer-overflow/cso-permittees/#resources>. The Department conducts routine compliance inspections where inspection reports are available online at <https://njems.nj.gov/DataMiner>.

Failure to comply with the NJPDES permit conditions, including the System Cleaning Program, can result in enforcement action and penalties. Refer to N.J.A.C. 7:14A-6.12, N.J.A.C. 7:14A-8.1 et seq., N.J.A.C. 7:14A-6.2, and N.J.A.C. 7:14A-2.9 as referenced within the permit at Part I of the NJPDES CSO permits. The federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C also contain requirements that relate to the proper operation and maintenance of the collection system.

This change affects Part IV.F.1.f of the final permits.

- 12. COMMENT:** There has been a great deal of concern among impacted community members that they are exposed to *Escherichia coli* (E. coli) and other harmful bacteria, viruses, and chemicals during sewage backups into homes and streets. The fear of not knowing causes panic and a sense of urgency to disinfect homes. Since this and subsequent permits will not completely solve the localized flooding issue, it is imperative that community members have time to prepare for impending heavy rainstorms and possible sewage back-ups.

We recommend the Department require that the permittee measures the amount of sewage released in localized flooding. We recommend that the Department require alerts and notification systems, not just for Elizabeth River, Arthur Kill and Newark Bay discharges, but in advance of potential sewer backups and street/basement flooding. This notification should be published through all of the municipal communication channels, including those designed for emergency situations, as well as through the press, social media, and outreach to community-based organizations.

In addition, while the reports that track flooding and sewage back-ups into streets are technically available, they are not user-friendly and difficult to read. We recommend that the permittee improve public accessibility to this information. [2]

- 13. COMMENT:** Sewage back-ups may expose community members to *Escherichia coli* (*E. coli*) and other harmful bacteria and chemicals. Since this permit will not completely eliminate all flooding and water quality issues, it is important that community members are notified in advance of possible flooding events. We recommend that NJDEP require permittees to create alerts through a municipal notification system, similar to those used for emergency situations, in advance of potential sewer overflows and back-ups. [4]

RESPONSE (12-13): During periods of heavy rainfall, the capacity of the CSS may be exceeded, and can cause overflows from manholes onto surface streets and can even cause untreated combined sewage and storm water to back up into basements. Combined sewage can contain bacteria, debris and other substances that can be harmful. The Department agrees that addressing any areas that flood with combined sewage are of the utmost priority since flooding of combined sewage in streets is a public health concern and is not acceptable. Any events related to CSO-related flooding should be reported to the respective permittee who is required to track this information on required progress reports to be submitted on a semi-annual basis. CSO-related flooding can also be reported to the NJDEP Hotline at 1-888-WARN-DEP where details of the physical address or location should be provided. In addition, the locations of CSO-related flooding should be a topic of CSO Supplemental Team meetings, as stated in Part IV.G.2.

In addition to the above, specific permit provisions in Part IV.F for both permits are as follows:

- 1.h.i. SOPs [Standard Operating Procedures] shall be designed to ensure that the entire collection system owned/operated by the permittee that conveys flows to the treatment works functions in such a way as to not result in sewage overflows (except from designated CSO outfalls) including to basements, streets and other public and private areas, or bottlenecks/constrictions that limit flow in specific areas and prevent the downstream STP treatment capacity from being fully utilized, in accordance with Section F.4.
- 1.h.ix. SOPs shall be designed to provide a system for documenting, assessing, tracking, and addressing residential complaints regarding blockages, bottlenecks, flow constrictions, sewer overflows including to basements, streets and other public and private areas, or related incidents for the collection system that is owned/operated by the permittee.
- 2.a. The permittee shall continue to use the entire collection system owned/operated by the permittee for in-line storage of sewage for future conveyance to the STP when sewer system flows subside by ensuring that the sewage is retained in the sewer system to the extent practicable to minimize CSO discharges (i.e. volume, frequency and duration), while not creating or increasing sewage overflows, including to basements, streets and other public and private areas.

In summary, the NJPDES permit contains specific permit conditions that require the permittee to directly address flooding through SOPs as well as by requiring a method to track flooding locations.

In addition, it is not feasible to predict where and when CSO-related flooding and basement back-ups may occur given the many variables that impact the occurrence of any CSO-related flooding such as weather patterns, capacity of the CSS, tidal stage, when the last storm occurred etc. Requiring reporting of the amount or volume of raw sewage discharged as suggested in this comment would also not be feasible. Effluent sampling of CSOs during rain events has demonstrated that these levels are not safe and it is unlikely that additional water quality sampling would prove otherwise. Nonetheless, the Department encourages the reporting of CSO-related flooding events to better understand the location of problematic areas. The reduction of CSOs and the associated contaminants is consistent with the goals of the Clean Water Act and the Department.

- 14. COMMENT:** It is encouraging that an Asset Management Plan is included in this permit. However, it is not clear if affordability is assessed in this plan. Is affordability considered in the Asset Management Plan and where is that described?

How will the NJDEP ensure the CSO Supplemental Team can provide meaningful input on the Asset Management Plan and how it is establishing rates? How is the permit holder held accountable to engage community members in these discussions? [2]

RESPONSE (14): Asset Management is a process to ensure that there is sufficient investment and planned maintenance, needed repair, replacement, and upgrade of the physical components of a wastewater system. These physical components of the system infrastructure are considered assets. To achieve effective asset management, a water system must assess the current state of their assets and have a program in place to prioritize investment. This prioritization is done through an Asset Management Program and documented in an Asset Management Plan. Asset Management is separate from affordability and is a separate issue from setting sewer rates. Additional guidance on the development of an Asset Management Plan is available at <https://www.nj.gov/dep/assetmanagement/index.html>.

The preparation of an Asset Management Plan is a requirement of the NJPDES CSO permits. As stated in Part IV.F.1.i, an Asset Management Plan is required to address asset inventory/mapping and condition assessment, level of service, criticality/prioritization assessment, life-cycle costing, and long-term funding strategy of the treatment works. In addition, the Asset Management Plan must address infrastructure inventory with infrastructure repair/replacement needs listed and scheduled according to priority/criticality.

The objectives of the CSO Supplemental Team as listed in the NJPDES permits at Part IV.G.2 do not include Asset Management or setting sewer rates. Asset Management requirements are designed for the purpose of a permittee developing an Asset Management Plan. Sewer rates will be set by the permittee and are based in part on costs of LTCP projects and presently available funding.

15. **COMMENT:** We request that NJDEP develop clear and specific inspecting, monitoring, and enforcement procedures to ensure the permittee complies with the system cleaning program for both gray and green infrastructure projects. We also request that the role that NJDEP staff play be clarified in inspecting and enforcing all projects, including gray and green infrastructure and maintenance. How will the NJDEP inspect and enforce all projects, including green infrastructure? How will the NJDEP ensure the permittee complies with their maintenance plan for all projects? [2]

RESPONSE (15): The Department agrees that the operation and maintenance of both gray and green CSO control measures is integral to their proper function. Operation and maintenance of CSO control measures, such as green infrastructure, is addressed in a separate permit condition at Part IV.G.6 which reads as follows:

- a. Throughout implementation of the LTCP, the permittee shall update the Operational Plan, including Operation & Maintenance (O&M) Manual, Emergency Plan, and Asset Management Plan in accordance with F.1, to address the LTCP CSO control facilities and operating strategies, including but not limited to: the implementation, operation, and maintenance of CSO related bypass, Gray and Green Infrastructure; staffing and budgeting; and I/I. Climate change resilience requirements shall also be considered in the update of these plans.

Failure to properly operate and maintain any CSO control facility is a violation of the NJPDES permit. Refer to N.J.A.C. 7:14A-6.12, N.J.A.C. 7:14A-8.1 et seq., N.J.A.C. 7:14A-6.2, and N.J.A.C. 7:14A-2.9 as referenced within the permit at Part I of the NJPDES CSO permits. The federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C also contain requirements for an Operational Plan. Any green infrastructure practices must comply with applicable state and local rules, regulations and ordinances.

Extensive operation and maintenance program requirements are contained in Part IV.F.1 of the NJPDES permits and the System Cleaning Program is included as Part IV.F.1.f. However, the System Cleaning Program requirements do not apply to all gray and green infrastructure but rather is limited to the combined sewer collection system as described in Part IV.F.1.f.

- 16. COMMENT:** EPA recognizes the draft permit requirements concerning the identification and assessment of loadings from Significant Industrial Users (SIUs) in the draft permits. For permittees with an approved pretreatment program, it is recommended that permittees be required not only to evaluate the CSO impacts from SIUs, but also take appropriate steps to minimize such impacts during times when CSO events are likely to occur. For permittees without an approved pretreatment program, the permittees should continue to implement selected CSO controls to minimize CSO impacts resulting from nondomestic discharges. [1]

RESPONSE (16): JMEUC has an approved pretreatment program as it is a delegated publicly owned treatment works (POTW) pursuant to N.J.A.C. 7:14A-19. The Department agrees that this language can be clarified to meet EPA's intent in Part IV.F.3.a.

Changes to Part IV.F.3.a (CSM Requirements) of the final NJPDES CSO permit for JMEUC are as follows:

- a. For the SIU dischargers upstream of any CSO outfall which is owned/operated by the permittee, the permittee shall: (1) determine the locations of the SIUs; (2) identify the CSO outfalls associated with each of the SIUs; and (3) determine the discharge volume and loading of SIU-permitted parameters for each SIU. In the case of a municipal permittee or non-delegated STP permittee, information to satisfy (1) and (3) shall be obtained from the delegated local agency that regulates the SIU or, if there is no delegated local agency, from the Department. The permittee should take appropriate steps to minimize impacts from SIUs when CSO events are likely to occur. This information shall be used to prioritize O&M activities in portions of the CSS affected by SIU discharges.

The City of Elizabeth does not have an approved pretreatment program as they are not a delegated POTW pursuant to N.J.A.C. 7:14A-19. Changes to Part IV.F.3.a of the final NJPDES CSO permit for the City of Elizabeth are as follows:

- a. For the SIU dischargers upstream of any CSO outfall which is owned/operated by the permittee, the permittee shall: (1) determine the locations of the SIUs; (2) identify the CSO outfalls associated with each of the SIUs; and (3) determine the discharge volume and loading of SIU-permitted parameters for each SIU. In the case of a municipal permittee or non-delegated STP permittee, information to satisfy (1) and (3) shall be obtained from the delegated local agency that regulates the SIU or, if there is no delegated local agency, from the Department. The permittee should continue to implement selected CSO controls to minimize CSO impacts resulting from nondomestic discharges. This information shall be used to prioritize O&M activities in portions of the CSS affected by SIU discharges.

This change affects Part IV.F.3 (CSM Requirements) of the final permits.

- 17. COMMENT:** We were glad to read in the Guttenberg/North Bergen Municipal Utilities Authority (NBMUA) permit that NJDEP agrees with the EPA that language can be clarified for pretreatment requirements and modified the language in that final permit. We encourage NJDEP to similarly ensure that appropriate pretreatment requirements and language are included in this Elizabeth/JMEUC permit and subsequent CSO permits. [2]

RESPONSE (17): The Department modified the permit language at Part IV.F.3.a as shown in **RESPONSE (16)**, as suggested by EPA. Based on a similar comment provided by EPA in those permits, the Department had incorporated modified language in the NBMUA and Town of Guttenberg NJPDES CSO permits as issued on May 25, 2023; in the final North Hudson Sewerage Authority (NHSA) Adams Street Sewage Treatment Plant (STP) NJPDES CSO permit as issued on February 7, 2024; in the final NJPDES CSO permits issued to Camden County Municipal Utilities Authority (CCMUA), the City of Camden and Gloucester City on November 4, 2024; and in the final NJPDES CSO permits issued to Bergen County Utilities Authority, Borough of Fort Lee, City of Hackensack, and Village of Ridgely Park on January 30, 2025.

18. COMMENT: The CSO LTCP notes that some combined flows from the Elizabeth combined sewer system (Elmora sewer area) enter directly into the JMEUC interceptor, prior to the Elizabeth interceptors and Trenton Avenue Pump Station. It is recommended that the permittees more closely evaluate opportunities for increasing/maximizing flows directly into the JMEUC interceptor and avoid flow restrictions in the Elizabeth interceptor sewers and/or the Trenton Avenue Pump Station. [1]

RESPONSE (18): The Department agrees that maximization of flow to the POTW for treatment is often an effective and cost-effective strategy to reduce CSO volume. An example of this is the completed improvements to wet weather capacity from the Trenton Avenue Pump Station (TAPS) from 36 MGD to the estimated peak hydraulic capacity of 55 MGD. This has enabled the collection of additional wet weather flows that were previously discharged through CSO outfalls. In addition to a change in the contractual agreement between the City of Elizabeth and JMEUC, the use of real-time controls enables higher flows to be pumped from TAPS. In early 2022, the City of Elizabeth initiated trunk sewer level sensing and real-time control system for the TAPS Phase 1 increased pumping project. With this program, the system-wide average annual overflow volume was estimated to be reduced by approximately 175 million gallons, using the 2018 hydraulic model setup as noted on page 5-9 in the LTCP. Preliminary design of the TAPS Phase 2 upgrade is currently underway which will allow for additional flows to be diverted to JMEUC.

As referenced in this comment, the Department acknowledges that trunk sewers for JMEUC receive certain flows from Elizabeth (i.e., Elmora area) which go directly to JMEUC. Given this, there may be opportunities to increase flows directly into the JMEUC interceptor and avoid flow restrictions in the Elizabeth interceptor sewers and/or the TAPS. A map is available here: [cso_sewermap_elizabeth.pdf](#). Maximization of flows to the POTW is a requirement of the final permits, consistent with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C, Part IV.F.4 of the final permits which states the following:

4. Maximization of flow to the POTW for treatment

- a. The permittee shall continue to operate and maintain the entire collection system owned/operated by the permittee that conveys flows to the treatment works to maximize the conveyance of wastewater to the STP for treatment subject to existing capacity.
- b. The permittee shall continue to implement alternatives for increasing flow to the STP.
 - i. Capacity evaluations of the entire collection system owned/operated by the permittee that conveys flows to the treatment works in accordance with Section F.1.f to determine the maximum amount of flow that can be stored and transported.
 - ii. Identification of other activities conducted and/or planned to further maximize flow to the POTW.

The Department maintains that this permit condition ensures that the permittees will seek measures to continue to maximize flows to the POTW for treatment.

19. COMMENT: I've spent many years participating in multilingual public information sessions demonstrating and reporting on how to keep our CSOs clear so that the rain can go down the drain.

Residents must link the climate change impact to our CSOs in our city. Any busy resident can download a weather app on their phone in the language they speak to keep informed of potential flooding and how to prepare for it. A linguistically available weather app is also an important public health tool for air quality monitoring. Our state and local governments need to make our residents informed, proactive partners in mitigating the impact of climate change and CSOs. [9]

RESPONSE (19): The Department agrees that public notification of CSO discharges is important to ensure public awareness for residents who live near and around CSO discharges, especially given the effects of climate change. Public Notification is a required component of the NJPDES CSO permits. This element is part of the federal CSO

Control Policy and N.J.A.C. 7:14A-11, Appendix C within the Nine Minimum Controls as entitled “Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts.” Public notification was a required permit condition as included in the 2015 NJPDES permits which has been carried forward largely unchanged in these renewal permits. There are two components to the public notification element where item “a” requires posting of CSO signs at each CSO outfall and item “b” requires multiple public notification measures as suggested in this comment.

As required by item “a” in the 2015 NJPDES permit as well as in this renewal permit, CSO signs are required to be posted at each outfall. A picture of a CSO sign with instructions in English and Spanish is as follows:



Item “b,” as stated in the 2015 NJPDES permit as well as in this renewal permit, is as follows:

- b. The permittee shall continue to employ measures to provide reasonable assurance that the affected public is informed of CSO discharges in a timely manner. These measures shall include, but are not limited to, the items listed below:
 - i. Posting leaflets/flyers/signs with general information at affected use areas such as beaches, marinas, docks, fishing piers, boat ramps, parks and other public places (within 100 feet of outfall) to inform the public what CSOs are, the location(s) of the CSO outfall(s) and the frequency and nature of the discharges and precautions that should be undertaken for public health/safety and web sites where additional CSO/CSS information can be found.
 - ii. Notification to all residents by either US Postal Service or email, (with copies sent to the NJDEP) in the permittee's sewer service area. This notification shall provide additional information as to what efforts the permittee has made and plans to continue to undertake to reduce/eliminate the CSOs and related threat to public health. Updated notifications shall be mailed on an annual basis.
 - iii. The permittee shall maintain on a daily basis a CSO Notification System website to inform interested citizens of CSO discharges that are occurring or have occurred.

In response to Part IV.F.b.iii, as contained in the 2015 NJPDES permit, the permittee created the Waterbody Advisory System available at <https://njcso.hdrgateway.com/>. This map shows the locations of the CSO outfalls and indicates where CSOs may be occurring due to rainfall based on real time weather data. In sum, the Department maintains that these subject NJPDES CSO permits contain requirements to notify the public of CSOs.

20. COMMENT: While there is mapping of systems and inspections related to broken pipes, leaks, etc., as well as programs such as HEP’s Environmental Monitoring Plan, it is not clear how the findings are enforced. We encourage NJDEP to establish guidelines and procedures to enforce the findings. [2]

RESPONSE (20): Mapping of combined sewer versus separate sewer areas was a required component of the 2015 NJPDES CSO permits. Maps are posted and available here: [NJDEP | Division of Water Quality | CSOs in New](#)

Jersey. Note that this mapping did not identify broken pipes and leaks, as suggested in this comment, rather it identified areas of combined vs. separate sewer areas. Broken pipes and leaks in the CSS would be addressed by Operation and Maintenance Program requirements as specified in Part IV.F.1., which includes the Asset Management Plan, as required by Part IV.F.1.I. Operation and Maintenance Program requirements, including enforcement mechanisms, are discussed further in **RESPONSE (10-11)**.

Mapping of combined systems is a separate issue from the New York-New Jersey Harbor Estuary Program's (HEP) Environmental Monitoring Plan as identified in this comment. The Environmental Monitoring Plan consists of three tools: a monitoring inventory and interactive map, a companion digital storymap and a research and monitoring recommendations report. This appears to be a separate tool than mapping of broken pipes and leaks. Additional information is available here: <https://www.hudsonriver.org/article/environmental-monitoring-plan>. The Department is a regular participant in meetings conducted by HEP and views this organization as an important partner in addressing water quality issues, including CSOs.

LONG TERM CONTROL PLAN REQUIREMENTS (PART IV.G) COMMENTS

21. **COMMENT:** Thank you for drafting a Public Engagement Guidance document on the various methods for successful public engagement for the permit holder to utilize. Thank you for providing the public the opportunity to review this draft guidance and for developing the document with expediency. [2]
22. **COMMENT:** Thank you to NJDEP for drafting supplemental guidance regarding public engagement. We encourage that a diverse group of stakeholders be involved in the creation and review process of this resource, including the Supplemental Teams and community organizations. Engaging and informing the community are important tools towards reducing or eliminating CSOs, which is why we ask NJDEP to strengthen requirements related to environmental justice, accessibility, and inclusive multilingual meetings and resources. [4]
23. **COMMENT:** Thank you for agreeing to create a separate guidance in the Guttenberg North Bergen permit to strengthen and clarify those public engagement components. We are very glad to read that NJDEP is developing a separate guidance document around public engagement to ensure that the public is engaged as equitably and transparently as possible. We ask that this guidance document be released in a timely way so that it can be leveraged as implementation happens. Perhaps releasing it concurrently with the current permit but ideally a few months before to be in time for the implementation schedule so that the supplemental team has time to get organized and the long term control plan coordinator can be hired. We request that you include stakeholders in the final development of this guidance. We have a lot of ideas and recommendations and are happy to roll up our sleeves and help with that. [5]
24. **COMMENT:** We were glad to read in the final permit for Guttenberg and North Bergen that the NJDEP is developing a separate guidance document around Public Engagement. We assume that this will apply to all of the permits and request that NJDEP includes stakeholders in the development of or the review of this guidance before it's finalized. Having the public's input on a document that will guide public involvement is critical to its success. We also request that this guidance be developed with expediency and before any subsequent permits are finalized. This will give towns and permit holders time to prepare and hit the ground running to work towards their implementation dates. [6]

RESPONSE (21-24): As part of these final NJPDES CSO permits, the Department has shifted from public participation, as required in the 2015 NJPDES CSO permits, to public engagement in the 2023/2024 final NJPDES CSO permits. The Public Engagement requirements in this renewal permit serve to build upon the Public Participation requirements as contained in the 2015 NJPDES CSO permits by including prescriptive language for this next phase of the reduction of CSOs through the implementation of the LTCP. More specifically, NJDEP requires a public engagement process designed to educate the public about the status of the program, document progress in implementing the program, and inform neighborhood residents before, during, and after construction.

To guide implementation of these requirements, the Department posted the final guidance entitled "A Guide to CSO Public Engagement" on January 5, 2024 on Department's CSO webpage

(<https://www.nj.gov/dep/dwq/cso.htm>) and notified interested parties on that date. The Department facilitated a stakeholder process leading up to the release of the final guidance. Specifically, the January 5, 2024 guidance served to revise the draft guidance as posted on the Department's CSO webpage on June 27, 2023, with a stakeholder meeting held on July 19, 2023. At that meeting, stakeholders requested an opportunity to comment on any revised guidance as well as another stakeholder meeting. Since substantive changes were made to the draft guidance, the Department agreed that another round of input was appropriate for both interested parties and permittees and held another stakeholder meeting on November 28, 2023. Written feedback was collected through December 11, 2023, and the guidance was finalized shortly thereafter on January 5, 2024. The Department acknowledges and appreciates the comments provided and participation from the public as part of that stakeholder process.

Public Engagement is a requirement of the NJPDES CSO permits. As a result, Public Engagement must begin with the effective date of the permit for all permittees.

25. **COMMENT:** Regarding the outreach guidance and the financial guidance, we do hope that the NJDEP will release the guidance either concurrently, when possible, or as soon as possible within a 6 to 12 month period. For the last permit cycle in 2015, public participation guidance was not released for two years and that did have a deleterious effect on public participation and permittee outreach. I do believe that the permittees follow NJDEP's guidelines and recommendations, so the sooner that guidance can be released the better. [8]

RESPONSE (25): The Department agrees that the release of timely guidance regarding public engagement is essential. Subsequent to the release of the first round of final NJPDES CSO permit renewals after the 2015 NJPDES CSO permits, the Department posted final guidance on January 5, 2024, as entitled, "A Guide to CSO Public Engagement." This guidance is available on Department's CSO webpage (<https://www.nj.gov/dep/dwq/cso>). Permittees should aim to use this document as a guide for public engagement going forward. Note that the Department began a stakeholder process for that guidance beginning on June 27, 2023 as described in the previous response.

A fact sheet specific to CSO funding was recently developed to assist permittees and can be found at <https://dep.nj.gov/dwq/combined-sewer-overflow/>. This guidance document includes a summary about these funding opportunities for the upcoming State Fiscal Year.

26. **COMMENT:** Thank you for clarifying in the final CSO permit for Guttenberg/North Bergen MUA that meetings are to be considered CSO supplemental team meetings and open to the public. Thank you for removing the sentence that meeting frequency may be adjusted based on attendance to minimize confusion. We request that this change be included in subsequent permits as well as in the JMEUC and City of Elizabeth permits.

Given that important decisions will be made in the CSO Supplemental teams, we remain concerned that the public may be underrepresented on those teams since there is no specific requirement for how many community members should participate nor who they should represent. That may mean that during decision making the will of those representing the permit holders or municipal government will outweigh the desires of the community. As such, we highly encourage NJDEP to require that a certain percentage of CSO Supplemental teams consist of community representatives and that a certain percentage must be present at any given meeting.

Moreover, since CSO Supplemental teams are regional versus city-specific, we highly encourage that members present at every meeting represent the specific municipalities included in that regional permit and that at least one of the community members representing a municipality be at every meeting. [2]

27. **COMMENT:** We support the requirement of permittees to hold a combination of virtual and in-person meetings that are accessible and should include all community members. Hosting these meetings in different and diverse neighborhoods will allow for easier access. Regular meetings that provide a consistent and clearly defined feedback loop with the public where the public may provide input as projects are implemented and see how or if input is incorporated into final decisions will make the implementation process more successful.

We recommend that the Department require that a certain percentage of CSO Supplemental Teams consist of community representatives and that a certain percentage must be present at any given meeting. Moreover, since CSO Supplemental Teams may be regional and not city-specific, we highly encourage that members represent the specific municipalities included in that regional permit and that at least one of the community members representing a municipality be present at every meeting. Ensure that overburdened communities are fairly represented on Supplemental Teams. [4]

28. **COMMENT:** Engage all community members, especially those from overburdened communities, in the process once the permits and plans are finalized. This is critical to protect water quality and reduce the burden of combined sewer overflows to communities. [3]
29. **COMMENT:** It is imperative for affected residents across communities, but especially those living in overburdened areas to be communicated with considerably and creatively throughout the entire permitting process, especially during final decision making. Public meetings must be physically accessible and communicated across languages in this specific geographic region. [7]

RESPONSE (26-29): As noted in these comments, these subject NJPDES CSO permits continue requirements for a CSO Supplemental Team, as part of the Public Engagement requirements. The Department maintains that requirements pertaining to reconstituting the CSO Supplemental Team as well as the role and responsibilities of the team are prescriptive within the renewal permit to the best extent practicable. As described in the Part IV.G.2.b of the permits, permittees are required to develop a CSO Supplemental Team to serve as a liaison between the affected community, interested public, and the decision makers for the permittee regarding the implementation of the CSO control alternatives. The CSO Supplemental Team shall be reconstituted with the goal of including members of the following groups, at a minimum, where possible: mayor's office, local planning board, local community groups, and residents from the affected areas and from any affected areas that are also overburdened communities. The permittee shall solicit members of its community to join the CSO Supplemental Team through various outreach and public notice activities. The permittee's efforts to recruit CSO Supplemental Team members shall be documented on the permittee's website.

The NJPDES CSO permits also contain language at Part IV.G.2.e specifying that engagement with overburdened communities to solicit representation is required where overburdened communities (OBCs) should be aware of the meeting schedule in order to encourage participation. The Department published a list of overburdened communities in the State and associated electronic mapping available at <https://www.nj.gov/dep/ej/communities.html>. The permittee is also required to give the Department's Office of Environmental Justice 30 days advance notice of meetings scheduled so they may be shared with Environmental Justice community leaders as described at Part IV.G.2.g. Based on the above, the Department maintains that the objectives of the CSO Supplemental Team are clearly defined within Part IV.G.2.

While the Department maintains that the language as written is sufficiently prescriptive, the NJPDES CSO permit is not intended to dictate the recruitment, retainment, and participation aspect of the Public Engagement process. That should be decided by the permittees based on the needs of the affected community and to allow input from the CSO Supplemental Team members.

Nonetheless, due in part to these comments, the Department has determined it appropriate to clarify permit language at Part IV.G.2.c, which outlines the objectives of meetings related to Public Engagement. Similar changes were incorporated to the NBMUA/Guttenberg NJPDES CSO permits issued on May 25, 2023; to NHSA Adams Street STP issued on February 7, 2024; to Camden County Municipal Utilities Authority, City of Camden, and Gloucester City on November 4, 2024; and in the final NJPDES CSO permits issued to Bergen County Utilities Authority, Borough of Fort Lee, City of Hackensack, and Village of Ridgefield Park on January 30, 2025. Specifically, CSO Supplemental Team meetings should be accessible to all community members by being open to the public. Part IV.G.2.c is modified as follows:

- c. The permittee is required to hold regular CSO Supplemental Team public meetings that are open to the public (virtual, in person or a combination of both) in order to:

- i. Inform the affected community and interested public of the ongoing process of implementing the LTCP including reports of project status and its present impact on the local community including consideration of locating specific meetings in the affected neighborhood.
- ii. Continue to identify areas of combined sewer-related flooding.
- iii. Allow the affected community and interested public an opportunity to provide input on the siting of GI as required by the permit.
- iv. Engage the affected community and interested public in solutions they can implement to reduce CSOs. Examples may include an adopt-a-catch-basin program, rain barrels, water conservation, the removal of impervious surfaces, and the installation of green infrastructure projects.
- v. Neighborhood specific information on construction of CSO control projects throughout the process including before and during construction in order to receive feedback from the community. This should include the posting of information on scheduling of street closures as well as any potential impacts to the residents in the vicinity of any CSO mitigation projects.

This change affects Part IV.G.2.c of the final permits.

- 30. COMMENT:** We encourage NJDEP to include more prescriptive ways to make meetings accessible. The permit suggests having a call-in number along with in-person meetings for those who do not have access to a computer and that updates during periods of inactivity can also be communicated through websites which are required by the permit. These should be made more explicit and a requirement.

Furthermore, the permit provides permittees the option to hold meetings outside of the implementation schedule. As we may conclude from the permit holders' response to NJDEP, they may be less likely to hold meetings when no work is being implemented and limit the CSO Supplemental team's desire to meet. We recommend including a minimum of one CSO Supplemental Team meeting per year, outside of implementation meetings, to ensure members stay active and engaged with the permit holder throughout the lifecycle of the LTCP. We recommend these meetings as the place where annual reports are reviewed and updates are shared by the permit holder. [2]

- 31. COMMENT:** We recommend the Department clearly define accessibility of meetings in this permit, including how documents will be translated, into what languages, and where they will be posted. We also recommend the Department require a minimum number of meetings yearly or quarterly to provide updates to the CSO Supplemental Team and the public to maintain transparency, consistency, and engagement. We recommend that there be a minimum of one CSO Supplemental Team meeting per year outside of implementation meetings, to ensure that members stay active and engaged with the permittee throughout the lifecycle of the LTCP. [4]

- 32. COMMENT:** Make public meetings physically accessible and materials language accessible to all community members. This is critical to protect water quality and reduce the burden of combined sewer overflows to communities. [3]

RESPONSE (30-32): To implement the Public Engagement requirements in this renewal permit, it is suggested that decision making for meeting frequency be decided by the CSO Supplemental Team at the first meeting (similar to the 2015 permits). The permit language as written encourages regular meetings to be held (virtual, in person or a combination of both) with defined tasks. Virtual meetings typically include an option for a telephone call-in number for those who do not have access to a computer. Updates during periods of inactivity can also be communicated through websites as required by the permit. Department representatives attended all CSO Supplemental Team meetings held under the 2015 NJPDES permit and will continue to provide representation at Public Engagement meetings held under this NJPDES permit renewal to ensure compliance with permit requirements. The Department also held stakeholder meetings specific to this topic and prepared guidance specific to this topic available at <https://www.nj.gov/dep/dwq/cso.htm>. This guidance was a direct result of specific requests and public comments on this topic.

The primary goal of this NJPDES CSO permit is to require the implementation of CSO control measures through an Implementation Schedule. The Department maintains that meeting schedules should be based on dates and milestones within the Implementation Schedules in order to encourage active participation and relevant meeting topics.

In summary, the Department maintains that the NJPDES CSO permit language as written provides clear and specific methods to acquire CSO Supplemental Team members as well as clear language for meeting accessibility including language needs. However, the Department agrees that the permit language in Part IV.G.2.d regarding CSO Supplemental Team meeting attendance can be clarified as it was not the Department's intent to say that meetings should be discontinued. Modified language is as follows:

- d. The frequency of CSO Supplemental Team meetings that are open to the public shall be determined by the milestones in the Implementation Schedule (See G.8.) and by input from the affected community and interested public. ~~Meeting frequency may subsequently be adjusted based on documented attendance.~~ Meetings should be held with accessibility for the interested public in mind. This may include varying start times and attendance options (availability of public transit or parking and virtual meetings), as fits the needs of the affected community and interested public.

This change affects Part IV.G.2.d of the final permits.

33. **COMMENT:** We appreciate the aspects of the permit that require public engagement, such as the requirement of hiring a LTCP Coordinator, continuing a CSO Supplemental Team and subsequent team meetings, and the creation of a website with public notifications.

The LTCP Coordinator requirement is a positive shift toward transparency. NJDEP should provide clear guidance on training and onboarding so that this position is consistent and transparent across all permit holders. [4]

RESPONSE (33): The NJPDES CSO permit requires that the permittee designate one LTCP outreach coordinator. This coordinator (or any another person designated by the permittee) must be available to maintain regular communication with the affected community and interested public. The permit also defines the many duties that are expected from the LTCP outreach coordinator so that tasks are clear, specific, and measurable. See Part IV.G.2.f.i through vi.

The inclusion of an LTCP outreach coordinator was suggested by several external organizations through the stakeholder process and the Department agreed that there were multiple benefits including streamlined coordination and consistency. While the Department agrees that an LTCP outreach coordinator should be familiar with the needs of the affected community, the Department maintains that it is advantageous for the permittees to define how this position will be chosen and managed.

34. **COMMENT:** In the final Guttenberg/NBMUA permit, NJDEP suggests that CSO Supplemental Team members may object to publication of their name and contact information on a website. We suggest that it be required that each CSO Supplemental team member be given the opportunity to be listed on the website and that all public officials have their names/contact information listed. Certainly, the LTCP Coordinator's contact information should be listed as a point of contact to manage the team and be a point for new prospective members to engage.

We applaud the continuous efforts by Future City and Groundwork Elizabeth in their partnership and collaboration with the City of Elizabeth. We further support the City of Elizabeth to continue engaging and inviting these organizations to be a part of the CSO Supplemental Team as well as providing them with the support they need in outreach to residents on the City of Elizabeth projects. [2]

35. **COMMENT:** Regular meetings that provide a consistent and clearly defined feedback loop with the public where the public may provide input as projects are implemented and see how or if input is incorporated into final decisions will make the implementation process more successful. [4]

RESPONSE (34-35): The Department maintains that a degree of flexibility in the process is necessary to account for circumstances unique to each permittee during the process and does not agree that it is appropriate to strictly define how the permittees manage their CSO Supplemental Team. The permittees must manage their CSO Supplemental Team to inform, educate and engage members of the communities with an overall goal of generating participation and input from stakeholders. In addition, CSO Supplemental Team members may object to publication of their name and contact information on a website which could dissuade interest in involvement. As noted in Part IV.G.2.b, the permittee's efforts to recruit Supplemental Team members are required to be documented on the permittee's website.

The Department maintains that the NJPDES CSO permit conditions encourage a feedback loop in Part IV.G.2.f and other permit conditions in Part IV.G.2. The permit requires that the permittees post handouts or other meeting materials on the website within one week after the meeting. The permit also requires the permittees to make data available on the amount of public feedback received including the number of meeting attendees. The Department maintains that it would be inappropriate to include strict requirements on this topic as the CSO Supplemental Teams are best suited to managing the needs of their team and members as well as the needs of the affected community.

36. **COMMENT:** We support the requirement of permittees to hold Supplemental Team meetings that require permittees to notify the Department's Office of Environmental Justice 30 days before a meeting to include overburdened communities. [4]
37. **COMMENT:** People in this state want to help each other and I know NJDEP is hearing this as you travel across hearing from various areas of the state through the perspective of environmental injustice. You're increasing listening sessions and we urge that you keep this spirit up; the spirit of the environmental justice cumulative impacts law. We wish you the ongoing strength and courage to foster trust and source solutions from affected residents who know their areas best, and local people who are eager to be of use and help during climate emergency. [7]

RESPONSE (36-37): The Department acknowledges the commenters' support. As noted within the permit at Part IV.G.2.g, the permittee is required to provide the Department's Office of Environmental Justice (see <https://dep.nj.gov/ej/>) 30 days advance notice of the meeting schedule so that it can be shared with Environmental Justice community leaders.

38. **COMMENT:** The CSO LTCP does not conform to the sensitive area provisions of the CSO Control Policy.

The CSO Control Policy expects "a permittee's long-term CSO control plan to give the highest priority to controlling overflows to sensitive areas" and to "eliminate or relocate overflows that discharge to sensitive areas wherever physically and economically achievable". 59 Fed. Reg. 18688, 18692 (April 19, 1994).

In addition, the CSO Control Policy recognizes the importance of maximizing treatment at the existing POTW and states that "increased flows during wet weather at the POTW treatment plant may enable the permittee to eliminate or minimize flows to sensitive areas." Id. at 18693. Furthermore, the CSO Control Policy states that "[c]onstruction phasing should consider: a. Eliminating overflows that discharge to sensitive areas as the highest priority." Id. At 18694.

As noted in the City of Elizabeth Fact Sheet, the NJDEP previously determined that five CSO outfalls in the City of Elizabeth discharge to sensitive areas based on potential habitat for the endangered Atlantic sturgeon and Shortnose sturgeon. However, the City of Elizabeth and JMEUC jointly-developed LTCP does not conform to the Sensitive Areas provision identified in the CSO Control Policy.

The CSO Control Policy identifies the following as a required provision in Phase II CSO permits which is missing from the draft permits:

“A requirement to reassess overflows to sensitive areas in those cases where elimination or relocation of the overflows is not physically possible and economically achievable. The reassessment should be based on consideration of new or improved techniques to eliminate or relocate overflows or changed circumstances that influence economical achievability;” 59 Fed. Reg. 18688, 18696 (April 19, 1994)

The permit must include a requirement to reassess overflows to sensitive areas. [1]

RESPONSE (38): The Department acknowledges that certain outfalls discharge to waterbodies classified as sensitive areas based on potential habitat for Atlantic sturgeon and Shortnose sturgeon as noted in the Fact Sheets of the draft permits. Nonetheless, the Department acknowledges that the language provided in this comment is included in the federal CSO Control Policy, N.J.A.C. 7:14A-11, Appendix C, and the Fact Sheet of the draft permit for the City of Elizabeth. Language has been included to address this provision at Part IV.G.3.b as follows:

- b. The permittee is required to prohibit new or significantly increased CSOs and to eliminate or relocate CSOs that discharge to sensitive areas wherever physically possible and economically achievable. Additionally, where elimination or relocation is not physically possible and economically achievable, or would provide less environmental protection than additional treatment, the permittee is required to provide the level of treatment for the remaining CSOs deemed necessary to meet water quality standards for full protection of existing and designated uses.

This change affects Part IV.G.3 (CSM Requirements) of the final permit for the City of Elizabeth. JMEUC does not own/operate any CSO outfalls.

- 39. COMMENT:** Phase II CSO permits must include water quality-based effluent limitations expressed as a numeric performance standard for the CSO controls.

Section 301(b)(1)(c) of the Clean Water Act requires that permits include limits as necessary to meet water quality standards. EPA’s regulations at 40 CFR §122.44(d)(1)(vii)(A) require that permits include limits that derive from and comply with water quality standards. Section IV.B.2.c.ii of the CSO Control Policy identifies the following as a permitting provision in Phase II CSO permits:

“water quality-based effluent limits under 40 CFR Section 122.44(d)(1) and 122.44(k), requiring, at a minimum, compliance with, no later than the date allowed under the State’s WQS, the numeric performance standards for the selected CSO controls, based on average design conditions” specifying at least one of the following:

.....

- ii. A minimum percentage capture of combined sewage by volume for treatment under specified design conditions consistent with II.C.4.a.ii; or

.....”

59 Fed. Reg. 18688, 18696 (April 19, 1994)

The example below shows how the permit may be modified to include the CSO Water Quality Based Effluent Limitation.

Exhibit 4-4. Example Permit Language for Performance Standards for the Presumption Approach

I. Effluent Limits

B. Water quality-based requirements for CSOs

The permittee shall not discharge any pollutant at a level that causes or contributes to an in-stream excursion above number or narrative criteria adopted as part of the [insert State name] water quality standards.

The permittee shall comply with the following performance standards. These standards shall apply during [insert average design conditions upon which controls are based].

1. [The permit writer should select the appropriate standard below.]

The permittee shall discharge no more than an average of [insert appropriate number: 4, 5, or 6] overflow events per year not receiving the treatment specified below.

[or]

The permittee shall eliminate or capture for treatment, or storage and subsequent treatment, at least 85 percent of the system-wide combined sewage volume collected in the combined sewer system during precipitation events under design conditions. Captured combined sewage shall received the treatment specified below.

[or]

The permittee shall eliminate or remove the following mass of pollutants from the combined sewage volume collected in the combined sewer system during precipitation events under design conditions:

[insert x] pounds of [insert pollutant]

[insert y] pounds of [insert pollutant]

Combined Sewer Overflows Guidance for Permit Writers, - August 1995, EPA 832-B-95-008.

https://www.epa.gov/sites/default/files/2015-10/documents/csopermitwriters_full.pdf

[1]

RESPONSE (39): The Department acknowledges that CSOs are point sources subject to NJPDES permit requirements that include both the technology-based and water quality-based requirements of the Clean Water Act. Section 301(b)(1)(C) of the Clean Water Act requires that permits include limits as necessary to meet water quality standards. Likewise, EPA's regulations at 40 CFR § 122.44(d)(1)(vii)(A) require that permits include limits that derive from and comply with water quality standards. Similar language is included within the NJPDES regulations at N.J.A.C. 7:14A-11, Appendix C, Section IV.B.2, Phase II Permits – Requirements for Implementation of a Long-Term CSO Control Plan.

All New Jersey CSO permittees, including JMEUC and the City of Elizabeth, have selected the "Presumption Approach," as described in II.C.4.a of the federal CSO Control Policy, N.J.A.C. 7:14A-11, Appendix C, and specified in Part IV.G.4.a.ii of this NJPDES CSO permit. Under the Presumption Approach, a permittee that meets any of the following criteria would be presumed to provide an adequate level of control to meet the water quality-based requirements of the Clean Water Act, and provided the permitting authority determines that such presumption is reasonable in light of the data and analysis conducted in the characterization, monitoring, and modeling of the system and the consideration of sensitive areas. Criteria is as follows:

- (1) no more than an average of four overflow events per year, provided that the permitting authority may allow up to two additional overflow events per year. For this criterion, an overflow event is one or more overflows from a combined sewer system (CSS) as the result of a precipitation event that does not receive the minimum treatment specified below;

- (2) the elimination or the capture for treatment of no less than 85% by volume of the combined sewage collected in the CSS during precipitation events on a system-wide annual average basis; or
- (3) the elimination or removal of no less than the mass of the pollutants, identified as a causing water quality impairment through the sewer system characterization, monitoring, and modeling effort, for the volumes that would be eliminated or capture for treatment under (2) above.

Combined sewer flows remaining after implementation of the nine minimum controls and within the criteria specified in (1) or (2) should receive a minimum of: primary clarification (removal of floatables and settleable solids that may be achieved by any combination of treatment technologies or methods that are shown to be equivalent to primary clarification.); solids and floatables disposal; and disinfection of effluent, if necessary, to meet WQS, protect designated uses and protect human health, including removal of harmful disinfection chemical residuals, where necessary. Where a permittee has selected controls based on the Presumption Approach, the Department must have determined that the presumption that such level of treatment will achieve water quality standards is reasonable considering the data and analysis conducted under the federal CSO Control Policy.

Because the permittees have selected the Presumption Approach, the numeric performance standard for the selected CSO controls is a minimum percentage capture of combined sewage by volume for treatment under specified design conditions. This is consistent with Part IV.B.2.c.ii, which refers to II.C.4.a.ii, of the federal CSO Control Policy. As a result, the Department acknowledges that the minimum 85% volume capture must be expressed explicitly in the permit as a water-quality based effluent limit to achieve water quality standards. As a result, the Department agrees that it is appropriate to include II.C.4.a.ii of the federal CSO Control Policy as a water-quality based requirement for CSOs as a numeric performance standard. Accordingly, the Department has included this additional language as Part II.C.2 of this final NJPDES permit to ensure conformance with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. The Department met with the City of Elizabeth and JMEUC on November 25, 2024 and notified them of this change.

Part II.C.2 has been modified as follows:

2. Water-Quality Based Requirements for CSOs as a Numeric Performance Standard

- a. CSOs are point sources subject to NJPDES permit requirements including both technology-based and water-quality based requirements of the Clean Water Act.
- b. Water quality-based effluent limits under 40 CFR Sections 122.44(d)(1) and 122.44(k) require, at a minimum, compliance with, no later than the date allowed under the State's WQS, the numeric performance standards for the selected CSO controls, based on average design conditions. Because the permittee selected the Presumption Approach, as specified in Part IV.G.4.a.ii, the numeric performance standard for the selected CSO controls is a minimum percentage capture of combined sewage by volume for treatment under specified design conditions consistent with II.C.4.a.ii of the CSO Control Policy.

These changes affect Part II of the final permits.

40. **COMMENT:** We recommend that NJDEP provide specificity in its guidance to permit holders around other cost-effective, innovative financing opportunities to help fund this work equitably, such as Water Bank low-interest loan programs, utilizing more green infrastructure, grants, and more. [4]
41. **COMMENT:** NJDEP should provide more detailed guidance to permit holders around other cost-effective, innovative finance opportunities to help finance this work equitably, such as Water Bank low-interest loan programs, utilizing more green infrastructure grants, and building a stormwater utility. [5]

RESPONSE (40-41): The Department and the New Jersey Infrastructure Bank (NJIB) partner together as the New Jersey Water Bank to administer New Jersey's State Revolving Fund in order to provide low-cost financing for the design, construction, and implementation of projects that help to protect, maintain and improve water quality. The Department recognizes the importance of providing robust funding opportunities for CSO projects, including gray and green infrastructure, WWTP improvements, and stormwater resilience projects. To this end, the New Jersey Water Bank offers a variety of funding packages with low interest loans and principal forgiveness, and additional resources for disadvantaged communities. For additional information visit <http://nj.gov/dep/dwq/cwpl.htm>.

A fact sheet specific to CSO funding was developed to assist permittees and can be found at <https://dep.nj.gov/dwq/combined-sewer-overflow/>. This guidance document includes a summary about these funding opportunities for the upcoming State Fiscal Year.

The New Jersey Water Bank offers free technical assistance to disadvantaged communities for clean water projects. Participants of this program are also eligible for planning and design principal forgiveness loans and guaranteed funds upon construction certification. This comprehensive support framework streamlines project development for disadvantaged CSO communities and enhances capacity to comply with their LTCPs and meet their environmental and infrastructural needs. Detailed information about these funding opportunities, including eligibility and technical assistance, can be found within the Programs Intended Use Plan at <https://dep.nj.gov/wiip/intended-use-plan-and-project-priority-lists/>.

Stormwater utility fees are similar to a water or sewer utility fee except customers pay a fee based on the amount of impervious surface on their property. This includes all commercial, residential, and tax exempt properties within the service area. Comprehensive guidance for stormwater utility creation, feasibility studies, and fee assessments is available at https://dep.nj.gov/njpdes-stormwater/swu_stormwaterutility. If grants for stormwater utility feasibility studies become available, notices will be posted to <https://dep.nj.gov/grantandloanprograms/>. Stormwater utilities can be a means to fund infrastructure projects. However, feasibility studies for stormwater utilities are outside the scope of the NJPDES CSO permit.

- 42. COMMENT:** EPA strongly recommends that the NJDEP negotiate with the permittee to aggressively pursue all available funding opportunities so that CSO controls may be designed and implemented as soon as practicable. [1]

RESPONSE (42): As noted in **RESPONSE (40-41)**, the Department recognizes the importance of providing robust funding opportunities for CSO projects.

The City of Elizabeth has frequently been awarded funding through the New Jersey Water Bank including the recent award of several loans to maintain and improve its wastewater and stormwater infrastructure; these projects have increased the amount of wet weather combined sewer flows that can receive treatment. These projects include a \$6.5 million project for South Street flood controls, a \$16.5 million project for drainage improvements on Atlantic Street and the construction of a one-million-gallon CSO storage tank, and a \$7.7 million project to construct a 1.5 MG CSO storage vault. A \$13.2 million project for improvements to the Western Interceptor is under review.

JMEUC has been awarded over \$75 million of funding for several projects to improve the resilience of its treatment and biosolids facilities. The New Jersey Water Bank funding has been supplemented by FEMA funding. Projects include several phases of treatment facility upgrades, flood mitigation walls around the treatment and biosolids facilities, and stormwater pumping stations. An additional \$235 million of supplemental phases are under review.

The Department understands the important role State Revolving Fund funding plays in the reduction of CSOs. Since 2015, the Department has maintained a dedicated team for all CSO permittees and associated projects in order to provide guidance, streamline funding applications, and ensure internal and external coordination. A variety of wastewater treatment facility, CSS, and stormwater management projects have been financed through the New Jersey Water Bank to date.

43. **COMMENT:** We encourage the NJDEP and the permittees to take advantage of EPA's technical assistance intake form, which begins the formal process for communities, utilities, and state to request assistance with financial capability assessments and with finding and applying for funding opportunities. [1]
44. **COMMENT:** There are new federal funding opportunities, released since the LTCPs were drafted, that permit holders can take advantage of through the Water Bank. In addition, there is technical support from the EPA that permit holders can take advantage of to help them develop a more robust financial capability analysis. This is described and recommended in the US EPA's 2023 CWA FCA Guidance. Knowing that connecting this funding to the ability to shorten the timelines is so critical, how can NJDEP actively encourage and help permit holders to take advantage of this and other innovative funding? [2]
45. **COMMENT:** There is Technical Support funding from EPA that permit holders can apply for to take advantage of to help them develop a strong financial capability analysis. We highly encourage permit holders take advantage of the EPA's technical assistance funding. That's described in the EPA's 2023 Clean Water Act Financial Capability Assessment Guidance which also has great strategies that permit holders can utilize around innovative financing. NJDEP should accelerate the timeline working with permit holders to implement the EPA's Financial Capability Assessment Guidance.

Knowing that connecting this funding to the ability to shorten timelines is so critical, is there a way for NJDEP to more actively encourage this? Can NJDEP create guidance to help permit holders access this innovative funding more readily. We are happy to help craft that guidance. [5]

46. **COMMENT:** As the EPA has released financing guidelines, we hope that NJDEP will also encourage permittees to take a look at those innovative funding strategies and to share the technical assistance needed for permittees to access those funds. [8]

RESPONSE (43-46): The Department agrees that all available funding opportunities should be pursued. The Department is aware that EPA's free Water Technical Assistance (WaterTA) services support communities to identify water challenges, develop plans, build technical, managerial, and financial capacity, and develop application materials to access water infrastructure funding. Additional information is available at <https://www.epa.gov/water-infrastructure/request-water-technical-assistance>. Refer to **RESPONSE (40-41)** and **RESPONSE (42)** for more information on funding.

47. **COMMENT:** The permit must include a requirement that ALL CSO controls identified in the LTCP are implemented.

The NJDEP should clearly identify all the approved LTCP CSO controls in each permit. Section IV.B.2 of the CSO Control Policy identifies the following as a permitting provision in Phase II CSO permits:

“b. Narrative requirements which ensure that the selected CSO controls are implemented, operated and maintained as described in the long-term CSO control plan;”

Section IV.B.2. of the CSO Control Policy also addresses compliance with the Phase II CSO permit requirement that all CSO controls be implemented, operated and maintained, as described in the LTCP. It states that “[u]nless the permittee can comply with all requirements of the Phase II permit, the NPDES authority should include, in an enforceable mechanism, compliance dates on the fastest practicable schedule for those activities directly related to meeting the requirements of the CWA. For major permittees, the compliance schedule should be placed in a judicial order.”

Section V.B.2. of the CSO Control Policy addresses enforcement as well as compliance with this Phase II CSO permit requirement. It states that “[t]he main focus for enforcing compliance with Phase II permits will be to incorporate the long-term CSO control plan through civil judicial action, an administrative order, or other enforceable mechanism requiring compliance with the CWA and imposing a compliance schedule with appropriate milestone dates necessary to implement the plan. In general, a judicial order is the appropriate mechanism for

incorporating the above provisions for Phase II. Administrative orders, however, may be appropriate for permittees whose long-term control plans will take less than five years to complete, and for minors that have complied with the final date of the enforceable order for compliance with the Phase I permit.”

To ensure compliance with this Phase II CSO permit requirement in the CSO Control Policy, these judicial or administrative orders, which include the fastest practicable schedules and dates for implementing all of the CSO controls identified in the final LTCP, are expected to be issued in conjunction with the Phase II CSO permit.

Should the permitting authority not issue a judicial or administrative order for compliance in conjunction with this Phase II CSO permit requirement, the permit itself must include a compliance schedule that includes all CSO controls and the corresponding implementation schedule. Compliance schedules included in NPDES permits must “require compliance as soon as possible, but not later than the applicable statutory deadline under the CWA.” 40 C.F.R. § 122.47(a)(1). Additional guidance on the use of compliance schedules for water quality-based effluent limitations in NPDES permits is contained in EPA’s memo, dated May 10, 2007, from James Hanlon, Director of EPA’s Office of Wastewater Management to Alexis Strauss, Director of the Water Division in EPA Region 9. https://www3.epa.gov/npdes/pubs/memo_complianceschedules_may07.pdf compliance schedule longer than one year must include, among other things, interim requirements and dates for their achievement (40 CFR § 122.47(a)(3), as well as an enforceable final effluent limitation and date for its achievement (CWA sections 301(b)(1)(C); 502(17); 40 C.F.R. §§ 122.2, 122.44(d), 122.44(d)(1)(vii)(A) and 122.47(a)(3)).

The example provided below shows how the draft permit may be revised to include a compliance schedule including interim design requirements with corresponding dates, in addition to final project deliverables, to implement the CSO controls.

Exhibit 4-3. Example Permit Language for Implementing Selected CSO Controls

II. Long-Term Control Plan	
The permittee shall implement and effectively operate and maintain the CSO controls identified in the long-term control plan. The implementation schedule for those controls shall be as follows:	
<u>Activity</u>	<u>Completion Date</u>
[Insert name of activity]	[insert date]
Site-Specific Language:	
1. Retention basin	
• Complete design of [named] retention basin.	[insert date]
• Submit construction drawings for [named] retention basin.	[insert date]
• Initiate Construction of [named] retention basin.	[insert date]
• Complete construction of [named] retention basin.	[insert date]
2. [Named street] sewer separation	
• Complete design	[insert date]
• Solicit bids	[insert date]
• Award contracts	[insert date]
NOTE: A compliance schedule exceeding the term of the permit may only be included in the permit if explicitly authorized in the applicable State WQS.	

Combined Sewer Overflows Guidance for Permit Writers, - August 1995, EPA 832-B-95-008.

https://www.epa.gov/sites/default/files/2015-10/documents/csopermitwriters_full.pdf

[1]

RESPONSE (47): The Department agrees that CSO control measures should be implemented, as discussed below in **RESPONSE (48)**. The Department also agrees that wet weather percent capture should be maximized in the short term to attain the minimum 85% wet weather capture. A number of significant CSO control projects have already been completed or are underway, as described in **RESPONSE (7-8)** and **RESPONSE (48)**.

The Department is aware that interim project deliverables for larger projects are required and are intended to help the permittees stay on schedule. Accordingly, the JMEUC and the City of Elizabeth included a Gantt chart as part of the Implementation Schedule in the October 2020 LTCP submission, as included in the draft permit Fact Sheets. The LTCP (as revised in October 2024) includes Table 9-2 as entitled “Project Milestones for First Five Years of Implementation. The first five years of this Implementation Schedule are also included in Part IV.G.8 which includes final project deliverable dates. Note that the implementation schedule included in the May 9, 2023 draft NJPDES CSO permit for the City of Elizabeth has been modified to reflect project completion, as described in **RESPONSE (48)** and **RESPONSE (51-56)**.

The NJPDES permit term is limited to a five-year period pursuant to N.J.A.C. 7:14A-2.7(a). Therefore, as the implementation schedule for the City of Elizabeth and JMEUC goes beyond five years, it will not be possible for the permittees to implement all CSO controls within the term of this NJPDES permit. As such, the permittees’ obligations beyond the five-year permit term should be included in an appropriate enforceable mechanism, as contemplated by the federal CSO Control Policy. The Department has determined that a separate enforceable instrument is necessary in order to formalize and solidify that part of the implementation schedule that goes beyond the five-year permit term. As such, the Department and the permittee have executed an Administrative Compliance Agreement, dated February 27, 2025, to solidify the LTCP and Implementation Schedule. This document is separate from the NJPDES permit but will be issued in conjunction with the permit.

This change affects Part II.C of the final permits, as shown below:

3. Approval of the LTCP

- a. This renewal permit implements the initial five years of the LTCP Implementation Schedule as established by the permittee and as approved in the Administrative Compliance Agreement executed by the Department and the permittees dated February 27, 2025. The LTCP as approved by the Administrative Compliance Agreement also addresses the CSO control measures within the Implementation Schedule that extend beyond the five-year NJPDES permit term for the City of Elizabeth and Joint Meeting of Essex & Union Counties.

- 48. COMMENT:** The CSO Long Term Control Plan implementation schedule must provide for the implementation of CSO Controls “as soon as practicable.” The CSO Control Policy states that LTCPs are expected to include “both fixed-date project implementation schedules (which may be phased) and a financing plan to design and construct the project as soon as practicable.” 59 Fed. Reg. 18688, 18691 (April 19, 1994).

The CSO Control Policy identifies a construction and financing schedule for the implementation of CSO controls as one element of a permittee’s LTCP, and notes that implementation schedules may be phased based on the relative importance of adverse impacts upon water quality standards and designated uses, priority projects identified in the long-term plan, and on a permittee’s financial capability. The CSO Control Policy also states that “the permitting authority should include, in an appropriate enforceable mechanism, requirements for implementation of the long-term CSO control plan as soon as practicable.” Id. At 18696. The CSO Control Policy further states that “each permittee is ultimately responsible for aggressively pursuing financial arrangements for the implementation of its long-term CSO control plan” and that “[a]s part of this effort, communities should apply to their State Revolving Fund program, or other assistance programs as appropriate, for financial assistance”. Id. At 18690.

The fact sheets contain a Summary of Permit Conditions for Combined Sewer Management that includes Section C. Components of LTCP. In this section, Item 8. Implementation Schedule identifies the LTCP-selected CSO controls along with the corresponding schedule 40-year schedule for implementing the controls. [1]

RESPONSE (48): The Department is aware that the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C requires fixed date implementation schedules as well as the implementation of CSO controls “as soon as practicable.” Both of these requirements are evidenced within the draft permit and Implementation Schedule for these subject NJPDES CSO permits. Significant CSO control projects for this system have been completed or are in various stages of completion which will result in significant volumes of combined sewage being diverted to JMEUC instead of discharging to waterbodies untreated. These projects include the Progress Street Stormwater Control Project, completed in 2018, the Trumbull Street Stormwater Control Project, completed in August 2020, the South Street Flood Control Project, and the Lincoln Avenue Stormwater Control Project. Likewise, construction is underway on the 1.3 MGD Atlantic Street CSO Storage Facility. In addition, the implementation schedule is front-loaded with significant CSO control projects so that percent capture is increased in the short term to minimize CSOs as quickly as practicable. For example, and in addition to the foregoing projects, it is anticipated that the TAPS upgrades, that have already been implemented, will increase percent capture by 7.3%. Refer to **RESPONSE (7-8)** for more information on these projects.

The permittees have proactively completed projects and commenced construction prior to approval of the LTCP and any issued final permits. The project list included on page 31 of the Fact Sheet of the draft NJPDES CSO permit for the City of Elizabeth, issued on May 9, 2023, has been updated as follows:

Project No.	Project Name	CSO Control Technology
-	Progress Street Stormwater Control Project	Completed stormwater control
-	Trumbull Street Stormwater Control Project	Completed stormwater control
-	South Street Flood Control Project	Completed stormwater control
-	Trenton Avenue Pumping Station - Phase 1 Upgrade	Completed increased conveyance from TAPS
1	Lincoln Avenue Stormwater Drainage Improvements	Current/planned stormwater control Completed
2	South Second Street Stormwater Control	Current/planned stormwater control Completed
3	CSO Basin 012 Sewer Separation	Select sewer separation Construction completed
4	Atlantic Street CSO Storage Facility	Current/planned stormwater control Completed
5	Park Avenue Stormwater Control	Current/planned stormwater control
6	Green Infrastructure Pilot Program	Green infrastructure pilot program
7	Trenton Avenue Pumping Station - Phase 2 Upgrade	Increased conveyance from TAPS
8	CSO Basin 037 Sewer Separation	Select sewer separation
9	Easterly Interceptor Improvements	Regulator modifications and interceptor improvements for additional conveyance
10	New Wet Weather Pump Station Force Main to JMEUC	New wet weather pump station and force main
11	New Wet Weather Pump Station	New wet weather pump station and force main
12	New CSO WWTF	New combined sewer flow treatment facility
13	Bridge Street Siphon Upgrade	Regulator modifications and interceptor improvements for additional conveyance
14	Palmer Street Branch Interceptor Upgrade	Regulator modifications and interceptor improvements for additional conveyance
15	Palmer Street Siphon Upgrade	Regulator modifications and interceptor improvements for additional conveyance
16	Lower Westerly Interceptor Upgrade	Regulator modifications and interceptor improvements for additional conveyance
17	Pearl Street Branch Interceptor Upgrade	Regulator modifications and interceptor improvements for additional conveyance

18	R027/028 Regulator Modifications	Regulator modifications and interceptor improvements for additional conveyance
19	R040 Regulator Modifications	Regulator modifications and interceptor improvements for additional conveyance
20	Upper Westerly Interceptor Upgrade	Regulator modifications and interceptor improvements for additional conveyance
21	Morris Avenue Siphon Upgrade	Regulator modifications and interceptor improvements for additional conveyance

From a practical standpoint, STP and downstream improvements must be completed prior to conveyance improvements so that the STP and downstream facilities can accept the additional flow. As such, it is reasonable for STP improvements to occur prior to initiating major conveyance improvements. Notably, the EPA’s Financial Capability Assessment (FCA) guidance suggests LTCP schedule development be based on “logical engineering sequencing.” In addition, it is critical for the City of Elizabeth to re-meter the system in order to periodically assess wet weather percent capture, as allowable under post-construction compliance monitoring as set forth in the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. Given the large acreage area for the CSS and sizable CSO volume, the Department finds the JMEUC and City of Elizabeth implementation schedule to be reasonable where projects related to downstream facilities are generally scheduled to occur first. See also Table 5: CSO LTCP Project Sequencing Plan within the October 2024 LTCP.

By way of letter dated July 29, 2024, the Department requested the City of Elizabeth and JMEUC provide justification for the length of the proposed 38-year schedule, as identified in the May 9, 2023 draft NJPDES CSO permits, which has since been reduced as per Figure 9-2 of the LTCP, as revised October 2024. The City of Elizabeth and JMEUC responded via letters dated August 27, 2024 and August 30, 2024, respectively. In particular, the City of Elizabeth noted that “the schedule is laid out sequentially to allow for adequate capacity at downstream facilities as the collection system takes on more CSO volume and accommodates greater peak flows. Simultaneous upgrades could result in moving overflows to different locations if the downstream treatment facilities are not in place to receive the wet-weather flows, or worse, exacerbate local capacity issues.”

The City of Elizabeth notes that certain projects must take place in sequence and have a multi-year duration. As can be seen in the LTCP schedule as set forth in Figure 9-2 of the October 2024 LTCP, activities that can overlap do so to the extent practical, such as the wet weather pumping station and Combined Sewer Flow Treatment Facility, or the Upper Westerly Interceptor Upgrades and Morris Avenue Siphon Upgrades. However, collectively, even with the overlap, the sequence of these projects requires significant time.

The permittees have successfully obtained financing through the New Jersey Water Bank for numerous projects over the years, as discussed in further detail in **RESPONSE (42)**. The timing of this schedule is not solely related to funding availability but rather a logical sense of order for the projects and ability for the permittee to complete construction on multiple major projects simultaneously.

The Department maintains that the Implementation Schedule included is appropriate and compliant with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. The Department is proceeding with the issuance of the final permit in order to solidify the Implementation Schedule for planning purposes and to ensure that projects proceed under an enforceable mechanism. Implementation of these projects is necessary to reduce CSOs and improve water quality. See also **RESPONSE (51-56)** regarding changes to the first five years of the implementation schedule since certain projects have been completed subsequent to the issuance of the draft NJPDES CSO permits on May 9, 2023.

- 49. COMMENT:** NJDEP did incorporate EPA’s recommendation and updated the final permit for Guttenberg/North Bergen MUA to include interim deliverables. Similarly, NJDEP included interim project deliverables in the drafted North Hudson Sewerage Authority permit and the subsequent permits. This section could be improved by including a paragraph that identifies the required numeric performance standard for the selected controls and including interim project deliverables for larger projects to help stay on schedule. [2]

50. COMMENT: NJDEP must include interim project deliverables in this permit and subsequent permits. [4]

RESPONSE (49-50): The Department agrees that interim project deliverables are appropriate. The implementation schedule in Part IV.G.8 includes detail for project deliverables such as design and construction as suggested by EPA in **COMMENT 47**.

The numeric performance standard of a minimum 85% volume capture for the selected CSO controls has been added as Part II.C.2 of this final NJPDES permit. Refer to **RESPONSE (39)**.

51. COMMENT: There are 29 CSO outfalls that are discharging into the water bodies surrounding Elizabeth and associated with this permit. While we are pleased to see the City of Elizabeth is investing in a significant amount of construction and design activities during this first five years of the LTCP, it is disappointing to read that the annual average combined sewage collected in the system during wet weather by the end of the first 5 years will be only 69% and that the community will have to wait until 2045 to reach the minimum 85% capture requirement. This delay will negatively impact the water quality to local water bodies, those using these waters for recreation, the residents who live in the CSO-sheds, and the potential for continued combined sewer flooding into streets and homes for another 20 years.

As it relates to water quality, we are concerned that the prolonged timeline for achieving 85% capture in the City of Elizabeth will continue to further impair the Elizabeth River, Arthur Kill, and Newark Bay, and delay the community's ability to enjoy safe recreational activities along their waterfront. This further underscores the need to accelerate the CSO reduction projects that are currently slated in this permit to be constructed by 2045, and to shorten the timeline substantially. Specifically, the planned projects that should be implemented as soon as possible include the Upper Westerly Interceptor Upgrade, the Morris Avenue Siphon Upgrade, and the new wet weather pump stations expected to be completed in the year 2039-2043. [2]

52. COMMENT: There are 29 CSO outfalls into the waterbodies surrounding Elizabeth and therefore these waterbodies are being impacted by pollution more than waterbodies in the region. While we're glad to see that a reasonable amount of activity will be completed in the first five years, about \$26 million dollars of construction, it's still disappointing to read that the annual average combined sewage collected in the system during wet weather by the end of the first five years will only be 69% and that area will have to wait until 2045 to reach the minimum 85% capture. This is a long way away and has a big impact on waterbodies and humans and the potential for combined sewer flooding into streets and homes. [5]

53. COMMENT: There are 29 CSO outfalls in the waterbodies surrounding Elizabeth and associated with this current permit. This means that these waterbodies are being impacted by pollution more than others in the region. We're glad to see that a reasonable amount of the activity in the permit including the design of additional construction, which is over \$26 million worth of investment, is occurring in the first five years, it is disappointing to see that the annual average of combined sewer reduction is only landing at about 69% in that five years. The area will have to wait until 2045 to reach the minimum 85% capture required. This delay will negatively impact local waterbodies, those people using those waterbodies for recreation and other reasons and will increase the potential of combined sewer flooding for another 22 years roughly. It will really be beneficial to everybody in the region to see if there is a way to reduce that timeline a little bit.

This further underscores the need to accelerate CSO reduction projects that are currently slated in this permit to be constructed by 2045 and to shorten the timeline substantially. The planned projects that should be implemented much sooner include the Upper Westerly Interceptor Upgrade and the Morris Ave Siphon Upgrade and the new wet weather pump stations expected to be completed in the year 2039 to 2043. These dates are far in advance but I know that these projects do take time. [6]

- 54. COMMENT:** To improve water quality, NJDEP should encourage the permittee to shorten project timelines to achieve 85% capture in the City of Elizabeth, as prolonged timelines will further impair the Elizabeth River, Arthur Kill, and Newark Bay. Specifically, the planned projects that should be implemented as soon as possible include the Upper Westerly Interceptor Upgrade, the Morris Avenue Siphon Upgrade, and the new wet weather pump stations expected to be completed in the year 2039-2043. [4]
- 55. COMMENT:** Shorten the 2045 project completion date/timeline so the environmental and public health impacts are realized in the next 10 years, rather than 25 years. Shorten the timelines in a way that is affordable to all community members. This is critical to protect water quality and reduce the burden of combined sewer overflows to communities. [3]
- 56. COMMENT:** Today, we are specifically requesting a reduction of that 2045 projection completion date timeline of 10 years versus 25 years. To make the timeline shortened is to ensure affordability for all residents in this community or area of concern because we don't want to make it seem like it's small or trivial in any way. Other states are doing this and New Jersey can too; where there's a will there are ways. [7]

RESPONSE (51-56): The Department agrees that CSO control projects should be implemented as soon as practicable. As discussed more fully in **RESPONSE (48)**, the Department has determined that the City of Elizabeth and JMEUC implementation schedule is compliant with the requirements of the federal CSO Control Policy and represents implementation of CSO controls as soon as practicable.

As noted in **RESPONSE (7-8)** and **RESPONSE (48)**, the City of Elizabeth has proactively begun a number of CSO control projects, which are in various stages of completion where additional combined sewage will then be diverted to JMEUC. Additionally, the implementation schedule is front-loaded with significant CSO control projects so that percent capture is increased in the short term to minimize CSOs as quickly as practicable. For example, Phase 1 upgrades to TAPS have already been completed and the pumping capacity has increased from 36 MGD to 55 MGD. This has reduced the system-wide average annual combined sewer overflow volume by approximately 175 million gallons, using the 2018 hydraulic model setup as noted on page 5-9 in the LTCP. Within the Implementation Schedule as set forth in Part IV.G.8, Phase 2 upgrades to TAPS will further increase percent capture by an estimated 7.3%. The permittees have proactively completed projects and increased flows of combined sewage to JMEUC and have commenced construction prior to approval of the LTCP and any issued final permits.

Due to a number of circumstances and practical considerations, the current schedule represents implementation of CSO controls as soon as practicable. As discussed fully in **RESPONSE (48)**, as would be the case with any LTCP, projects must be appropriately sequenced and cannot always be pursued simultaneously. Particularly, and from a practical standpoint, improvements to downstream facilities must be completed prior to conveyance system improvements so that the downstream facilities can accept the additional flow. In the case of the City of Elizabeth, a number of projects must be completed in a particular order and cannot overlap. The Department finds the implementation schedule here to be reasonable where certain downstream facilities are scheduled to be completed first.

Refer to **RESPONSE (62-66)** for more information regarding the length of the implementation schedule in relation to funding.

However, because the permittees have proactively completed projects, changes are necessary for the implementation schedule set forth in Part IV.G.8 for the City of Elizabeth. The changes below are necessary since projects have either been completed or the schedule has advanced, but are otherwise reflective of the projects set forth in the draft permit Fact Sheet and LTCP. Note that while changes to Part IV.G.8. are not needed for JMEUC, JMEUC is accepting this additional combined sewage as the receiving POTW. Changes to the Implementation Schedule as incorporated in the final NJPDES CSO permit for the City of Elizabeth, as compared to the May 9, 2023 draft NJPDES CSO permit, are as follows:

- i. Year One (EDP to EDP + 1 year): ~~Complete construction of Lincoln Avenue Stormwater Drainage Improvements;~~ Complete construction of South Second Street Stormwater Control Project; Complete construction Sewer Separation for CSO Basin 012 Sewer Separation; Commence construction of Atlantic Street CSO Storage Facility; Commence design for Trenton Avenue Pumping Station – Phase 2 upgrade.
- ii. Year Two (EDP + 1 year to EDP + 2 years): ~~Complete construction of South Second Street Stormwater Control Project; commence construction of CSO Basin 012 Sewer Separation and Atlantic Street CSO Storage Facility;~~ Complete construction of Atlantic Street CSO Storage Facility.
- iii. Year Three (EDP + 2 years to EDP + 3 years): ~~Complete construction of CSO Basin 012 Sewer Separation;~~ award Award detailed design contract for Park Avenue Stormwater Control Project (contingent on legal agreement with Roselle Park for removal for storm sewer connection).
- iv. Year Four (EDP + 3 years to EDP + 4 years): Award detailed design contract for CSO Basin 037 Sewer Separation.
- v. Year Five (EDP + 4 years to EDP + 5 years): ~~Complete construction of Atlantic Street CSO Storage Facility;~~ solicit Solicit bids for construction of Green Infrastructure pilot program; complete detailed design of Trenton Avenue Pumping Station – Phase 2 upgrade.

This change affects Part IV.G.8 of the final NJPDES CSO permit for the City of Elizabeth.

- 57. COMMENT:** The CSO Control Policy identifies elements to be included in the CSO LTCP, including an evaluation of alternatives and cost performance considerations. This information is used to demonstrate the anticipated effectiveness of the CSO control alternative (i.e. pollutant reduction benefit/reduction of combined sewer flows) and its cost. This information is lacking for some of the selected CSO controls and should be provided so that the most cost-effective CSO controls are identified and implemented. For example, according to the CSO LTCP, the Borough of Roselle Park has a major 42” storm water connection to the Elizabeth combined sewer system. While the Park Avenue Stormwater Control Project is identified in the Implementation Schedule of CSO control projects, the permit, fact sheet and CSO LTCP do not identify the anticipated pollutant reduction benefit/reduction of combined sewer flows or improvement to water quality, if any; this same information appears to be lacking for some of the other storm water projects.

The CSO LTCP identifies other possible storm water connections to either sanitary or combined sewer systems within JMEUC’s service area, such as NJDOT catch basin connections. These, as well as other sources of inflow into the sanitary or combined sewer systems, including possible underground streams or flows from storm water pump stations, should be evaluated. [1]

RESPONSE (57): The LTCP and implementation schedule include a number of CSO control projects. The most significant projects include the increased pumping rate at TAPS and construction of several CSO storage facilities so that additional combined sewage can be diverted to JMEUC. The pollutant reduction benefits from these projects are considerable as untreated combined sewage will now be diverted to JMEUC for treatment as opposed to being discharged untreated to CSOs. JMEUC has received no additional loading allowance in its NJPDES discharge to surface water permit based on the acceptance of these flows. For example, combined sewage can contain high levels of fecal coliform; however, once diverted to JMEUC any combined sewage volume must comply with the same requirements as treated sanitary wastewater. As described in **RESPONSE (48)** and

RESPONSE (51-56), as well as in other responses, the implementation schedule is front-loaded with significant CSO control projects so that percent capture is increased in the short term to minimize CSOs as quickly as practicable.

As noted in this comment, there are also sewer separation projects that will be completed as part of the implementation schedule. This includes planned separation of stormwater flows from the 42" stormwater connection in the Borough of Roselle Park to the Elizabeth combined sewer. Separation of these stormwater flows from this line will free up capacity and could potentially result in additional combined sewage making its way to JMEUC as opposed to being discharged through CSOs.

Addressing sources of inflow is also suggested in this comment. Inflow can enter the sanitary sewer line through rain leaders, sump pumps, storm sewer cross connections, and foundation drains that are connected to sanitary sewer pipes. Inflow is greatest during major storm events and can significantly increase wastewater volumes. Infiltration can also take up capacity where infiltration is a more gradual process which occurs when water seeps into sanitary sewer pipes through cracks, leaky pipe joints and/or deteriorated manholes. If inflow and infiltration is taking up capacity in the sewer line, there is less capacity for combined sewage that can be routed to JMEUC as opposed to being discharged as CSOs. While no specific CSO control projects are included in the LTCP to address I/I, there are permit requirements to address inflow/infiltration within the CSS as per Part IV.F.1.h.xii.

It would be difficult to estimate the exact pollutant reduction benefit associated with each of these projects; however, the reductions in combined sewage amount allows for pollutant reduction benefit. The Department maintains that all of these projects will minimize CSO volumes and will allow for water quality benefits.

- 58. COMMENT:** EPA developed a guidance document to assist in the development of CSO control implementation schedules and to this end, includes guidance on performing a Financial Capability Assessment (USEPA, 1997). The goals of this guidance document are that it serve as a planning tool for evaluating the financial resources a permittee has available to implement CSO controls, and to assist the permittee, EPA, and state National Pollutant Discharge Elimination System (NPDES) authorities in cooperatively developing CSO control implementation schedules. The EPA guidance includes a methodology to evaluate the financial "burden" CSO control implementation places on permittees; it suggests that a longer implementation schedule of up to 15-20 years may be appropriate for "High Burden" permittees, a schedule length of up to 10 years for "Medium Burden" permittees and a Normal Engineering/Construction schedule for "Low Burden" permittees.

In its LTCP, the City of Elizabeth and JMEUC utilized the FCA guidance and determined the implementation of CSO Controls would represent a "High" burden. In consultation with the NJDEP, an EPA contractor performed a separate review of the permittee's financial information and concluded that the CSO controls identified in the LTCP present a "Medium" financial burden on the permittee. Consistent with the EPA FCA guidance, an implementation schedule of up to 10 years is suggested for a "Medium" burden community, and a schedule of up to 15 - 20 years is suggested for a "High" burden community. In 2023, EPA finalized its updated FCA Guidance (USEPA, 2023) to include Recommended Implementation Schedule Benchmarks, which allow additional time (5 more years) if a Comprehensive Financial Alternatives Analysis has been performed; if this additional analysis was provided and the FCA resulted in a "Medium Impact," the maximum recommended implementation schedule could be extended to 15 years or, in the case of a "High Impact" community up to 25 years, based on further negotiation with EPA and State NPDES authorities. While we note that this additional analysis was not performed because the LTCPs were developed prior to the new FCA guidance was finalized, the CSO control implementation schedules identified in the permits are significantly longer than the suggested schedules identified in EPA guidance and are not consistent with the CSO Control Policy that states that the selected CSO Controls be implemented "as soon as practicable." [1]

RESPONSE (58): As an initial matter, the Department notes that the City of Elizabeth and JMEUC submitted their LTCP in October 2020 and, as such, evaluated financial capability under EPA's 1997 FCA guidance. Subsequent to the LTCP submission, EPA issued updated FCA guidance in February 2023 (revised March 2024). EPA did provide contractor assistance to the Department as identified in this comment and as referenced in the Contents of the Administrative Record. The Department maintains that the implementation schedules identified in the draft and final permits are compliant with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C based upon a thorough review of the LTCP, requirements of the federal CSO Control Policy, recommendations of the 1997 and 2023 FCA guidance, and discussions with the permittee.

The Department is aware that the federal CSO Control Policy, which has been adopted into the Department's regulations at N.J.A.C. 7:14A-11, Appendix C, states that CSO controls shall be implemented "as soon as practicable." However, the federal CSO Control Policy does not expand on that phrase. Nevertheless, the federal CSO Control Policy notes that implementation schedules may be phased with consideration given to, among other things, the permittee's financial capability, user fees and rate structures.

Likewise, and although guidance only, the 1997 and 2023 FCA guidance provide "general boundaries" for schedules. Notably, however, the "general boundaries" are not unyielding depending on the attendant circumstances. Specifically, the 1997 FCA guidance states "the time boundaries are not intended to replace the negotiations and deliberations necessary to balance all of the environmental and financial considerations that influence the site-specific nature of the controls and implementation schedules." Similarly, the 2023 FCA guidance states:

EPA does not view or use the FCA guidance as a rigid metric that points to a given schedule length....In practice, EPA considers each community's financial capability on a holistic case-by-case basis. Where appropriate, EPA has and will continue to consider supplemental information submitted by the community (as encouraged by the 2014 FCA Framework) and may agree to implementation schedules that are different than the schedules suggested by the FCA guidance's baseline analysis.

As referenced in the 1997 FCA guidance, the permittee and permitting authority should ultimately agree on a "reasonable and effective" schedule. Although longer than the "general boundaries" set forth in the 1997 and 2023 FCA guidance, the Department, upon a holistic review of the permittees' circumstances, has determined that the City of Elizabeth and JMEUC implementation schedule is nevertheless compliant with the requirements of the federal CSO Control Policy, N.J.A.C. 7:14A-11, Appendix C, and recommendations of the FCA guidance and represents implementation of CSO controls as soon as practicable based on the given circumstances.

As noted in **RESPONSE (48)**, the Department discussed the length and sequence of the implementation schedule multiple times. As discussed in the City of Elizabeth's August 27, 2024 letter, certain CSO control projects must occur in a particular sequence and cannot be pursued simultaneously, and each project has a multi-year duration. This necessarily means the City of Elizabeth's implementation schedule can only be shorted so much and, where appropriate, CSO control projects are planned to occur simultaneously. Nevertheless, as feasible, the City of Elizabeth has been proactively pursuing implementation of CSO controls measures in the absence of an approved LTCP. As discussed in **RESPONSE (48)** a number of LTCP projects have already been completed or construction has commenced. In addition, the implementation schedule is front-loaded with significant CSO control projects so that percent capture is increased in the short term to minimize CSOs as quickly as practicable.

Of importance in this matter is the financial capability of the City of Elizabeth. The length of the implementation schedule is due, in part, to the financial impacts on the City of Elizabeth's users. The permittee's financial situation is unique. Utilizing the 1997 FCA guidance, the City of Elizabeth determined that the LTCP represents a "High Burden" on the City of Elizabeth. Of particular note, this determination concluded that the burden reached 4.7% of MHI for the lowest income quintile. According to the City of Elizabeth's August 27, 2024 letter, the US Census Bureau 2022 American Community Survey concluded that 16.6% of the population is living below the poverty line, while the City of Elizabeth's cost of living is approximately 30% higher than the national index and cost of housing is 68% higher than the national average. As more fully discussed in **RESPONSE (42)** and **RESPONSE (62-66)**, the City of Elizabeth and JMEUC have historically aggressively pursued funding through the New Jersey Water Bank; however, there is only a limited amount of funding available, and costs above and beyond available funding must be shouldered by the permittee.

The immense complexity of planning unique to this area of the State is also noteworthy. The City of Elizabeth is located in a heavily industrialized and populated area of New Jersey. In and around the City of Elizabeth are densely populated neighborhoods and vital shipping ports, highways, and airports. This serves to make obtaining necessary permits and approvals a time consuming and highly complex process and also serves to require careful

planning of construction to avoid significant impacts to traffic and neighborhoods. According to the City of Elizabeth's August 27, 2024 letter, such considerations must factor into the overall length of the implementation schedule.

Given the above, the Department has concluded that "unique circumstances," as contemplated by the 1997 FCA guidance, exist. Briefly, the 1997 FCA guidance acknowledges that "unique circumstances" may exist for a given permittee, and, upon consideration of same, encourages flexibility in LTCP schedule length. Likewise, the 2023 FCA guidance notes "other metrics submitted by the community may affect the length of the schedule regardless of where the community is on the 'high,' 'medium,' and 'low' continuum.... Where appropriate, this information can result in schedules that are different than the schedules suggested by the baseline analysis in the FCA guidance." Additionally, the permittee has indicated that project costs have significantly increased since submission of its LTCP.

- 59. COMMENT:** In February 2023, the US EPA released the final 2023 CWA FCA Guidance, created to help communities "seek ways to minimize financial impacts while ensuring residents also enjoy the benefits of infrastructure investments and improved water quality." This EPA guidance encourages municipalities to integrate stormwater management practices, such as green infrastructure, to reach compliance with the Clean Water Act. To ensure that ratepayers are not affected by the impacts of longer schedules while minimizing financial impacts on lower-income households, New Jersey Future asks that NJDEP and permittees for this permit and subsequent CSO permits follow the US EPA's 2023 CWA FCA Guidance.

New Jersey Future recognizes that it is vital to consider the financial impact on lower income rate-payers and overburdened households. New Jersey Future recommend that NJDEP incorporate a review of the permit holder's financial capability analysis, including interest and inflation rates and related calculations be incorporated into the permit. NJDEP should clarify how affordability for lower income households is reflected in the analysis. [4]

RESPONSE (59): The permittees conducted a FCA, required by the 2015 NJPDES CSO permit, outlined in the October 2020 LTCP. The purpose of this analysis is to evaluate the financial capability of the Permittees and sewer rate payers to fund future investments in combined sewer infrastructure. As required by the 2015 NJPDES CSO permit, the permittees' financial capability was submitted along with the implementation schedule. To complete the assessment, the permittees utilized the 1997 FCA guidance which outlines the process for determining financial impacts and affordability associated with mitigating CSOs.

The Department acknowledges that EPA announced its updated CWA FCA Guidance on February 1, 2023 (updated March 2024). This guidance outlines strategies for communities to follow to support affordable rates while planning investments in water infrastructure essential to protecting our Nation's waters. Specifically, this guidance is intended to be used by municipalities after controls are selected when it is devising specific timeframes for implementation. See <https://www.epa.gov/waterfinancecenter/clean-water-act-financial-capability-assessment-guidance>. As stated within the EPA document, it is intended to provide clarity to the public regarding existing requirements under the law or agency policies. Moreover, as discussed in **RESPONSE (62-66)**, further financial analyses would delay, potentially significantly, implementation of CSO controls. At this time, the Department maintains that the analysis done under EPA's 1997 FCA guidance and contained within the LTCPs is sufficient as written.

This subject NJPDES CSO permit as issued to the permittees serves to incorporate the findings of the October 2020 LTCP which was required based on the Department's issuance of the 2015 NJPDES CSO permits. The LTCP reflects many years of data gathering, evaluation and modeling and included an assessment of Cost/Performance analysis as part of LTCP to determine what level of technology to control CSO discharges may be reasonably implemented. 59 Fed. Reg. at 18693. There are significant projects occurring at the beginning of the implementation schedule which will ensure that the benefits of reductions in CSO volume are realized in the short term.

In sum, the Department maintains that the CSO control measures should be implemented as soon as practicable as evidenced by the Implementation Schedule. The Department does not agree that it would be appropriate to require

the permittees to revise their LTCP and resubmit it to the Department in order to incorporate the suggestions provided within the February 1, 2023 EPA FCA guidance. To do so would require the permittee to revisit the findings of their LTCP and resubmit to the Department which could result in delays in the implementation of the CSO control measures.

60. **COMMENT:** In the case of this permit, would it be possible to ask the JMEUC to undertake this project for the City of Elizabeth so that the costs would be spread out over all of JMEUC's customers, and not just on Elizabeth? In this way, you would have the same total costs spread out over more users, and those users would also have a higher median household income, which would improve the affordability calculation considerably. [2] [5] [6]
61. **COMMENT:** We recommend NJDEP encourage the JMEUC to undertake this project for the City of Elizabeth so that the costs would be spread out over all of Joint Meeting's customers, rather than just customers of Elizabeth. The same total costs would be spread out over more users, and those users would have a higher median household income. This will improve the affordability calculation considerably. [4]

RESPONSE (60-61): JMEUC owns and operates a WWTF which treats wastewater collected in a 65 square mile service area in northern New Jersey. The JMEUC trunk sewer system collects wastewater from a service area which includes eleven member (owner) communities and four customer communities. The JMEUC service area is primarily separately sewered areas, with the only confirmed combined sewer area in the system located within the City of Elizabeth. The City of Elizabeth provides wastewater and stormwater collection and conveyance services which encompasses approximately 12.3 square miles in Union County, New Jersey. This collection and conveyance system consists of an extensive network of intercepting sewers, sewer mains, manholes, catch basins, pump stations, overflow control facilities, and drainage channels. The City of Elizabeth's owned sewer system conveys wastewater flows to the JMEUC WWTF.

The Department acknowledges that several commenters have suggested that the cost of CSO control measures be spread amongst the entire JMEUC service area. However, the Department maintains that user fees and rate structures are outside the purview of the NJPDES regulations and therefore outside the terms of the permit. As such, concerns regarding cost distribution should be directed to the appropriate utility authorities.

The Department agrees that all innovative funding strategies should be considered. As noted in previous comments, funding is available through the New Jersey Water Bank and EPA provides free technical assistance. However, user fees and rate structures are outside the purview of the NJPDES regulations and therefore outside the terms of the permit. Refer to **RESPONSE (48)** and **RESPONSE (51-56)** regarding the implementation schedule.

62. **COMMENT:** This permit should not extend the timeline for requirements to reduce rate increases, as this will extend the time by which the community faces environmental and public health issues. We ask for the permittee to shorten the 2045 project completion timeline so that the project benefits are demonstrated within ten years. Given that the LTCP was crafted prior to the availability of federal water infrastructure funding through the Bipartisan Infrastructure Law and American Rescue Plan Act, we suggest that NJDEP, the City of Elizabeth, and the Joint Meeting of Essex and Union Counties revisit financing of these critical projects and find ways to shorten the timeline while maintaining affordability. This once-in-a-generation funding opportunity can reduce the debt the permittee would need to take on to reduce the timeline and would not place the cost onto ratepayers. [4]
63. **COMMENT:** NJDEP should work with the local permit holders to take advantage of new financing mechanisms through the Water Bank to help shorten these timelines, affordably. This is critical to protect water quality and reduce the burden of combined sewer overflows to communities. [3]
64. **COMMENT:** The permits should not extend the timeline for requirements to reduce rate increases, as this will extend the time the community faces environmental and public health issues. There's some concern about this timeline reaching all the way out to 2043.

If the reason that these timelines are so lengthened is due to financing, there are new federal funding opportunities that were instituted after the long term control plans were drafted. Permit holders can take advantage of them right

now through the Water Bank. This is a once in a lifetime opportunity in terms of federal funding. This can help to shorten those timelines while enabling affordability for all community members. NJDEP should incorporate a review of the permittee's financial capability analysis and the permittee should clarify how affordability for lower income households is reflected in the analysis. [5]

65. **COMMENT:** If financing is a hindrance to shortening timelines while ensuring affordability, there are new federal funding opportunities released since the long term control plans were drafted that permit holders can take advantage of through the Water Bank. In addition, there is Technical Support funding from EPA that permit holders can take advantage of to help them develop a stronger financial capability analysis. This is described and recommended in EPA's recent 2023 Clean Water Act Financial Capability Assessment guidance. We really hope that the permittees take a look at this documentation and use it to help them shorten some timelines while also reducing the impact to ratepayers. [6]

66. **COMMENT:** Speaking of timing, we do encourage NJDEP to encourage the permittees to explore innovative funding. There is new funding available that was not available when the long term control plans were developed and so there are options now that were not in effect for the long term control plan. We're not asking that the plans be delayed but we are asking that financing be reviewed. There are 26 outfalls that are affecting thousands if not millions of people and in the water that they access and the recreation and we do hope that we will not be pushing out cleaning these waters into 2045 when there are opportunities for us to fast track that when possible. [8]

RESPONSE (62-66): Practicability and affordability must be balanced with reducing CSOs and CSO-related flooding as quickly as possible. The development and implementation of CSO projects requires both the permitting authority and the permittee to carefully balance a number of considerations to implement the LTCP as soon as practicable and ultimately achieve compliance with the CWA. In developing an implementation schedule, the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C directs permitting authorities and permittees to consider, among other things, use impairment, financial capability, funding availability, and user rates and fee structures.

As fully discussed in **RESPONSE (40-41)** and **RESPONSE (42)**, there are funding opportunities available through the New Jersey Water Bank and the City of Elizabeth and JMEUC have historically aggressively pursued funding through the New Jersey Water Bank. As noted in previous responses, the Department agrees that all funding opportunities should be pursued and has shared information regarding available funding and the EPA technical assistance program with the permittees. Low-cost financing is available for the design, construction, and implementation of projects that help to protect, maintain and improve water quality. Projects eligible for financing include a wide variety of wastewater treatment works, stormwater management, drinking water systems, land acquisition, and landfill activities. However, there is only a limited amount of funding available, and costs above and beyond available funding must be shouldered by the permittee. Projects costs, regardless of whether they are financed through the New Jersey Water Bank, impact user rates and fee structures, and the amount of debt which a given permitting authority can take on is prescribed by its specific financial capability. Shortening an implementation schedule will lead to costs being spread out over a correspondingly shorter period, generally resulting in higher user rates. Similarly, a recalculation of an FCA or review of funding alternatives would necessitate extending the timeline to finalization of an LTCP. Again, the permittee, based on its specific circumstances, must develop a schedule compliant with the CWA which balances the competing interests of shorter timeframes and lower user rates. The Department is presently satisfied that the permittees have vigorously pursued available funding opportunities. Similarly, the permittees submitted a FCA with their LTCP, which the Department has reviewed and maintains is compliant with the requirements of the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. The Department has determined that the LTCP strikes the appropriate balance between all considerations.

67. **COMMENT:** Waterspirit urges that you take advantage of new financing mechanisms through the Water Bank to help shorten such timelines, and we believe you can do this. To establish a way forward trust must be factored in.

I thought that the USA TODAY article back in November of 2021 covering Paterson's floods for 75 years and the dire CSO issue would have been embarrassment enough. Having people's schools and homes flooded with

hazardous waste before considerable investments would be made to fast track prevention of sewage filled streets and rivers. This is a global issue. New Jersey had a budgetary surplus that could have been spent fixing CSOs and their effects throughout the state in their entirety. [7]

RESPONSE (67): The Department agrees that CSO control projects should be implemented as soon as practicable and that all available funding sources should be pursued. The Department does not have control over any state budget surplus and does not have the authority to redirect any state budget funds. The Department and the New Jersey Infrastructure Bank (NJIB) partner together as New Jersey Water Bank to administer New Jersey's State Revolving Fund in order to provide low-cost financing for the design, construction, and implementation of projects that help to protect, maintain and improve water quality including CSO controls.

Note that the City of Paterson is covered under a separate LTCP as part of the Passaic Valley Sewerage Commission District.

68. COMMENT: Is there a way to create a separate guidance document around financing and affordability, since there has been new funding that's come about since the long term control plans. Even stormwater utilities have taken on a new emphasis so much more research has been done around that. It would be nice to have a separate document, maybe it's a living document that continuously can be updated, but a repository as one place to go. that talks about the EPA's guidance, the affordability calculation, and how to do an alternative affordability calculation. This is a repeating theme and maybe a separate guidance document would be helpful. [5]

69. COMMENT: In order to provide for more clarity and prescriptive measures to ensure equity and consistency across permits, we recommend that NJDEP issue concurrent guidance to permittees to assist them with tracking and demonstrating their work on affordability. [2]

RESPONSE (68-69): Given the comprehensive nature of the 2023 FCA guidance, the Department does not intend to create its own NJDEP guidance on the FCA. It is unclear what is intended by the reference to an alternative affordability calculation.

A fact sheet specific to CSO funding was recently developed to assist permittees and can be found at <https://dep.nj.gov/dwq/combined-sewer-overflow/>. This guidance document includes a summary about these funding opportunities for the upcoming State Fiscal Year.

Refer to **RESPONSE (70-71)** regarding stormwater utilities.

70. COMMENT: The permit holders should include the impact on affordability and corresponding timeframe that implementation of an equitable stormwater fee would have. Can the permit holders be required to take these steps? Can it be included in the guidance? [5]

71. COMMENT: In addition to including Water Bank funding in the affordability calculation, the permit holder should include the impact on affordability and corresponding time frame that implementation of an equitable stormwater fee would have. Can the permit holder be required to take these steps? The Department should require the permittees to engage community members in discussions to decide innovative funding strategies. How is the permit holder held accountable in engaging community members in these discussions? [2]

RESPONSE (70-71): Stormwater utility fees can be a means to fund infrastructure projects. As described previously, stormwater utility fees are similar to a water or sewer utility fee except customers pay a fee based on the amount of impervious surface on their property. This includes all commercial, residential, and tax exempt properties within the service area. Comprehensive guidance for stormwater utility creation, feasibility studies, and fee assessments is available at https://dep.nj.gov/njpdes-stormwater/swu_stormwaterutility. However, stormwater utilities are outside the scope of the NJPDES CSO permit.

Funding for stormwater infrastructure is within the scope of Public Engagement and can be a topic for CSO Supplemental Team meetings. See Part IV.G.2.

- 72. COMMENT:** GI is an integral stormwater practice and an essential climate resilient solution that has benefits for CSO volume reduction and water quality improvement. CSO control alternatives including green infrastructure are important components in achieving 85% capture during wet weather. We recommend the Department require permittees to prioritize controls and projects based on the impact on CSO volume reduction and water quality improvements, including well-designed green infrastructure.

The Department should provide additional guidance for permittees to ensure that high-impact green infrastructure is considered as part of gray infrastructure projects to address both solutions simultaneously and achieve economies of scale while ensuring affordability to ratepayers. [4]

- 73. COMMENT:** GI is an integral stormwater management practice and an essential climate resilient solution that has benefits for CSO volume reduction and water quality improvement. CSO alternatives including green infrastructure are important components in achieving 85% capture of combined sewage collected during wet weather. NJDEP should prioritize controls and projects based on the impact of CSO volume reduction and water quality improvements, including well-designed green infrastructure. We urge you to work with the local permit holder to leverage green infrastructure and fast track more green infrastructure in the first five years. This is another avenue for shortening timelines to achieving the 85% capture goal. It's a lower cost and higher impact strategy.

The Department should provide additional guidance for permittees to ensure that high-impact green infrastructure is considered as part of gray infrastructure projects to address both solutions simultaneously and achieve economies of scale while ensuring affordability to ratepayers. We noticed that there were quite a few gray infrastructure projects in these permits, which is great, so is there an opportunity to step back and see how green infrastructure might be built and designed simultaneously. Permit holders might need guidance on that technique, on those strategies. Is that something that NJDEP can support? [5]

- 74. COMMENT:** We encourage NJDEP to work with permit holders to fast track the green infrastructure implementation up more towards the beginning of the first five-year process. We have lots of evidence to show that green infrastructure, while not a 100% solution, can help ameliorate the street level flooding problems and the stormwater related CSO events. Putting those up front is a lower cost, high impact (not low cost) opportunity for communities to see real change and also for there to be additional benefits to the community as well. And so moving GI up higher in the timeline should be something that NJDEP encourages across the board. [8]

- 75. COMMENT:** Moreover, with so many gray infrastructure projects being implemented, has the permit holder evaluated the opportunities to install green infrastructure simultaneously and use that to achieve a sort of economy of scale in getting projects and reductions done at the same time? [6]

- 76. COMMENT:** Prioritize green infrastructure solutions in the first five years. Incorporate green infrastructure into the gray infrastructure solutions as early as possible. This is critical to protect water quality and reduce the burden of combined sewer overflows to communities. [3]

RESPONSE (72-76): As discussed in **RESPONSE (48)**, significant CSO controls for these permittees are already in various stages of completion.

The Department acknowledges that green infrastructure can be utilized to manage stormwater while simultaneously providing environmental, social, and other co-benefits. These co-benefits can include a reduction in urban heat island effect, decreased energy use, removal of pollutants from the air through greater utilization of vegetation, beautification of public spaces, and increased property values. The Department has long supported the use of green infrastructure to assist with CSO reduction and released a document in January 2018 entitled "Evaluating Green Infrastructure: A Combined Sewer Overflow Control Alternative for Long Term Control Plans" and available at <https://dep.nj.gov/dwq/combined-sewer-overflow/cso-permittees/#resources>.

The 2015 NJPDES CSO permit required the three Permittees to work collaboratively through the three stages of LTCP development including the submission of the Development and Evaluation of Alternatives Report (DEAR)

dated September 6, 2019 (available at <https://www.nj.gov/dep/dwq/cso-ltcpsubmittals.htm>). The objective of the DEAR was to provide a comprehensive evaluation of CSO control alternatives including gray and green infrastructure. The DEAR discussed the phased implementation of green stormwater infrastructure projects throughout the report. Subsequent to the DEAR, the Permittees were required to work collaboratively to create and submit an LTCP which included Implementation Schedules consisting of projects and timelines. As part of that requirement, the Permittees were required to evaluate the practical and technical feasibility of a range of CSO control alternatives that met the goals of the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. The selection of CSO control strategies was left to the permittees consistent with the federal CSO Control Policy. The City of Elizabeth is pursuing a GI pilot program as part of its Implementation Schedule and has already incorporated GI measures into certain completed CSO projects such as the Trumbull Street Stormwater Control Program.

The Department recognizes the importance of providing robust funding opportunities for CSO projects, including green infrastructure. Green infrastructure projects are eligible for funding through the New Jersey Water Bank which offers a variety of funding packages with low interest loans and principal forgiveness, and additional resources for disadvantaged communities.

The Department agrees that the operation and maintenance of green infrastructure is integral to their proper function. Operation and maintenance of CSO control measures, such as green infrastructure, is addressed in a separate permit condition at Part IV.G.6, as described in **RESPONSE (15)**.

77. **COMMENT:** Organizations such as Future City and GroundWork Elizabeth and community members in Elizabeth are very active, especially in proposing and planning green infrastructure projects. We urge you to work with the permit holder to leverage their expertise and support to accelerate implementation of green infrastructure. This is another avenue for shortening timelines toward achieving the minimum 85% capture goal. [2]
78. **COMMENT:** The permittees should work collaboratively with the community and with community-based organizations, such as GroundWork Elizabeth, to identify locations for green infrastructure projects to maximize community benefit. [4]
79. **COMMENT:** Green infrastructure projects should be collaboratively identified with the community. There are some very strong community organizations that are doing this work and we hope that you will continue to work with them. [5]
80. **COMMENT:** We know that organizations and community members and Elizabeth are very active, especially in proposing and planning green infrastructure projects. We urge you to work with the permit holder to leverage their expertise and support to accelerate implementation of green infrastructure. That's another avenue for shortening timelines toward achieving the minimum 85% capture goal in a shorter timeframe. [6]
81. **COMMENT:** Prevention will help and we have 400 Rutgers University Cooperative Extension Water resources program green infrastructure champions throughout the entire state. These people have heart and want to help. To realize the benefits of incorporating green infrastructure into gray infrastructure solutions really requires planning ahead of time. [7]

RESPONSE (77-81): Permittees are responsible for the implementation of CSO control projects including green infrastructure. Community groups are encouraged to work with the permittees to assist with the implementation of green infrastructure practices. Groundwork Elizabeth works in and around Elizabeth to improve the urban environment and address quality of life issues related to environmental and food injustice. See [Groundwork Elizabeth - Groundwork USA](#). Rutgers Cooperative Extension Water Resources Program serves to identify and address water resources issues by engaging and empowering communities to employ practical science-based solutions. See water.rutgers.edu.

Representatives from local community groups could also serve on the CSO Supplemental Team which is a requirement of the permit at Part IV.G.2. Specific objectives of CSO Supplemental Team meetings as specified in

Part IV.G.2.c include allowing the affected community and interested public an opportunity to provide input on the siting of GI. In addition, CSO Supplemental Team meetings can also serve to engage the affected community and interested public in solutions they can implement to reduce CSOs such as the installation of green infrastructure projects, an adopt-a-catch-basin program, rain barrels, water conservation, and the removal of impervious surfaces.

82. **COMMENT:** NJDEP should require that the permittee monitor and track the impact of green infrastructure projects implemented by the permittees on CSOs, such as the Trumbull Street Stormwater Control Project, to ensure that they are being properly installed and maintained. [4]
83. **COMMENT:** NJDEP should require the permittee to monitor and track the impact of CSOs of green infrastructure projects implemented by the permittees, such as the Trumbull Street stormwater control project, to ensure they are being properly installed and maintained and so that we understand the impact of green infrastructure on the outcomes. [5]
84. **COMMENT:** NJDEP should require that the permittee monitor and track the impact of green infrastructure projects implemented by the permittees on CSOs, such as the Trumbull Street Stormwater Control Project, to ensure that they are being properly installed and maintained. [2]

RESPONSE (82-84): All green infrastructure measures serve to free up capacity in the collection system. There is no requirement to monitor and track the efficacy of any particular gray or green control alternative. However, note that the final permit contains “specific requirements to track and assess compliance with the attainment of wet weather percent capture.” in Part IV.G.4.c and d in achieving the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C requirements.

Regarding tracking and monitoring, green infrastructure can absorb stormwater and thereby contribute to reductions in volume of CSOs. A rerun of the hydraulic and hydrological (H&H) model as part of the Post Construction Compliance Monitoring Program will document any changes to wet weather percent capture as a result of any completed green infrastructure projects. See Part IV.G.9.e.

85. **COMMENT:** NJDEP must ensure that the benefits from the green infrastructure pilot program are maximized by accelerating timelines and by creating and implementing maintenance plans. The permittees should work collaboratively across municipalities, with community members and community-based organizations, such as GroundWork Elizabeth, to identify locations for green infrastructure projects to maximize community benefits. [4]
86. **COMMENT:** We appreciate that the permit holder is committed to a green infrastructure pilot program. NJDEP must ensure that the benefits from the program are maximized by accelerating timelines and by creating and implementing 8 maintenance plans. The permittee should work collaboratively with the community to identify locations for green infrastructure projects to maximize community benefits. When will the identification of the green infrastructure sites be determined if they have not been already? How long will it take for the program to make a determination around full roll-out? Moreover, with so many gray infrastructure projects being implemented, has the permit holder evaluated the opportunities to install green infrastructure, simultaneously, and achieve economies of scale? Has a professional consultant been considered for such a feasibility study?

NJDEP should provide assistance for the permittee to explore conducting a green infrastructure feasibility study to determine locations with a large amount of impervious cover that will benefit from implementation of green infrastructure projects to address flooding. [2]

87. **COMMENT:** NJDEP should provide assistance for the permittee to explore conducting a green infrastructure feasibility study to determine locations with a large amount of impervious cover that will benefit from implementation of green infrastructure projects to address flooding. NJDEP must ensure that the benefit from the green infrastructure pilot program included in this permit be maximized by accelerating timelines and creating maintenance plans. [4]

88. COMMENT: The permittees should explore conducting a green infrastructure feasibility study to determine locations with a large amount of impervious cover that might benefit from implementation of green infrastructure projects to address flooding. This would be a study done across Elizabeth. NJDEP must ensure that the benefit from the green infrastructure pilot program be maximized by accelerating timelines. The permittee should work collaboratively with the community to identify locations for green infrastructure projects to maximize community benefits.

Is there a way to ensure that there's a benefit from this green infrastructure pilot program in addressing flooding. How can we determine that this pilot is addressing flooding and that it is reducing the volume? Is that something that can be measured and reported back? [5]

RESPONSE (85-88): As identified within the implementation schedule, the City of Elizabeth has selected a green infrastructure pilot program where solicitation of bids for construction is targeted for Year 5 of the implementation schedule. The Department supports the use of green infrastructure; however, the selection of CSO control strategies is left to the permittees consistent with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C as part of the already submitted LTCP. Representatives from local community groups could also serve on the CSO Supplemental Team where an objective of this team could include allowing the affected community and interested public an opportunity to provide input on the siting of GI. See Part IV.G.2.c.

89. COMMENT: EPA supports the requirements of the PCCMP. Of particular note is the importance of requiring post construction compliance monitoring every 5 years to assess the performance and effectiveness of CSO controls as they are implemented, including an assessment as to whether the control is performing as expected and achieving the required interim increase in percent capture of wet weather flows, as well as the final capture of no less than 85%. Interim requirements/milestones for capture percentage of combined wet weather flows be identified and included in the fact sheet/ permit. EPA recommends that the permittee be required to submit its water quality compliance monitoring plan to the NJDEP for review and approval prior to implementation. [1]

RESPONSE (89): Extensive Post Construction Compliance Monitoring Plan requirements are included in Part IV.G.9 of the permit as noted in this comment. This requirement already specifies a time interval of five years for submission of an Interim PCCMP Report as shown in Part IV.G.9.e:

- e. The permittee shall conduct interim post-construction compliance monitoring every five years as established in the LTCP. Such monitoring shall assess the projects and implementation schedule including attainment of percent capture milestones set forth in the LTCP. These projects shall be monitored and analyzed to determine if they are operating as intended and whether the implementation of projects under the LTCP are achieving the interim required percent capture milestones set forth in the LTCP. If the PCCMP determines that the implemented CSO control measures do not meet the interim required percent capture or the final required percent criteria, an evaluation must be included in the Adaptive Management Plan in accordance with H. below.

Both the Interim PCCMP Report and the Final PCCMP Report are required to be submitted to the Department and will include modeling results regarding wet weather percent capture. Interim wet weather percent capture milestones are summarized in the draft NJPDES CSO permits.

In the event that the Permittees do not obtain final percent capture requirements, Adaptive Management practices must commence to ensure that additional CSO control measures are implemented to attain interim milestones. As stated in Part IV.H.2:

- b. If an Interim or the Final PCCMP Report determines that the implemented CSO control measures do not meet the interim required percent capture or the final required percent capture, the Adaptive Management Plan shall include:
 - i. Modified or additional CSO control measures that will be to achieve the interim required percent capture or the final required percent capture;

- ii. A detailed analysis and a modified implementation plan and schedule of the CSO control measures; and
- iii. Inclusion of any adaptive management modifications based on an Interim or the Final PCCMP Report.

In addition, Part IV.G.9 of the permit also requires submission of water quality monitoring results. As stated in Part IV.G.9.g:

- g. Upon implementation of all the LTCP CSO control measures, the monitoring information collected from the ambient baseline monitoring phase of the BCMP shall be compared to the post-construction compliance monitoring to evaluate the effectiveness of CSO control measures implemented to verify that the remaining CSOs are not precluding the attainment of water quality standards for pathogens.

Finally, Part II contains a reopener clause which references compliance with water quality standards (WQS). Specifically,

- a. This reopener clause authorizes the NJDEP to reopen and modify the permit upon determination that the CSO controls as contained in a LTCP fail to meet WQS or protect designated uses.

In summary, the Department maintains that the NJPDES permit is fully reflective of PCCMP requirements as included in the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C.

- 90. COMMENT:** Part g. of the Compliance Monitoring – Post Construction Compliance Monitoring Plan section of the permits includes the statement: “remaining CSOs are not precluding the attainment of water quality standards for pathogens.” EPA requests that this statement be revised to remove “for pathogens” as the CSO Control Policy (Section II.C.9.) does not limit water quality standards attainment to only pathogens. [1]

RESPONSE (90): The Department agrees that the NJPDES CSO permit must be consistent with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. Part IV.G.9.g has been modified in the final permits as follows:

- g. Upon implementation of all the LTCP CSO control measures, the monitoring information collected from the ambient baseline monitoring phase of the BCMP shall be compared to the post-construction compliance monitoring to evaluate the effectiveness of CSO control measures implemented to verify that the remaining CSOs are not precluding the attainment of water quality standards ~~for pathogens~~.

This change affects Part IV.G.9.g (CSM Requirements) of the final permits.

- 91. COMMENT:** The City of Elizabeth and JMEUC NJPDES permits should be cross referenced in each permit. The CSO Control Policy states that “[w]hen a CSO is permitted separately from the POTW, both permits should be cross-referenced for informational purposes.” Id. At 18695. [1]

RESPONSE (91): The Department has included an additional permit condition to Part IV.G.10 to include a cross-reference to the hydraulically connected system for informational purposes. As a result, the revised language at Part IV.G.10.a (CSM Requirements) of the final permits is as follows:

- a. The City of Elizabeth (NJPDES Permit No. NJ0108782) and JMEUC (NJPDES Permit No. NJ0024741) are a hydraulically connected combined sewer system. The permittees own/operate separate portions of one hydraulically connected combined sewer system.
- ab. The permittee is responsible for implementing CSO control measures to ensure compliance with the federal CSO Control Policy and N.J.A.C. 7:14-11, Appendix C as outlined in the Implementation Schedule located in Section G.8. Since multiple permittees own/operate different portions of a hydraulically

connected CSS, the permittee is required to work cooperatively and provide the necessary information with all other CSO permittees to ensure overall compliance. In addition, each permittee is required to institute necessary measures in accordance with the Implementation Schedule for only the portion of the hydraulically connected system that the permittee owns/operates and provide this information to the other permittees for compliance with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C.

This change affects Part IV.G.10 (CSM Requirements) of the final permits.

CUSTOM REQUIREMENT (PART IV.H) COMMENTS

- 92. COMMENT:** EPA is very supportive of the Custom Requirements for Precipitation Trends, which require the permittee to analyze the annual precipitation trends over the term of the permit and compare them to the assumptions used in the development of the LTCP. EPA would also like to highlight the importance of the Adaptive Management Plan and the requirement to provide additional or modified CSO control measures, additional analysis, and a modified implementation plan, should recent precipitation trends not agree with assumptions contained in the LTCP or if interim capture requirements for CSO controls are not met. [1]

RESPONSE (92): The Department acknowledges this supportive comment. The Department agrees that an assessment of annual precipitation trends is appropriate given climate change effects. In addition, the Department agrees that Adaptive Management is a key permit component to allow flexibility for changing conditions as well as technology improvements.

- 93. COMMENT:** There is still less clarity in the language in these permits around how CSO controls address climate change and rising sea levels. At a minimum, the permittee should review the projected CSO removals and whether current projections of precipitation and sea level rise due to climate change affect the implementation plan.

It is unclear how this recent tool released by NJDEP will be used: <https://njprojectedprecipitationchanges.com/>. This was part of the two Extreme Precipitation Studies that NJDEP released confirming increased precipitation across New Jersey over the last twenty years and projecting further increases in precipitation intensity through the end of this century due to climate change. Can you clarify how this tool will be used by NJDEP and permit holders?

How will the Permit Holder be required to adjust their current plan to include these new precipitation models and projections? How will this be documented and reported on? Will NJDEP require permit holders to review the projected CSO removals and whether current projections of precipitation and sea level rise due to climate change require alterations to the implementation plan? [2]

- 94. COMMENT:** NJDEP should provide guidance to permittees on how to use the newly released Extreme Precipitation Projection Tool, which projects increased precipitation intensity due to climate change. The Department should require the permittee to document and report climate change impacts on CSO removals. [4]
- 95. COMMENT:** NJDEP should work with the local permit holders to incorporate the latest climate change modeling and projected rainfall models into the permits so they are adaptive to the changing climate circumstances. This is critical to project water quality and reduce the burden of combined sewer overflows to communities. [3]
- 96. COMMENT:** With the new Federal rule that was just announced, will the permit holder be required to adjust their current five-year plan to include the newer precipitation models and projections? That is an important one to look at going forward. Can I review the projected CSO removals and whether current projections of precipitation and sea level rise due to climate change affect the implementation plan and adjust as needed for that? [6]
- 97. COMMENT:** NJDEP must also clearly incorporate the most up-to-date scientific climate crisis modeling, including projected rainfall models, into the permit, such that they are adaptive to our ever changing circumstances. [7]

- 98. COMMENT:** We do hope that those precipitation models and the climate projection models are updated regularly. If this isn't something that's capable of being done in this first five years, we do hope that NJDEP will make that as a standing requirement for each new five-year permit. [8]

RESPONSE (93-98): The Department agrees that climate change must be considered as part of CSO control measures. NJPDES permit requires measures to prepare for and respond to the effects of climate change, including: Adaptive Management provisions, the preparation of an Emergency Plan (including Vulnerability Analysis and Asset Management requirements), and annual precipitation analyses over the life of the permit. The requirements of this permit may be modified or updated at the discretion of the Department as technology, information, and legal or regulatory requirements relating to climate change continue to develop.

Projects financed through the New Jersey Water Bank, which offers principal forgiveness loans and additional assistance for disadvantaged communities, will review individual projects for climate change impacts. This includes fluvial flooding, coastal flooding, sea level rise, category 1 hurricanes, and extreme precipitation in order to ensure that climate change considerations are maintained throughout the planning and implementation process.

The New Jersey Extreme Precipitation Projection Tool identified in this comment is an interactive tool for users to identify regional and local estimates of projected changes in extreme rainfall amounts. The tool allows users to view a range of rainfall depths, with options for frequencies, emission scenarios and time periods. The use of this specific tool by permittees is not required by the NJPDES CSO permits or the federal CSO Control Policy. However, as described in **RESPONSE (118)** the NJPDES CSO permits require permittees to determine the annual precipitation depth and analyze them against the assumptions used in the development of the LTCP.

Permittees are encouraged to consider the potential for increases in precipitation throughout the implementation of the LTCP via information sources like the New Jersey Extreme Precipitation Projection Tool.

- 99. COMMENT:** Future hydrologic and hydraulic modeling should be updated based on precipitation data and modeling from the Northeast Regional Climate Center released in November 2021. The Department should require the permittee to document and report climate change impacts on CSO removals. [4] [5]

RESPONSE (99): As per the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C, "The permittee should examine the complete rainfall record for the geographic area of its existing CSS" The Department maintains that utilizing local historical rainfall data is accurately representative of local conditions and is required to be used for the H&H model. The H&H model and system wide annual average rainfall were addressed in the System Characterization Report dated June 27, 2018 (revised December 5, 2018) and approved by the Department on January 17, 2019.

- 100. COMMENT:** We acknowledge the NJDEP is working towards the development of rules entitled NJ PACT to begin a regulatory reform effort to help reduce greenhouse gas and other climate pollutant emissions while making our natural and built environments more resilient to the impacts of climate change that are now unavoidable. We look forward to the development and implementation of NJ PACT by permittees through the CSO permit and other applicable regulations.

Governor Phil Murphy announced the adoption of the landmark Inland Flood Protection Rule to better protect New Jersey communities on the frontlines of severe flooding and increased storm events. The Inland Flood Protection Rule corrects outdated portions of the Flood Hazard Area and Stormwater Management Rules to better protect people and property from the devastating flooding that science shows is occurring with increasing frequency due to climate change. Currently, the state underestimates these floodplains because it uses outdated 20-100-year-old data that does not account for recent development and increased rain due to climate change. [2]

- 101. COMMENT:** As New Jersey experiences the impacts of climate change, it is imperative to plan ahead in order to reduce flooding issues and create climate resilient communities. It is essential to use updated and accurate data to protect the environment, infrastructure, public health, and community members. As such, NJDEP should provide clear guidance on how the New Jersey Protection Against Climate Threats (NJ PACT) rules will be incorporated into this permit and future permits. [4]

102. COMMENT: As New Jersey experiences the impacts of climate change it's imperative to plan ahead in order to reduce flooding issues and create climate resilient communities. It's essential to use updated and accurate data to protect the environment, infrastructure, public health and community members. NJDEP should provide clear guidance on how the NJPACT rules will be incorporated into this permit especially with the new inland flood rules that were announced. [5]

103. COMMENT: With the release of the new inland flood protection rules, we do hope that NJDEP will work with the permittee to adjust the precipitation models. We do not want projects to spend potentially billions of dollars go into the ground and not be able to meet the coming climate crises that even NJDEP is predicting in the next 20 to 30 years. Sometimes before the projects are complete and they're already not be meeting the need. [8]

RESPONSE (100-103): The Department acknowledges that New Jersey is threatened by climate change impacts such as rising sea levels, increasing temperature, and more intense and frequent storm events and flooding. As referenced in these comments, the Department continues its regulatory reform effort commonly referred to as NJ PACT. These regulations are the result of Executive Order No. 100 signed by Governor Phil Murphy. Consequently, Administrative Order No. 2020-01 required the Department to begin a regulatory reform effort to help reduce greenhouse gas and other climate pollutant emissions while making our natural and built environments more resilient to the impacts of climate change that are now unavoidable. The Inland Flood Protection Rule is a regulation that aims to improve community resilience against flooding by using updated precipitation data. This rule adopts amendments to the Flood Hazard Area Control Act rules and the Stormwater Management Rules. This rule applies to new and reconstructed assets in areas at most significant risk of flooding. The federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C is the relevant regulation that is applied to NJPDES CSO permits.

The permittees are required to comply with all final and applicable regulations.

RESPONSE TO PERMITTEE COMMENTS

Comments on behalf of the City of Elizabeth (the City) were submitted, as identified below:

Written Comments		
Person	Affiliation	Commenter Number
Daniel J. Loomis, PE	City Engineer, City of Elizabeth	10

The following comments and responses apply only to the City of Elizabeth (the City) draft NJPDES permit issued on May 9, 2023 (hereafter referred to as the Elizabeth draft permit). Where changes to the permit are specified in the responses below, deleted language is shown in strikethrough and additional language is shown in underline.

104. COMMENT: Under sections IV.B.1.a and IV.B.1.d, recordkeeping requirements for Combined Sewer Systems (CSS) complaint, maintenance, inspection, and repair documentation forms and related tracking forms appear to overlap the requirements for the Operations and Maintenance (O&M) program and corresponding manual under section IV.F.1. Please clarify if the Department's overall intent is for the permittee to specify and maintain these recordkeeping procedures and associated forms through the O&M program and manual. [10]

RESPONSE (104): The 2015 NJPDES CSO permits contain Recordkeeping Requirements in Part IV B.1 which have been carried forward in these subject renewal permits. Part IV B.1.a states:

- a. The permittee shall identify the Combined Sewer System (CSS) complaint, maintenance, inspection, and repair documentation forms and related tracking forms and/or systems and the Permittee shall also specify how, where and when this documentation will be maintained.

Part IV B.1.d states:

- d. The permittee shall retain records to document implementation of the Nine Minimum Controls (NMC) and Long Term Control Plan (LTCP) requirements in Sections F and G. The permittee shall utilize this information when preparing and submitting progress reports required in Section D, including residential complaints, inspection records, and maintenance records. This information shall be made available to the Department upon request.

In addition, the 2015 NJPDES CSO permits contain Proper Operation and Regular Maintenance Program Requirements in Part IV.F.1 (CSM Requirements) which have also been carried forward in these renewal permits. Specifically, Part IV.F.1 (CSM Requirements) contains three (3) significant components: (i) O&M Manual; (ii) Emergency Plan; and (iii) Asset Management Plan. These components are being continued and further clarified in this permit renewal. A description of the objectives of these components is as follows for clarification:

- The O&M Manual shall be prepared to provide system operators of POTWs with the comprehensive guidance, procedures, and the necessary technical references to efficiently operate their treatment works. Proper operation and maintenance includes the implementation of detailed SOPs and corrective/preventive maintenance SOPs within a structured maintenance program, adequate funding, effective management, adequate operator staffing, training and process controls.
- The Emergency Plan shall be prepared to provide operators of POTWs with the comprehensive guidance and procedures to ensure the safe and effective operation of the treatment works during emergencies or disasters of manmade or natural origin.
- The Asset Management Plan is a process to ensure that there is sufficient investment in the CSO control strategy as well as the planned maintenance, needed repair, replacement, and upgrade of the infrastructure for the treatment works.

The Department considers the Recordkeeping Requirements set forth in Part IV CSM B.1 as an umbrella requirement for the O&M Program which is further described in Part IV CSM F.1 as entitled, “Proper Operation and Maintenance Programs for the Sewer System and CSOs”. The Recordkeeping Requirements at Part IV CSM B.1 is also intended to describe the required recordkeeping procedures and the associated forms to be included in the permittee’s O&M Manual.

- 105. COMMENT:** Part IV CSM D.2 indicates that the permittee shall submit semi-annual CSO Progress Reports and specifies requirements for the progress report preparation. For the previous permit cycle, the Department provided a progress report template that could be utilized by permittees to comply with the progress report requirements. We kindly request that the Department prepares and publishes a similar template that incorporates the progress reports requirements for this renewal permit. We note that such a template will be useful to the Department and permittees by defining expected contents and organizing the reports in a standard format. [10]

RESPONSE (105): The Department had previously provided a downloadable CSO progress report template on its website for the NJPDES CSO permits as issued in 2015. The Department agrees that the progress report template has proven to be useful for both permittees and the Department since this template serves to define expectations and standardize the submitted reports.

For these more recent permits, a new form has been created and a link to the new progress report (Version 2.1) form can be found on the CSO webpage below the Long Term Control Plans title card here: [NJDEP| Division of Water Quality | Combined Sewer Overflow](#). The current version of the progress report form can be found here: [semi-annual-progress-report-template-ver-2.1.docx](#).

- 106. COMMENT:** Section IV.F.1.f specifies that the permittee shall include a System Cleaning program in the O&M Program, with the System Cleaning Program designed to ensure that the entire collection system is sufficiently clean through regular inspection and, if necessary, cleaning, such that the entire system is covered within five years. The City has an existing sewer cleaning program that maintains the collection system sufficiently clean for

its proper functioning under a supportable operating cost. The City implements this cleaning program through its sewer system contract operator, who performs routine inspections and cleaning of the sewer system components.

Under the current program the contract operator targets the cleaning of about 180,000 feet, or 34.1 miles, of sewer per year. With this cleaning program, the contract operator aims to cover the 160 miles of gravity sewer main and trunk lines in the City's combined sewer system on a recurring 5-year period. If the contract operator finds after jetting a line that further investigation of the sewer condition is appropriate, the operator follows up with an internal sewer inspection. Moreover, the contract operator has implemented a catch basin cleaning program on a regular schedule. The contract operator also monitors sewer locations that have been identified as needing more frequent attention, referred to as hotspots, and flushes these locations as required. However, the contract operator does not conduct internal sewer inspections throughout the entire system to determine sewer main cleaning requirements.

Given the size of the City's sewer system, requiring the inspection of the entire sewer system over a 5-year recurring cycle to determine sewer cleaning needs may add operating activities and costs that may not be suitable in certain situations or be consistent with a permittee's maintenance approach. Moreover, the operating history for the City's sewer system has demonstrated that adequate cleaning is provided with the current program and that internal sewer inspection before cleaning is not advantageous. For these reasons, we request that the Department revises the Sewer Cleaning Program requirements such that appropriate judgement is considered in defining the program approach, procedures, and schedule. In the City's case specifically, please clarify if sewer cleaning directly without sewer inspections is acceptable. [10]

RESPONSE (106): As stated in the permit in Part IV CSM F.1.f.ii, the System Cleaning Program shall be designed to ensure that the entire collection system is sufficiently clean which can be accomplished through regular inspection and, if necessary, cleaning. Such inspection and cleaning should be done, such that within five years, the entire system has been covered. The draft permit Fact Sheet (page 12 of 49) further states, in part, that System Cleaning Program is designed to ensure the collection system is sufficiently clean in order to function properly and minimize CSO-related street flooding which can include overflows to basements, streets and other public and private areas.

This requirement was created to ensure that sewer system blockages, which may result in sewer system-related street flooding, does not occur as the result of insufficient sewer system cleaning. Given this, the System Cleaning Program requirement focuses on inspection and, if necessary, cleaning of the entire system over the five-year effective period of the permit. In order to accomplish this, the permit further requires an annual certification that 20% of the system is cleaned each year. However, if less than 20% of the system has been completed within the previous year, the certification shall include a statement of how much of the system was inspected and, if necessary, cleaned, within the last year and a plan to ensure that 100% of the system is inspected and, if necessary cleaned, by the expiration date of the permit.

Given the scenario described in this comment, the contract operator is targeting the cleaning of 34.1 miles each year which equates to 21.3% of the total system which consists of 160 miles of gravity sewer main and trunk lines. It appears that this cleaning occurs without an inspection step. The Department had incorporated this inspection step to allow flexibility for the permittee. The Department agrees that cleaning greater than 20% of the system is beneficial and would be in compliance with this requirement.

- 107. COMMENT:** Regarding the Compliance Monitoring Program (CMP) - Post Construction Compliance Monitoring Plan (PCCMP), Section IV.G.9.d.i appears to indicate that permittees must collect flow monitoring and rainfall data for a 1-year period during this effective NJPDES permit. However, this paragraph as currently stated does not seem to reflect the other conditions of this Section. Sewer flow and rainfall monitoring data collection is typically associated with the calibration and validation of a hydraulic model. Updating the approved CSS hydraulic model to include the CSO control measures implemented during the permit period is needed to evaluate the system-wide annual average performance for the CMP, but recalibrating and revalidating the model each permit cycle will not

be necessary in many circumstances. In Section IV.G.9.d.iii, the Department recognizes this point by noting that the updated hydrologic and hydraulic (H&H) model is to be calibrated and validated if needed.

Unnecessary sewer flow monitoring and rainfall data collection for a 1-year period represents a significant financial burden, particularly for a comprehensive system-wide assessment. As such, we kindly ask that the Department revise the clause to indicate that the permittee shall collect adequate additional flow monitoring and rainfall data if calibrating and validating the updated H&H model is needed. The permittees data collection program also can be subject to approval by the Department.

This approach is consistent with Section 11.3 of the Selection and Implementation of Alternatives Report (revised September 2021), in which the City and JMEUC note that data collection and modeling updates should be performed following a Quality Assurance Project Plan that is submitted to NJDEP for approval if and as required. Major sewer system model updates can be conducted on approximately a five-year cycle, coinciding with the completion of significant conveyance improvement projects. However, the frequency of sewer flow monitoring data collection and model recalibration should be dependent upon the scale of the projects implemented. [10]

RESPONSE (107): The following is stated in Part IV G.9.d (CSM Requirements):

- d. During and after the implementation of the LTCP, the PCCMP shall use the following steps to determine if the CSO control measures are meeting the interim required percent capture or the final required percent capture:
 - i. Collect flow monitoring for a 1-year period and rainfall data for a 1-year period during the effective NJPDES permit. Perform QA/QC on the data. Note that this is separate from the monthly monitoring form data;
 - ii. At the end of the effective NJPDES permit, update the H&H model to include all completed CSO control measures and any other modifications to the CSS since the H&H model was calibrated for the LTCP;
 - iii. Calibrate and/or validate the updated H&H model, if needed, using the flow and rainfall data collected during the effective NJPDES permit. Any recalibration of the H&H model shall be approved by the Department; and
 - iv. Perform continuous simulation using the updated H&H model on the system-wide annual average and calculate the percent capture to determine if the interim required percent capture or the final required percent capture is being achieved.

The conduct of flow monitoring is intended to be directly tied to the implementation of CSO control measures, as stated in Part IV G.9.d (CSM Requirements). The need for flow metering, as well as recalibration of the H&H model, will be evaluated on a case-by-case basis in coordination with the Department. Such a need will depend on the scale of the CSO control measures and whether the already calibrated/validated model accurately simulates changes in the system, as a result of the CSO control measures constructed by conducting model revalidation using the flow monitoring data collected after the completion of the CSO control measures.

As noted above, the NJPDES CSO permit requires that the Post Construction Compliance Monitoring Plan determine if the implemented CSO control measures are meeting the required percent capture through a simulation using the H&H model. The Interim PCCMP Report serves to provide an update and evaluation of the effectiveness of the CSO control measures constructed during the permit term to demonstrate progress towards 85% wet weather capture by determining if the interim required percent capture is achieved. To comply with this requirement, the H&H model must be updated to include all completed CSO control measures since the original calibration of the H&H model for the LTCP. The purpose of the flow monitoring is to demonstrate predictability of the H&H model by simulating the changes in flow patterns based on the implemented CSO control measures

during the permit cycle. If recalibration of the H&H model was determined to be needed, adequate flow monitoring data must be collected during the effective permit for the purpose of recalibration and revalidation of the model. Once the H&H model is successfully recalibrated/revalidated, no additional flow monitoring data would be needed. See also **RESPONSE (117)**.

No changes have been made to the final permit as a result of this comment.

RESPONSE TO PERMITTEE COMMENTS

Comments were submitted on behalf of the Joint Meeting of Essex and Union Counties (JMEUC), as identified below:

Written Comments		
Person	Affiliation	Commenter Number
Hanifa Johnson	Executive Director, Joint Meeting of Essex & Union Counties (JMEUC)	11

The following comments and responses apply only to the JMEUC draft NJPDES permit issued on May 9, 2023 (hereafter referred to as the JMEUC draft permit). Where changes to the permit are specified in the responses below, deleted language is shown in strikethrough and additional language is shown in underline.

108. COMMENT: The last paragraph of page 7 in the Public Notice section of the Draft Permit states:

“The City of Elizabeth owns and operates a Combined Sewer System including twenty-nine (29) CSO outfalls. These outfalls discharge combined sewage into various waterbodies during wet weather periods when the combined sewage flows exceed the conveyance capacity of the collection system and/or capacity of JMEUC WWTF.”

The highlighted description in the public notice implies that the treatment capacity of the JMEUC wastewater treatment facility (WWTF) is partially responsible for discharges at the City of Elizabeth’s (the “City”) CSO outfalls. This assertion is incorrect and highly misleading. CSO discharges from the City are primarily due to excessive flow entering the combined sewer system that exceeds the capacity of the collection system operated by the City. In addition, the flow conveyance from the City to the JMEUC WWTF through the Trenton Avenue Pump Station (TAPS) was limited to a peak pumping rate of 36 MGD in a contractual agreement between the City and the JMEUC. (Fact Sheet on page 13).

The JMEUC WWTF can accept more flow from the City beyond 36 MGD. Changes to the JMEUC NJPDES permit were incorporated in a permit modification dated May 1, 2020 to allow the permittee to accept 55 MGD from TAPS. (Fact Sheet on pages 6 and 8).

Under the coordinated LTCP submitted by the City and the JMEUC in October 2020, the City committed to implementing sewer level sensing and real-time control systems for the TAPS to allow pumping at the estimated peak hydraulic capacity of the existing facility (55 MGD). These improvements to the City’s collection system will result in increased capture of combined sewer flows (estimated at 175 million gallons per year) with no changes to the TAPS force main, trunk sewers or WWTF “because the existing force main, trunk sewers and WWTF can accept and treat flow at the increased TAPS pumping rate with RTC [Real Time Controls].” (Fact Sheet on page 6). Moreover, the capacity of the TAPS will be expanded to a peak flow of 110 MGD when the LTCP is fully implemented. Thus, overflows from the City CSO system are primarily attributed to operation of the City’s collection system and the existing capacity of the pumping station.

Please revise the Public Notice to remove any reference to the JMEUC WWTF as a cause of the City's CSOs. [11]

RESPONSE (108): The public notice was published at the time of the release of the draft NJPDES CSO permits and can be seen here: www.njpublicnotices.com. The public notice is not part of the final permit. This language is intended to generally describe how combined sewer systems operate within a hydraulically connected system where NJPDES CSO permits have been issued to the City, who is the owner/operator of the collection system, and JMEUC, who is the receiving POTW. The Department maintains that the language as written is accurate. An explanation is below.

The Department recognizes that the JMEUC does not own or operate any portion of member or customer community collection systems, with the exception of the incoming trunk sewer that begins approximately 1,300 feet upstream of the wastewater treatment facility. The City is a customer of JMEUC located downstream of the JMEUC WWTF. The City wastewater flows are collected and conveyed by the East and West intercepting sewers to the JMEUC WWTF. These intercepting sewers flow to TAPS, which is the City's main pumping station. A contractual agreement between the City and the JMEUC had limited the peak pumping rate of TAPS to 36 MGD. Furthermore, the Department acknowledges, through a NJPDES permit modification dated May 1, 2020, that JMEUC had committed to modify the operation of the existing TAPS to pump at the estimated peak hydraulic capacity of the existing facility of 55 MGD. That change has since occurred and has already resulted in additional flows being directed to JMEUC which would have otherwise been discharged untreated through CSOs. The Department acknowledges that both permittees acted proactively on this effective CSO control measure in advance of the LTCP approval.

No changes have been made to the final permit as a result of this comment.

- 109. COMMENT:** Regarding Item 3 of the Fact Sheet, the second paragraph on page 10 of the Fact Sheet section has two duplicate sentences: Please remove the duplicate sentences. [11]

RESPONSE (109): The Department agrees that the paragraph identified above includes sentences that were erroneously repeated. Although the fact sheet is not part of the final permit action, the duplicate sentence on page 2 of the Fact Sheet is hereby modified as follows for the purposes of the Administrative Record:

~~"JMEUC does not own or operate any CSOs. Combined sewage that drains to the collection system can cause large spikes in influent flow levels to the sewage treatment plant when certain precipitation conditions (i.e. heavy rain) occur. While the majority of the collection system is served by a combined sewer system in the City, a portion of the collection system consists of separate sewers (i.e., a separate pipe for stormwater and a separate pipe for sewage). Combined sewage that drains to the collection system can cause large spikes in influent flow levels to the sewage treatment plant when certain precipitation conditions (i.e. heavy rain) occur. While the majority of the collection system is served by a combined sewer system in the City, a portion of the collection system consists of separate sewers (i.e., a separate pipe for stormwater and a separate pipe for sewage)."~~

This change is hereby incorporated for the purposes of the Administrative Record for the JMEUC NJPDES CSO permit.

- 110. COMMENT:** Regarding Fact Sheet Item 4A (Page 10) Climate Change requirement, and Part IV Combined Sewer Management Section (CSM) F.1.j (Page 127), a vulnerability study is one of the three elements in the Draft Permit to address climate change. When is a Vulnerability Analysis due if there isn't one already? If the O&M manual, Emergency Plan, and Asset Management Plan are supposed to be checked and updated annually, is it safe to assume that the first Vulnerability Analysis (as part of the Emergency Plan) would be due within 12 months of the effective date of the permit (EDP)? [11]

RESPONSE (110): The 2015 NJPDES CSO permits contain Proper Operation and Regular Maintenance Program Requirements which have been carried forward in this renewal permit. Specifically, Part IV CSM F.1 contains three (3) significant components as follows: (i) O&M Manual; (ii) Emergency Plan; and (iii) Asset Management Plan. This renewal permit enhances the requirements to maintain and perform regular updates to the Emergency Plan. To ensure effective operation of the treatment works and facilities under emergency conditions, including those due to climate change, the Emergency Plan must include a Vulnerability Analysis as a component. The Vulnerability Analysis is intended to estimate the degree to which the treatment works and facilities would be adversely affected by each type of emergency situation which could reasonably be expected to occur including, but not limited to, those emergencies caused by natural disaster; extreme weather events, including those as a result of climate change; civil disorder; strike; sabotage; faulty maintenance; negligent operation or accident.

In accordance with Part IV CSM F.1.c, the permittee shall continue to implement and review annually, and update as needed, an O&M Program and corresponding Manual, including an Emergency Plan. Through this requirement, the Department is requiring that a Vulnerability Analysis be completed as part of the Emergency Plan, where the complete O&M Program and corresponding manual is updated and amended annually in accordance with Part IV CSM D.2. Since the Vulnerability Analysis is a component of the Emergency Plan, the Vulnerability Analysis is due at EDP + 12 months.

No changes have been made to the final permit as a result of this comment.

111. **COMMENT:** Regarding Fact Sheet Item 5B (Page 13) – Unauthorized Bypasses, the Fact Sheet section of the Draft Permit notes:

“This permit does not authorize in-plant bypass discharges through the following emergency bypass points: 1) an in plant primary overflow weir which discharges, after disinfection, to the Arthur Kill and 2) a bypass at the Army Corps of Engineers pump station to the Elizabeth River. Any discharge from the two identified unpermitted bypass points is a violation of the regulations at N.J.A.C. 7:14A-2.1 and will be subject to appropriate enforcement action.”

Notwithstanding that routine discharges from these locations are prohibited, in the event of an emergency (such as extreme rainfall and/or flooding), the facility may need to use these outfalls, particularly in the case of threatened severe property damage and/or to protect human health. If the facility were to discharge from these emergency discharge points, the permit should acknowledge that an upset defense may be presented to justify such a release in accordance with 40 C.F.R. § 122.41 (n).

The JMEUC would like your concurrence that these outfalls may only be used in the event of an upset, as defined in § 122.41 (n), provided that the conditions necessary for a demonstration of upset are met. Such a demonstration would constitute an affirmative defense to an action brought for noncompliance. [11]

RESPONSE (111): The language identified by the permittee is located on page 5 of the Fact Sheet of the draft permit within the Facility Description, WWTP Overview section. As described in this language, this permit does not authorize in-plant bypass discharges. Any in-plant bypass discharges through emergency bypass points are prohibited and must be reported. A bypass is defined within N.J.A.C. 7:14, the Water Pollution Control Act, as well as within N.J.A.C. 7:14A-2.1, the NJPDES Regulations, as follows:

“Bypass” means the anticipated or unanticipated intentional diversion of waste streams from any portion of a treatment works.

An upset is defined within N.J.A.C. 7:14 as follows:

“Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with an effluent limitation because of an event beyond the reasonable control of the permittee, including fire, riot, sabotage, or a flood, storm event, natural cause, or other act of God, or other similar circumstance, which is the

cause of the violation. "Upset" also includes noncompliance consequent to the performance of maintenance operations for which a prior exception has been granted by the Department or a delegated local agency.

The Department agrees that emergency discharges under bypass or upset may occur in the event of an emergency. The relevant rule requirements contain significant detail as to the appropriate reporting requirements that must be submitted to the Department in the case of such an event. The Department maintains that the rule provisions are already referenced in the permit and, in the event such a bypass occurs due to emergency circumstances, the permittee shall comply with N.J.A.C. 7:14A-6.10i. This regulatory provision is already referenced in Part I of these subject NJPDES CSO renewal permits. Specifically, Non-Compliance Reporting is addressed at N.J.A.C. 7:14A-6.10 and 6.8(h); Hotline/Two Hour and Twenty-four Hour Reporting is addressed at N.J.A.C. 7:14A-6.10(c) and (d); and Written Reporting is addressed at N.J.A.C. 7:14A-6.10(e) and (f) and 6.8(h). These NJPDES regulatory requirements are modeled after 40 CFR 122.21(m) (bypass) and 40 CFR 122.21(n) upset.

The Department cannot speculate as to whether a given situation would satisfy an available affirmative defense. The relevant Department regulations, N.J.A.C. 7:14A-8.1, et seq. are incorporated into the permit by reference and fact sheet language identified by the permittee does not preclude the permittee from claiming an available affirmative defense. The Department maintains that the NJPDES CSO permit, as written, already references the appropriate procedures and additional language to acknowledge that an upset may occur is not warranted.

No changes have been made to the final permit as a result of this comment.

- 112. COMMENT:** Regarding Fact Sheet Item 12B.1 (Page 39), 12B.7 (Page 44), 12C.4 (Page 54), and Part IV CSM F.1.h on I/I, various items within the Fact Sheet section mention the permit modification on I/I. The 2015 permit modification dated May 1, 2020 only required JMEUC to include I/I reduction as one of the alternatives to analyze (2015 Permit Modification Part IV CSM F.1.h and G.4.e.iv). As stated in the 2015 Permit Modification Part IV CSM G.4.e.iv, only if I/I reduction is proposed as a selected LTCP alternative, the permittee shall submit a schedule and written agreement with the affected municipalities to revise rules, ordinances, and/or its sewer use agreements to require the affected municipalities to: (1) operate and maintain their treatment works; (2) identify and reduce I/I, and (3) identify and eliminate interconnections and cross-connections in storm sewers.

Due to the fact that JMEUC does not own the sewer pipes within the municipalities and the costly and disruptive nature of I/I removal, I/I removal was not selected as part of the LTCP projects. Nevertheless, JMEUC has been contributing to I/I reduction in the member and customer communities as documented in the approved DEAR report Section 7.7.1 which states "JMEUC encourages member municipalities to reduce I/I and provides significant resources to them in support of their I/I reduction program.... an estimated 40% of infiltration and 34% of inflow have been removed from upstream member municipalities since 1983."

The Draft Permit Part IV CSM F.1.h lists the required elements in the SOPs, which includes item xii related to I/I. Since JMEUC does not own the separated sewer systems upstream of the trunk sewers and I/I reduction was not selected as part of the final LTCP, JMEUC should not be subject to this requirement. As such, please remove item xii. [11]

RESPONSE (112): As noted in the draft permit Fact Sheet, JMEUC owns and operates a WWTF which treats wastewater collected in a 65 square mile service area in northern New Jersey. The JMEUC trunk sewer system collects wastewater from a service area which includes eleven member (owner) communities and four customer communities where the City is a customer community. Most municipalities in New Jersey utilize a separate sewer system where there is one pipe for sanitary wastewater which leads to the treatment plant and a separate pipe for stormwater that discharges to the river. Of the 15 municipalities serviced by JMEUC, the only confirmed combined sewer area in the system is located within the City, and the remaining municipalities are separately sewered.

Sanitary sewer lines contain sanitary sewer contributions from these separately sewered communities, as well as inflow and infiltration (I/I) which consists of stormwater runoff and groundwater. Inflow can enter the sanitary

sewer line through rain leaders, sump pumps, storm sewer cross connections, and foundation drains that are connected to sanitary sewer pipes. Inflow is greatest during major storm events and can significantly increase wastewater volumes whereas infiltration is a more gradual process which occurs when water seeps into sanitary sewer pipes through cracks, leaky pipe joints and/or deteriorated manholes. If inflow and infiltration is taking up capacity in the sewer line when it crosses the border into the City of Elizabeth, there is less capacity for stormwater which could be routed to JMEUC as opposed to being discharged as CSOs.

The Department acknowledges that changes were incorporated into the May 1, 2020 permit modification which altered Part IV CSM G.4.e.iv and that JMEUC did not select I/I as a CSO control technology. Nonetheless, the Department maintains that I/I reduction is also required as the first Nine Minimum Control within the federal CSO Control Policy as “Proper operation and regular maintenance programs for the sewer system and the CSOs” where conditions to address this NMC are included in Part IV CSM F.1. This condition was unchanged from the May 1, 2020 permit modification. As referenced in this comment, Part IV CSM F.1.h.xii reads as follows:

- h. At a minimum, the SOPs shall contain detailed instructions for system operations, such as frequency of inspections, regular maintenance, and the timely repair, and documentation of such information, of the entire collection system that conveys flows to the treatment works. These SOPs shall include procedures to address the following items:
 - xii. Provide reduction strategies to resolve excessive I/I through the identification of I/I sources and the prioritization and implementation of I/I reduction projects within the collection system that is owned/operated by the permittee.

Excessive I/I is a defined term at N.J.A.C. 7:14A-2.1 which reads as follows:

“Excessive inflow/infiltration” means the quantities of infiltration/inflow (I/I) which can be economically eliminated from a sewer system as determined in a cost effectiveness analysis that compares the cost for correcting the I/I conditions to the total costs for transportation and treatment of the I/I also the definitions for “nonexcessive infiltration” and “nonexcessive inflow”).

The Department maintains that the Nine Minimum Controls apply to JMEUC as the receiving POTW for combined sewage and excessive I/I must be addressed as applicable through reduction strategies. Information regarding I/I is available on the JMEUC website at https://www.jmeuc.com/services/operations/collection_systems.php. Similarly, the regulations that pertain to Financial Assistance Programs for Environmental Infrastructure Facilities at N.J.A.C. 7:22-3 and 4 require applicants to address excessive I/I when applying for capacity increase funding for collection sewers, pump stations or sewage treatment plants. In sum, the Department maintains that the reference to reduction strategies for excessive I/I is appropriate and supported by relevant regulations as well as the federal CSO Control Policy.

No changes have been made to the final permit as a result of this comment.

- 113. COMMENT:** Regarding Fact Sheet Item 12B.1, additional details item i O&M Manual; also in Part IV CSM F.1.f.ii, the JMEUC acknowledges that the pertinent JMEUC collection system section for inspection/cleaning under the O&M Program is the incoming trunk sewer that begins approximately 1,300 feet upstream of the wastewater treatment facility. Other requirements (i.e. F.1.f.i and F.1.f.iii) are not applicable to JMEUC. Please remove subsections F.1.f.i and F.1.f.iii from the Draft Permit. [11]

RESPONSE (113): Part IV CSM F.1.f.i. through iii states the following:

- i. The System Cleaning Program shall be designed to ensure the entire collection system, including, but not limited to, tide gates, outfalls and regulators, is sufficiently clean in order to function properly and minimize CSO-related street flooding.

- ii. The System Cleaning Program shall be designed to ensure that the entire collection system is sufficiently clean which can be accomplished through regular inspection and, if necessary, cleaning. Such inspection and cleaning should be done, such that within five years, the entire system has been covered. Specifically, for JMEUC's sewer system, as it pertains to the combined sewer system, consists of the incoming trunk sewer that begins approximately 1,300 feet upstream of the wastewater treatment facility.
- iii. The System Cleaning Program shall include an annual certification that a minimum of 20% of the system (by linear feet/miles) shall have been inspected and, if necessary, cleaned, within the last year. Alternatively, if less than 20% of the system has been completed within the last year, the certification shall include a statement of how much of the system was inspected and, if necessary, cleaned, within the last year and a plan to ensure that 100% of the system is inspected and if necessary cleaned, by the expiration date of the permit. This is an annual requirement based on the calendar year, due February 1 of the following year and is part of the Operation and Maintenance Manual. The total length of the system in linear/feet shall also be defined. Updates on the System Cleaning Program shall also be provided in Progress Reports.

The language in the above referenced sections applies only to infrastructure covered under this permit and owned/operated by the permittee. This is clarified in Part IV CSM F.1.c. which states:

“The permittee shall continue to implement and review annually, and update as needed, an Operations & Maintenance (O&M) Program and corresponding Manual, including an Emergency Plan, in accordance with N.J.A.C. 7:14A-6.12, to ensure that the treatment works, including but not limited to collection system, the CSO outfalls, solids/floatables facilities, regulators, and related appurtenances including any green infrastructure *which are owned/operated by the permittee* are operated and maintained in a manner to achieve compliance with all terms and conditions of this permit.” (emphasis added).

The Department maintains that the language as written at Part IV CSM F.1.c already specifies that inspections/cleaning only applies to the portion of the sewer system that is owned/operated by the permittee.

No changes have been made to the final permits as a result of this comment.

114. **COMMENT:** Regarding Fact Sheet Item 12.B.3 and Part IV CSM F.3 Review and Modification of Pretreatment Requirements to Assure CSO impacts are Minimized, Part IV CSM F.3 does not apply to JMEUC since JMEUC does not own any CSOs or sewer system upstream of a CSO. The Industrial Pretreatment Program Requirements for JMEUC are already included under Part IV Sanitary Wastewater E. Please remove Part IV CSM F.3 from the Draft Permit.

JMEUC noticed that item b and c in Part IV CSM F.3 are not included in the City's draft permit. [11]

RESPONSE (114): The following language is included in the draft NJPDES CSO permit as issued to JMEUC as the POTW at Part IV.F.3 (CSM Requirements):

“3. Review and modification of pretreatment requirements to assure CSO impacts are minimized

- a. For the SIU dischargers upstream of any CSO outfall which is owned/operated by the permittee, the permittee shall: (1) determine the locations of the SIUs; (2) identify the CSO outfalls associated with each of the SIUs; and (3) determine the discharge volume and loading of SIU-permitted parameters for each SIU. In the case of a municipal permittee or non-delegated STP permittee, information to satisfy (1) and (3) shall be obtained from the delegated local agency that regulates the SIU or, if there is no delegated local agency, from the Department. This information shall be used to prioritize O&M activities in portions of the CSS affected by SIU discharges.

- b. The permittee shall require SIUs upstream of any CSO outfall which is owned/operated by the Permittee to investigate ways to minimize their discharges during wet weather and report their findings to the permittee.
- c. The permittee shall establish agreements with SIUs upstream of any CSO outfall which is owned or operated by the permittee or ordinances specifying that the SIUs (especially for batch discharges, non-continuous dischargers) should restrict discharges to the extent practical during wet weather periods.”

The following language is included in the NJPDES CSO permit for the City of Elizabeth at Part IV.F.3 (CSM Requirements) as the owner/operator of the CSS:

“3. Review and modification of pretreatment requirements to assure CSO impacts are minimized

- a. For the SIU dischargers upstream of any CSO outfall which is owned/operated by the permittee, the permittee shall: (1) determine the locations of the SIUs; (2) identify the CSO outfalls associated with each of the SIUs; and (3) determine the discharge volume and loading of SIU-permitted parameters for each SIU. In the case of a municipal permittee or non-delegated STP permittee, information to satisfy (1) and (3) shall be obtained from the delegated local agency that regulates the SIU or, if there is no delegated local agency, from the Department. This information shall be used to prioritize O&M activities in portions of the CSS affected by SIU discharges.”

The “Review and modification of pretreatment requirements to assure CSO impacts are minimized” is a Nine Minimum Control which applies to the CSS as well as the receiving POTW. This condition has been carried over from the 2015 NJPDES CSO permit and the Department disagrees that deletion is appropriate. JMEUC is a delegated pretreatment agency and is therefore responsible for regulating any industrial users of the system. For these reasons the Department maintains that the language is appropriate and deletion would be inconsistent with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C.

No changes have been made to the final permits as a result of this comment.

- 115. COMMENT:** Regarding Fact Sheet Item 12.B.4, 12.C.7; Part IV CSM F.4 and G.7 on maximizing treatment to POTW/STP, as proposed in the LTCP, the future TAPS peak flow will increase from 36 to 55 MGD. The new pumping station from the City to JMEUC will have peak capacity at 110 MGD. The secondary treatment process at the JMEUC plant cannot exceed 153 MGD which is when the proposed combined sewer primary treatment and bypass facility at the JMEUC will activate the peak capacity of the proposed combined sewer treatment train is at 85 MGD. This will increase the peak capacity of the STP from 180 to 238 MGD.

The permit should be revised to state that the permittee shall continue to implement alternatives for increasing flow to the STP in accordance with the approved LTCP. F.4.b.ii should state: Identification of other activities conducted and/or planned to further maximize flow to the POTW in accordance with the approved LTCP. G.7 should state: The permittee shall continue to operate and maintain the entire collection system owned/operated by the permittee that conveys flows to the treatment works to maximize treatment at the hydraulically connected STP in accordance with the approved LTCP. [11]

RESPONSE (115): The Department agrees that maximization of flow to the POTW for treatment is key to the permittee’s CSO control measures as part of the LTCP. This is demonstrated by the proactive actions by both permittees to increase the flow from TAPS from 36 MGD to 55 MGD where such improvements were completed prior to the approval of the LTCP. The Department agrees that the City of Elizabeth must continue to maximize flows to the WWTP in order to reduce CSOs.

As described in **RESPONSE (18)**, Part IV CSM F.4, which is included in permits issued to JMEUC and the City of Elizabeth, is stated as follows:

“4. Maximization of flow to the POTW for treatment

- a. The permittee shall continue to operate and maintain the entire collection system owned/operated by the permittee that conveys flows to the treatment works to maximize the conveyance of wastewater to the STP for treatment subject to existing capacity.
- b. The permittee shall continue to implement alternatives for increasing flow to the STP.
 - i. Capacity evaluations of the entire collection system owned/operated by the permittee that conveys flows to the treatment works in accordance with Section F.1.f to determine the maximum amount of flow that can be stored and transported. Combined Sewer Management (IP)
 - ii. Identification of other activities conducted and/or planned to further maximize flow to the POTW.”

Part IV CSM G.7 states as follows:

“7. Maximizing Treatment at the Existing STP

- a. The permittee shall continue to operate and maintain the entire collection system owned/operated by the permittee that conveys flows to the treatment works to maximize treatment at the hydraulically connected STP.”

The permittee has suggested that the phrase “in accordance with the approved LTCP” be added to Part IV CSM F.4.b.ii. The Department does not agree that the addition of this phrase is necessary. Both permittees are already required to comply with Part IV CSM F.4 and both permittees are required to comply with the approved LTCP.

Based on the above, the Department maintains that maximization of flow to the treatment plant is understood and required through these various permit conditions and that a specific reference to the approved LTCP is not needed.

No changes have been made to the final permits as a result of this comment.

- 116. COMMENT:** Regarding Fact Sheet Item 12.C.2 Public Participation and Part IV CSM G.2.f, the Fact Sheet indicates that the permittee must designate one LTCP outreach coordinator for each LTCP. The permit clarifies that the permittee must designate one LTCP outreach coordinator.

Please revise the Fact Sheet to state: “The permittees must each designate one LTCP outreach coordinator.” [11]

RESPONSE (116): The Fact Sheet Item 12.C.2. on page 43 of 63 states:

“For each LTCP, permittees must designate one LTCP outreach coordinator.”

Part IV CSM G.2.f. states:

“The permittee must designate one LTCP outreach coordinator.”

The Department notes that there is only one LTCP required for JMEUC and Elizabeth. Thus the mention of “each LTCP” in the Fact Sheet is erroneous. The language of the Fact Sheet should be identical to what is in Part IV CSM G.2.f. Since the Fact Sheet is not part of the final permit, this change is hereby incorporated in the Administrative Record. Page 43 of the Fact Sheet is modified as follows, where deletions are shown in strikethrough:

~~“For each LTCP, The~~ permittees must designate one LTCP outreach coordinator.”

For further clarification, both permittees, JMEUC and Elizabeth, can designate one (the same) outreach coordinator.

This change is hereby incorporated to both permits for the purposes of the Administrative Record. No other changes have been made to the final permits as a result of this comment.

117. COMMENT: Regarding Fact Sheet Item 12C.9, also in Part IV CSM G.9.d, G.9.f, and H.2 on Compliance Monitoring, PCCMP, and Adaptive Management Plan schedule, Part IV CSM G.9.d states:

- “d. During and after the implementation of the LTCP, the PCCMP shall use the following steps to determine if the CSO control measures are meeting the interim required percent capture or the final required percent capture:.
- i. Collect flow monitoring for a 1-year period and rainfall data for a 1-year period during the effective NJPDES permit. Perform QA/QC on the data. Note that this is separate from the monthly monitoring form data;
 - ii. At the end of the effective NJPDES permit, update the H&H model to include all completed CSO control measures and any other modifications to the CSS since the H&H model was calibrated for the LTCP;
 - iii. Calibrate and/or validate the updated H&H model, if needed, using the flow and rainfall data collected during the effective NJPDES permit. Any recalibration of the H&H model shall be approved by the Department; and
 - iv. Perform continuous simulation using the updated H&H model on the system-wide annual average and calculate the percent capture to determine if the interim required percent capture or the final required percent capture is being achieved.”

Part IV CSM G.9.f states:

- “f. The permittee shall submit an Interim PCCMP Report on or before 54 months from the effective date of the permit (EDP). The report shall include: ”

The proposed NJPDES permit schedule of compliance identified in Part IV CSM G.9.d and f, and H.2 require clarification. As quoted above in Part IV CSM G.9.d, flow and rainfall monitoring are required to be conducted during the permit cycle while model update and calibration are to be done at the end of the effective NJPDES permit cycle. If data were collected before the planned projects were completed and operational, it would not be suitable for calibrating the updated model that includes all planned projects in the permit cycle. If the model is only updated and calibrated at the end of the permit, it would not be possible to include model update and calibration/validation in the PCCMP report which is 54 months from the EDP (G.9.d).

If the model update/validation/calibration were to be done within the permit cycle instead of at the end of the permit, the total amount of time required for flow monitoring, model calibration/validation and subsequent NJDEP approval, and typical year analysis would take about two (2) years to complete. If the PCCMP needs to be submitted six (6) months before the end of the permit cycle, the flow metering program would need to start in the middle of the permit cycle. This would allow the inclusion of the projects completed in the previous permit cycle and any projects completed before the commencement of the metering data collection period. This would not allow enough time to complete the planned projects within the current permit cycle and to evaluate their efficacies.

Since most of the projects proposed in the LTCP are Elizabeth's, JMEUC will update and only validate the model using its permanent meter data every five years. JMEUC should only be required to conduct full scale model calibration at major milestones of the LTCP implementation where significant impact on system flows would be expected. Based on the LTCP schedule (Fact Sheet Page 62 Figure 9-1), these major milestones are TAPS Phase I Upgrade (ID 1), TAPS Phase 2 Upgrade (ID11), New Wet Weather Pump Station and New Combined Sewer Flow Treatment Facility at JMEUC WWTF (ID15 and 16), and after completion of all proposed projects in the LTCP. The percent capture evaluation for the Typical Year will need to be carried out collaboratively with the City.

The JMEUC requests that the permit requirements in Part IV CSM G.9 be modified as follows:

- d. During and after the implementation of the LTCP, at the specified major milestones, the PCCMP shall use the following steps to determine if the CSO control measures are meeting the interim required percent capture or the final required percent capture:
 - i. After the specified major milestones in the LTCP have been achieved, collect flow monitoring and rainfall data for at least 3-month period. Perform QA/QC on the data. Note that this is separate from the monthly monitoring form data;
 - ii. After the specified major milestones in the LTCP have been achieved, update the H&H model to include all completed CSO control measures and any other modifications to the CSS since the H&H model was calibrated for the LTCP. [11]

RESPONSE (117): As described in **RESPONSE (107)**, flow monitoring (i.e., metering) is intended to be directly tied to the implementation of CSO control measures as shown in Part IV CSM G.9.d as identified in this comment. The Department acknowledges that, depending on the status of implementation of CSO control measures, 1-year of flow monitoring during every 5-year permit cycle may not always provide measurable improvement due to the progress of implemented infrastructure. Note, alternate flow metering periods were utilized as part of the System Characterization Report requirements as approved by the Department in a work plan. As a result, the permittee may propose an appropriate monitoring period for flow metering as part of any work plan for flow metering for the PCCMP. Flow monitoring can mean comprehensive flow metering, such as the flow metering performed at the time of the System Characterization Report dated June 27, 2018 (revised December 5, 2018), as approved by the Department on January 17, 2019, or could mean permanent meter data or other forms of metering. Either way, flow monitoring and model calibration/validation shall be performed in consultation with the Department. The Department maintains that the permit conditions as written are clear in that flow monitoring and model calibration/validation are already tied to the implementation of CSO control measures and modifications to the permit conditions are not necessary.

No changes have been made to the final permits as a result of this comment.

118. **COMMENT:** Regarding Fact Sheet Item 12D.1, also Part IV CSM H.1 Renewal Permit Requirement on Precipitation Trends, based on the requirements, the JMEUC would like Department confirmation that the submission of the five years of annual rainfall data and the analysis of the trend is for validated NOAA calendar-year data available 180 days prior to the end of the permit cycle. Please confirm whether this submittal is part of the PCCMP report or is a separate document? [11]

RESPONSE (118): Part IV CSM H.1 is a separate permit condition which requires the permittee to analyze the annual precipitation depth obtained by the National Oceanic and Atmospheric Administration (NOAA) at the Newark Liberty International Airport to determine the annual precipitation depth during the effective period of the permit. In accordance with Part IV CSM H.1a, this information shall be submitted to the Department as part of the NJPDES permit renewal application and is a separate report from the Post Construction Compliance Monitoring Plan requirement.

No changes have been made to the final permits as a result of this comment.

- 119. COMMENT:** According to Draft Permit Part IV CSM H.2, the Adaptive Management Plan is due 54 months from EDP if specific events occur. Two of these events (PCCMP Report, Precipitation Trends Report) are based on reports that must be submitted to the Department under separate compliance schedules (e.g., the Interim PCCMP Report is also due 54 months from the EDP). The Precipitation Trends Report requires evaluation of the most recent NOAA precipitation data and is required with the NJPDES renewal application (54 months from EDP). There is not enough time between the preparation of these reports and the compliance deadline for preparation of the Adaptive Management Plan. For example, this would not allow enough time to prepare the Precipitation Trends report, and to evaluate alternatives and draft the Adaptive Management Plan if needed. We also note that Fact Sheet Item 12,D.2 indicates that the Adaptive Management Plan is to be submitted with the permit renewal, but the permit does not indicate that the plan is to be submitted as part of the permit renewal application.

Please revise the compliance schedule for this item to require submittal of the Adaptive Management Plan no less than 30 months after submittal of the specific report demonstrating that the LTCP must be amended to achieve compliance with the federal CSO Control Policy and N.J.A.C 7:14A-11 – Appendix C. Please confirm whether the Adaptive Management Plan is a separate submittal with the permit renewal or is a part of the PCCMP? [11]

RESPONSE (119): Part IV CSM H.2 of the permit states:

- “a. An Adaptive Management Plan shall be submitted on or before 54 months from the effective date of the permit (EDP) if any of the following occurs:
- i. An Interim or the Final PCCMP Report determines that the implemented CSO control measures do not meet the interim required percent capture or the final required percent capture as per Part IV.G.9.e. above;.
 - ii. A permittee requests to modify the implementation schedule and/or CSO control measures in the implementation schedule; and/or
 - iii. The precipitation trends required in Part IV.H.1 above demonstrates a change in the assumptions used in the development of the LTCP.”

An Adaptive Management Plan is only required if any of the conditions in Part IV CSM H.2.i through iii occur. The NJPDES CSO permit requires that an Interim PCCMP Report be submitted on or before 54 months from EDP in accordance with Part IV CSM G.9.f. and an analysis of the annual precipitation depth shall be submitted to the Department as part of the NJPDES permit renewal application in accordance with Part IV CSM H.1a. The Department recognizes the coinciding submission dates of the Interim PCCMP Report, Precipitation Trends Report and Adaptive Management Plan. However, the Department considers the Adaptive Management Plan to be a separate report. The Department would also accept an amendment to a report subsequent to the deadline provided the permittee determines that there is a need for this report based on the results of the Interim PCCMP Report.

Furthermore, it was not the Department’s intent to require that an Adaptive Management Plan be submitted with the NJPDES permit renewal application although the due dates are the same. However, erroneous language was included in the Fact Sheet and is hereby modified as follows:

“An Adaptive Management Plan shall be submitted on or before 54 months from the effective date of the permit (EDP) ~~with the NJPDES permit renewal application~~ if any of the following occurs:”

Part IV CSM H.2.a of the final permit action correctly reflects the Department’s intent.

Since the Fact Sheet is not part of the final permit action, this change is hereby incorporated in both permits for the purposes of the Administrative Record. No other changes have been made to the final permits as a result of this comment.

- 120. COMMENT:** Part II. B.7 – Standard Reporting Requirements – Electronic Submission of NJPDES Information identifies documents and reports that shall be submitted to the Department. Item 7.a.ii addresses Non-compliance reporting. This provision of the permit references “Non-compliance reports required by N.J.A.C. 7:14A-6.10 and 40 CFR 122.41(1)(6) and (7) related to sanitary sewer overflows or bypass events”. The cited administrative code requires noncompliance reporting for, among other things, any anticipated bypass (7:14A-6.10(a).4).

Since the LTCP incorporates side-stream treatment equivalent to primary treatment and disinfection, is this an authorized bypass and is a non-compliance report required whenever the facility implements this treatment? Is this for existing bypass or future bypass or both? Future bypass reporting should not be non-compliance reporting and should only be for CSO improvement purposes. [11]

RESPONSE (120): The Department acknowledges that Part II includes standard provisions regarding non-compliance reporting including citations to relevant portions of the NJPDES and federal regulations. However, this regulatory reference should not be misconstrued to mean that a CSO-related bypass has been approved at this time. In the event that a CSO-related bypass is approved as part of a subsequent permit action, separate bypass reporting provisions will be incorporated into that permit. Refer to **RESPONSE (127)** for more information.

- 121. COMMENT:** Regarding Part III – Table III-A-1 – Nitrogen, Ammonia Total, the Draft Permit does not include effluent limits for ammonia-nitrogen because it was determined that there is no reasonable potential to exceed the WQBELs for this parameter. The determination on reasonable potential is provided in the Fact Sheet (Page 19). The JMEUC agrees with this conclusion. We note, however, that the input data provided in the table “Data Input for Equilibrium Equations and Calculation Results” shows incorrect input data for upstream pH, temperature, alkalinity, salinity and ammonia-nitrogen concentration. It would appear that the row identified as Upstream pH should be Upstream NH₃N, the row identified as Upstream temperature should be Upstream pH, the row identified as Upstream alkalinity should be Upstream temperature, the row identified as Upstream salinity should be Upstream alkalinity, and the row identified as Upstream NH₃N should be Upstream salinity. The Fact Sheet should be revised to identify the input data appropriately. [11]

RESPONSE (121): The commenter is correct in that the input data for upstream pH, temperature, alkalinity, salinity and ammonia-nitrogen concentration appear out of order in the table. However, the resultant calculations and conclusions remain the same. Since the Fact Sheet is not part of the final permit, these changes are hereby incorporated in the Administrative Record. The table on Page 11 of the Fact Sheet is modified as follows, where deletions are shown in strikethrough and additions are shown in underline:

Data Input for Equilibrium Equations and Calculation Results:

	Summer (a)		Winter (a)		March/April (a)	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Dilution Factor	6.8	17.5	6.8	17.5	-	-
Upstream pH (su) <u>NH₃N (mg/L)</u>	0.70	0.50	0.73	0.60	-	-
Upstream temperature (°C) <u>pH (su)</u>	7.40	7.40	7.45	7.30	-	-
Upstream alkalinity (mg/L) <u>temperature (°C)</u>	25.00	25.00	17.42	17.42	-	-
Upstream salinity (ppt) <u>alkalinity (mg/L)</u>	144.00	144.00	125.00	125.00	-	-
Upstream NH₃N (mg/L) <u>salinity (ppt)</u>	17.60	18.00	19.60	20.00	-	-

This change is hereby incorporated to the JMEUC permit for the purposes of the Administrative Record.

- 122. COMMENT:** Regarding Part III – Table III-A-1 – TSS and BOD, Carbonaceous 5 Day, the percent removal requirements for CBOD₅ and TSS were the subject of a Major Permit Modification that was issued on May 1, 2020 to address requirements during wet weather conditions and clarify existing permit conditions related to the CSM portion of the permit. The Permit Summary Table (Fact Sheet on page 36) identifies the percent removal requirements for CBOD₅ and cites “Option 1 31)” in the Parameter column. The reference should be revised to “Option 1(3)”. [11]

RESPONSE (122): The Department agrees to make the change requested in the comment above. The Permit Summary Table is modified as follows:

11

Permit Summary Table

PARAMETER
CBOD ₅ Percent Removal (minimum), Option 1 (34)

Since the Fact Sheet is not part of the final permit, these changes are hereby incorporated in the Administrative Record for JMEUC.

- 123. COMMENT:** Regarding Part III – Table III-A-1 – Chlorine Produced Oxidants, JMEUC has the following comments:

- i. The Draft Permit (Table III-A-1: Surface Water DMR Limits and Monitoring Requirements (Phase: 1 – Initial) includes mass limits of 24.9 kg/day as the monthly average limit and 10.2 kg/day as the daily maximum limit. These values appear to be reversed. Please confirm and make the necessary corrections.
- ii. The Chlorine Produced Oxidants (CPO) limits in the current permit are 0.036 mg/L (monthly average) and 0.088 mg/L (daily maximum) with an MDL of 0.1 mg/L and the facility routinely reports CPO at <0.1 mg/L as a daily maximum effluent concentration. (Page 22). As noted in the Fact Sheet, a 0.1 limitation was "in effect" regardless of the lower acute and chronic effluent limitations placed in the permit: "Since the previous permit limit was below 0.1 mg/L, the permit included language that the permittee was only required to demonstrate compliance with the enforceable permit levels of 0.1 mg/L (28.4 kg/day) as the monthly average and daily maximum concentration and equivalent loading. Therefore, it was never documented that the permittee complied with the existing limits of 0.036 mg/L (10.2 kg/day) as a monthly average and 0.088 mg/L (24.9kg/day) as a daily maximum."

With this permit renewal, the MDL for CPO has been revised to 0.02 mg/L – creating a far more restrictive effluent limitation than is now in effect. Since the new MDL is a number less than the water quality-based effluent limits (WQBELs), this permit also includes revised WQBELs and a schedule of compliance. The input data and calculation results for the WQBELs are presented in the Fact Sheet (Page 22).

For reasons that are not apparent, the revised permit limits are not identical to the current permit limits of 0.036 mg/L (monthly average) and 0.088 mg/L (daily maximum), even though nothing has changed since the last permit was issued. A review of the input data and calculations shows there is an apparent error in the calculations. Under the specified conditions of CV = 0.6 and using the 99th percentile, the acute LTA multiplier is 0.321 as indicated in the table, but the resulting acute LTA should be 0.028 mg/L, not 0.031 mg/L. In addition, the chronic LTA multiplier is 0.527 as indicated in the table, but the resulting chronic LTA should be 0.069 mg/L, not 0.088 mg/L. The average monthly limit multiplier should be 1.282 for n = 30 and the resulting AML should be 0.036 mg/L (the same as in the current permit). Please make these corrections.

- iii. The revised WQBEL is based on a default coefficient of variation of 0.6 because all prior monitoring for CPO has results with a concentration below the old MDL of 0.1 mg/L. However, this assumption should be determined using effluent monitoring data with the revised MDL. The actual CV could be a value well less than 0.6, which would result in an AML that is greater than the WQBEL of 0.036 mg/L. For example, if the actual CV is 0.36, the resulting AML = 0.048 mg/L. In fact, if the CV is low enough, the AML will equal the MDL, 0.088 mg/L. However, antibacksliding (CWA Section 402(o)) would likely preclude the use of the updated statistical information once the more reliable data set is available to ascertain the CV. For this reason, the permit should provide a compliance schedule to allow time for the facility to determine the CV for CPO using the updated MDL. During this interim period, reporting should be based on the current MDL of 0.1 mg/L while the facility evaluates its ability to comply using the revised MDL. (Note: the MDL for CPO is sufficient to ensure that the chronic wasteload allocation for CPO will not be exceeded. The chronic WLA is 0.131 mg/L and the facility monitors for chlorine every day. Compliance with the MDL of 0.088 mg/L will ensure compliance with the chronic water quality criterion for CPO. Consequently, the more stringent AML is not required to ensure compliance with the surface water quality standard for CPO).
- iv. There are additional concerns regarding effluent limitation compliance under conditions when much higher influent flows will be processed using only a form of primary treatment and those flows blended with the secondary treated effluent. We understand that this was also a concern of other WWTPs that will be processing higher CSO-related flows in the future (e.g., PVSC). Chlorine demand has been recognized as a natural fate characteristic of marine receiving waters for numerous municipal wastewater treatment facilities in New Jersey and will provide the best estimate of the actual impact of chlorine in the environment. The final chlorine residual limits applicable, in particular, under wet weather blending operations should be set in consideration of the chlorine demand occurring within the mixing zone.

Therefore, the JMEUC requests that it be allowed to submit a work plan to evaluate chlorine demand in the receiving water while it is operating under a compliance schedule. Since wet weather flow processing represents a significant change in conditions for facility operations, the CPO limits should be suspended (e.g., monitor-only requirement) during operation of the wet weather treatment facility until the receiving water chlorine demand is accounted for in the derivation of CPO limits. [11]

RESPONSE (123): These comments concern the derivation of CPO limits including the statistical procedure that is utilized and is based on effluent data.

By way of background, EPA's September 18, 2014 rule amendment under 40 CFR Part 136 or 40 CFR Chapter I, subchapters N and O included revisions to mandate the use of sufficiently sensitive test methods (SSTM) for permit applications and reporting. This rule requires permittees to use EPA-approved analytical methods that are capable of detecting and measuring pollutants at, or below, the applicable water quality criteria or permit limits, and requires the use of method minimum levels. The minimum level represents the lowest concentration at which an analyte can be measured with a known level of confidence. A method approved under 40 CFR 136 as required under 40 CFR chapter I, subchapters N or O is considered sufficiently sensitive if it meets one of the three conditions below:

- A. The method minimum level is at or below the level of the applicable water quality criterion or permit limitation for the measured pollutant or pollutant parameter; or
- B. The method minimum level is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
- C. The method has the lowest minimum level of the EPA-approved analytical methods.

The Department had historically established, and incorporated into wastewater NJPDES permits, Recommended Quantitation Levels (RQL) which are parameter-specific levels that were required to be achieved by laboratories performing wastewater analyses. The RQLs represent the level at which a quantity of a substance can reliably be

detected, with a degree of certainty acceptable to the Department. Due to adoption of the sufficiently sensitive test methods rule, a new RQL for CPO of 0.02 mg/L has been developed which has been shown to be attainable using an EPA approved standard method. As stated in Part IV Sanitary Wastewater A.1.d of the permit, the Department determined that this RQL is routinely achievable using a handheld colorimetric test (DPD Colorimetric Method (4500-Cl G-11)) where this method is well described in the Standard Methods for the Examination of Water and Wastewater, available at www.standardmethods.org. This method is standard practice in testing for CPO and has been available for decades. This RQL is listed in the Department's guidance document for SSTM as shown here: [sstm-faq.pdf](#).

As set forth by the recommendations in USEPA's Technical Support Document (USEPA TSD), Section 5.5.3, the WQBEL calculations were performed using the number of samples corresponding to the monitoring frequency per month, i.e., a value of n=180. Additionally, as set forth by the recommendations in the USEPA TSD, Section 5.5.2, a default Coefficient of Variation (CV) of 0.6 was used since the data used in the calculations were all non-detects of <0.1 mg/L. This results in limitations of 0.031 mg/L as a monthly average and 0.088 mg/L as a daily maximum. As stated on pages 15, 26, and 30 of the Fact Sheet, and Part IV Sanitary Wastewater C.2 of the draft permit, a schedule of compliance of 36 months is provided, during which time the permittee will report data on the DMR using the new RQL of 0.02 mg/L, which may be used to develop a CV more representative of the facility's effluent data.

As stated on page 15 of the Fact Sheet, it was the Department's intent to impose interim effluent limitations, and the Department retained the existing permit conditions for the "Initial Limits" period until the "Final Limits" become effective at EDP + 37 months. As stated on page 14 of the Fact Sheet, since the permittee never documented compliance with the existing WQBELs due to the previous RQL of 0.1 mg/L, the existing permit conditions (i.e., existing enforceable permit levels) are 0.1 mg/L (28.4 kg/day). As such, it was the Department's intent that the existing enforceable permit levels, equivalent to the RQL of 0.1 mg/L (28.4 kg/day), be retained as the interim limits. Although the fact sheet is not part of the final permit action, pages 29 and 30 of the Fact Sheet are hereby modified as follows for the purposes of the Administrative Record:

11

Permit Summary Table

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA (4/2017 – 12/2022)	EXISTING LIMITS	INITIAL LIMITS (1)	FINAL LIMITS (2)
Chlorine Produced Oxidants (CPO)	kg/d	Monthly Avg. Daily Max.	<10.93 <63.15	10.2 (9) 24.9 (9)	10.2 (5) (9) 24.9 (5) (9)	8.8 (5) 24.9 (5)
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	<0.1 <0.1	0.036 (9) 0.088 (9)	0.036 (5) (9) 0.088 (5) (9)	0.031 (5) 0.088 (5)

Footnotes and Abbreviations:

(5) The permittee shall utilize analytical methods for CPO that will ensure compliance with the specified RQL of 0.02 mg/L (5.7 kg/day).

(9) The permittee shall meet the RQL of 0.1 mg/L (28.4 kg/day).

In addition, this change is reflected in Table III-A-1 on page 3 of Part III of the final permit.

The commenter is correct in that the monthly average and daily maximum values are reversed for CPO loading in Table III-A-1 on page 3 of Part III of the draft permit. The correct values are 10.2 kg/day as a monthly average and 24.9 kg/day as a daily maximum, as was stated on page 14 of the Fact Sheet and in the Permit Summary Table on page 29 of the Fact Sheet. The Department agrees to make this correction to the final permit, and the change is reflected in Table III-A-1 on page 3 of Part III.

The permittee is allowed to submit any studies, reports, or plans, including a work plan, as requested in this comment. However, the Department cannot suspend existing limitations due to antibacksliding regulations at N.J.A.C. 7:14A-13.19 and 40 CFR 122.44. Any such studies must be completed prior to the Final Limits coming

into effect at EDP + 37 months. These studies must be performed under a Department approved Quality Assurance Project Plan.

This change is hereby incorporated into the JMEUC permit for the purposes of the Administrative Record. No other changes have been made to the final permits as a result of this comment.

- 124. COMMENT:** Regarding Part III – Table III-A-3 – Surface Water WCR Annual Limits and Monitoring and Reporting Requirements for Silver, the Fact Sheet (Page 25) in the Draft Permit indicates that the parameter “silver” was not found to be discharged in quantifiable amounts in the effluent. Therefore, a limit is not required and this parameter was moved from the DMR to the annual WCR with a monitoring frequency of once per year and a sample type of 24-hour composite. A review of Table III-A-3: Surface Water WCR – Annual Limits and Monitoring Requirements does not show a monitoring requirement for silver. Please confirm whether monitoring for silver is required (as indicated in the Fact Sheet) or not (as indicated in the draft NJPDES permit). [11]

RESPONSE (124): It was the Department’s intention to move silver from the DMR to the annual WCR, as was stated on pages 17 and 30 of the Fact Sheet of the draft permit. The Department agrees to make this correction to the final permit, and the change is reflected in Table III-A-3 on page 10 of Part III.

This change affects Part III of the final JMEUC NJPDES CSO permit.

- 125. COMMENT:** In Part III of the Draft Permit, Table III-B-1: Surface Water WCR – Annual Limits and Monitoring Requirements identifies influent sewage monitoring requirements for 1,2- Dichlorobenzene, 1,3-Dichlorobenzene, and 1,4-Dichlorobenzene as 24-hour composite samples. The sampling requirements for these parameters should be the same as the sampling requirements listed in Table III-A-3: Surface Water WCR – Annual Limits and Monitoring Requirements for effluent samples and consistent with 40 C.F.R. 136. These should be collected as grab samples. [11]

RESPONSE (125): Table III-B-1 includes the “IPP1 Influent Pretreatment Reqs” and lists the parameters required for influent sampling whereas Tables III-A-1 through 3 concern effluent sampling. The Department agrees to make the sample type consistent for influent and effluent sampling sample types for 1,2- Dichlorobenzene, 1,3-Dichlorobenzene, and 1,4-Dichlorobenzene and that these parameters shall be analyzed using a volatile method (e.g. – EPA method 624.1), as authorized by 40 CFR 136. Therefore, the sample type shall be grab for influent and effluent sampling for 1,2- Dichlorobenzene, 1,3-Dichlorobenzene, and 1,4-Dichlorobenzene. The Department agrees to make this correction to the final permit, and the change is reflected in Table III-B-1 on page 21 of Part III.

This change affects Part III of the final JMEUC NJPDES CSO permit.

- 126. COMMENT:** Regarding Part IV Sanitary Wastewater D.8, 9, 10, 11, and 12, Appendix A is referenced in many places in these sections regarding Reclaimed Water for Beneficial Reuse (RWBR), but Appendix A was not provided in the draft permit.

The JMEUC requests that the Department provide a copy of Appendix A (RWBR Approval Status List) for review and reserves the right to submit comments on Appendix A once it has been reviewed. We request that the Department authorize an additional 30 days from the time we receive Appendix A for comments to be submitted on this section of the permit. [11]

RESPONSE (126): The Department acknowledges this omission. Appendix A serves as the Reclaimed Water Beneficial Reuse (RWBR) Approval Status List as indicated in the Table of Contents for the May 9, 2023 draft NJPDES CSO permit. Appendix A is a list that indicates the specific category, type and location of approved RWBR types and is strictly for informational purposes. The purpose of Appendix A is also described in Part IV Sanitary Wastewater E.7 through E.14 in the draft NJPDES CSO permit. This Appendix was provided to the

permittee in the pre-draft renewal permit, dated April 6, 2023, and is unchanged from the 2015 NJPDES CSO permit renewal and subsequent modifications.

A copy of Appendix A has been included in this final permit. In the event that the permittee has comments or changes to this informational table, the Department can make changes via a minor permit modification in accordance with N.J.A.C. 7:14A-16.5 given that this table is included for informational purposes.

No changes have been made to the final permit as a result of this comment.

- 127. COMMENT:** Regarding Part IV CSM, in response to the major permit modifications proposed on March 20, 2020 for the JMEUC NJPDES permit, JMEUC requested that the Department state in the permit that it can approve blending as a CSO-related bypass upon approving a no feasible alternatives (NFA) analysis that was submitted to NJDEP for review. NJDEP addressed this issue in its response to comments on May 1, 2020.

The Fact Sheet (page 9-10) in the Draft Permit notes that the Clean Water Act requires that all permits, orders and decrees issued to regulate combined system overflows must comply with the federal CSO Control Policy. 33 U.S.C. 1342(q)(1), which has been incorporated verbatim into NJDEP's regulations at N.J.A.C. 7:14A-11 – Appendix C. The prior permit required submission of a LTCP consistent with the federal CSO Control Policy and NJPDES Regulations, and the City and JMEUC submitted a single, coordinated LTCP in October 2020. This submission included the wet weather treatment scheme identified in the NFA submitted by JMEUC.

Thus, the JMEUC submitted the necessary NFA analysis to the Department on March 13, 2020 and the LTCP, submitted on October 1, 2020, incorporates the authorized bypass recommended in the NFA (See, Fact Sheet page 62, which presents the implementation schedule for the LTCP showing construction of the CSO treatment facility at the JMEUC WWTF (ID 16)).

Pursuant to the Department's response to comments indicating that "Any request for bypass must be accompanied by a "No Feasible Alternatives" (NFA) analysis so that the Department can evaluate such analysis against the requirements of the National CSO Control Policy and 40 C.F.R. 122.41(m)(4)", the JMEUC requests that the Department provide its evaluation of the March 13, 2020 NFA and confirm whether the request to bypass during wet weather flows has been approved. It is our understanding that NJDEP approved the NFA, as the Draft Permit includes the treatment scheme identified in that document as a requirement (Long Term Control Plan Implementation Schedule – ID16).

Moreover, the Draft Permit makes numerous references to the LTCP and its implementation. (e.g., See, Part IV CSM D.1.c - the permittee shall work cooperatively with all other appropriate municipalities/permittees in the hydraulically connected sewer system to ensure that the Nine Minimum Controls (NMC) & Long Term Control Plans (LTCP) activities are being developed and implemented consistently.) This would imply that the LTCP and NFA have been approved for use in the permit, however the JMEUC has not been notified by the Department that either of these documents have been approved. If the LTCP/NFA have not been approved, it would be improper to include provisions in the Draft Permit that are unauthorized and/or inconsistent with Clean Water Act requirements.

The JMEUC objects to any requirements in the Draft Permit that have not been approved by NJDEP and reserves the right to challenge these requirements when it becomes aware that they have not been approved. [11]

RESPONSE (127): The Department acknowledges that wet weather treatment is a key component of the LTCP where CSO-related bypass is identified as Project 12 in **RESPONSE (48)** as "New CSO WWTF". However, CSO-related bypass may be approved in a future permit action pending JMEUC's submission and Department review of additional information. The Department will issue a technical comment letter on JMEUC's March 13, 2020 "No Feasible Alternatives" (NFA) analysis to describe what additional detail is needed.

By way of background, CSO-related bypass is one of the seven CSO control alternatives that was required to be evaluated as part of the LTCP as a requirement of the March 12, 2015 NJPDES CSO permit. As described in Section 7 of the LTCP, it was determined by the permittees that the most practical approach to cost-effective CSO control would be a focus on increased conveyance and treatment. As described within that section, the permittees note that the selected plan involves a combination of different control strategies, maximizing conveyance to the existing wastewater treatment facilities and providing additional conveyance and treatment capacity is the primary strategy and assures that the recommended plan is technically feasible, effective in meeting the control goals, cost-effective, and suitable for mitigating difficult siting challenges and disruptive construction of multiple satellite facilities. Wet weather treatment is also identified in Section 7.5 of the LTCP where this treatment is necessary to accommodate the flows from certain upstream conveyance improvements including the Easterly Interceptor improvements related to the Dowd Avenue siphon and regular modifications. The Department agrees CSO-related bypass is a component of the LTCP and is a key element of attainment of 85% wet weather percent capture as it will allow for treatment of the significant increases in conveyance capacity that will result from these other projects.

CSO-related bypass was also one of the seven CSO control alternatives specified in the 2015 NJPDES CSO permit at Part IV Section G.4.e for which an evaluation of alternatives was required in the Long Term Control Plan as due on October 1, 2020. As per the federal CSO Control Policy, any request for bypass must be accompanied by a NFA analysis so that the Department can evaluate such analysis against the requirements of the federal CSO Control Policy and 40 C.F.R. 122.41(m)(4). The Department provided a list of the criteria to be evaluated as part of that NFA analysis in the May 1, 2020 permit modification.

The Department can consider applications for bypasses at CSO POTWs where the applicant's NFA analysis shows that there are no feasible alternatives to a bypass. Provided the Department approves a bypass in a NJPDES permit action, a Treatment Works Approval is also required in order to authorize the construction and operation of any bypass line.

The Department received an NFA Analysis March 13, 2020 submission but did not authorize a CSO-related bypass in the May 1, 2020 final NJPDES permit modification. The Department did however incorporate revised percent removal requirements in the May 1, 2020 permit modification in order to accommodate an increased pumping rate from TAPS consistent with Maximization of flows to the POTW. As noted in the response to comments of the May 1, 2020 permit modification, it was further determined that additional detail would be provided in the LTCP to supplement the NFA Analysis.

The Department has reviewed the NFA Analysis in concert with the most recent LTCP and intends to issue a separate technical comment letter under separate cover. After that technical review process is completed, JMEUC can submit a modification request for the NJPDES permit. This will allow the Department to address CSO-related bypass by incorporating appropriate permit conditions within the JMEUC NJPDES CSO permit as a future phase of the JMEUC final permit. This phase can then be activated at a future date when a Treatment Works Approval is obtained and design and construction is completed. Note that the timeline for CSO-related bypass extends beyond the five-year NJPDES permit cycle.

No changes have been made to the final permits as a result of this comment.

- 128. COMMENT:** Regarding Part IV CSM, the Public Notice for the Draft Permit identifies the JMEUC and the City of Elizabeth as the permittees. Certain aspects of the CSM permit requirements fall under the responsibility of both permittees, but the individual permittees should only be responsible for their portion of the operation of the system. This is largely reflected in the permit requirements for the Nine Minimum Control Requirements (Part IV CSM. F) and Long Term Control Plan Requirements (Part IV CSM. G) where the permit limits the specific requirement to aspects "owned/operated by the permittee". Given the complexity of this permit and the joint, but separate, requirements for CSO management (including record keeping, submittals, progress reports, emergency planning, and the O&M program), the Draft Permit should provide a clause indicating that specific requirements in the NJPDES permit are the responsibility of the specific party unless otherwise specified. [11]

RESPONSE (128): Separate NJPDES permits are issued to JMEUC and the City of Elizabeth. As noted in this comment, both permits contain direct references to “the permittee” as well as direct references to “own/operate” for certain permit conditions. Note that the permit conditions regarding the Nine Minimum Control Requirements (Part IV CSM. F) are the direct responsibility of the individual permittee whereas the conditions of the Long Term Control Plan are intertwined. To ensure coordination and cooperation, CSM Part IV.G.10.a is included which addresses the Permittee’s LTCP Responsibilities and how the permittees are required to work cooperatively and provide the necessary information with the other CSO permittees to ensure overall compliance. The Department maintains that the permit as written effectively delineates who is responsible for various pieces.

- 129. COMMENT:** Part IV CSM G.4.d of the Draft Permit provides “To supplement these measures, as a condition of the NJPDES permit as issued to Joint Meeting of Essex and Union Counties, influent flow is required to be reported under “Flow, In Conduit or Thru Treatment Plant” as “Raw Sew/Influent”. The number of bypass events is also required to be reported as “Duration of discharge” namely the number of calendar days per month that a bypass event occurs. These reporting requirements are included to serve as a means to track increased flows to the plant, number of bypass events and will serve as an indication of any reduction in CSOs.”

Once the new bypass is constructed and in operation, JMEUC will report the number of bypass events. The amount of flow through the bypass will be considered as “captured”. Please confirm that this is acceptable. [11]

RESPONSE (129): As noted in this comment, Part IV CSM G.4.d includes a permit condition regarding reporting the number of bypass events. However, as described in **RESPONSE (127)**, CSO-related bypass cannot be approved until a full No Feasible Alternatives analysis is submitted and approved via a subsequent NJPDES permit action. This descriptive information regarding the reporting of bypass events was erroneously included in Part IV CSM G.4.d. As a result, the following change is hereby incorporated into the final permit:

- d. To supplement these measures, as a condition of the NJPDES permit as issued to Joint Meeting of Essex and Union Counties, influent flow is required to be reported under “Flow, In Conduit or Thru Treatment Plant” as “Raw Sew/Influent”. ~~The number of bypass events is also required to be reported as “Duration of discharge” namely the number of calendar days per month that a bypass event occurs. These reporting requirements are included to serve as a means to track increased flows to the plant, number of bypass events and will serve as an indication of any reduction in CSOs.~~

Note that a reporting requirement for “Duration of Discharge” was not included in the draft permit which is correct.

This change affects Part IV CSM G.4.d of the final permit.

- 130. COMMENT:** Under the Part IV CSM requirements regarding the Long-Term Control Plan (G), Item 5.a provides:

“This renewal permit action identifies that adequate and effective CSO control measures are being implemented consistent with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. This renewal permit sets forth an implementation schedule in Part IV.G.8.”

The federal CSO Control Policy states that EPA will allow a permit to authorize a CSO-related bypass, as authorized in the Draft Permit, in certain identified circumstances.

“This provision 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. (N.J.A.C. 7:14A-11, Appendix C at II.C.7 – Maximizing Treatment at the Existing POTW Treatment Plant).”

The Fact Sheet in the Draft Permit shows that data supporting all the requirements in the federal CSO Control Policy have been met, and that CSO-related bypasses are authorized as an anticipated bypass.

“The City and JMEUC submitted a single, coordinated LTCP dated October 2020. This subject permit action serves to incorporate CSO control strategies to achieve a minimum wet weather percent capture value as outlined in the CSO LTCP. (Fact Sheet on page 10).”

Given that the LTCP included peak flow blending to maximize treatment of CSO-related flows and that the Draft Permit includes construction of primary treatment with chlorination to accomplish this goal (see LTCP Implementation Schedule included in Fact Sheet on page 62) and that this approach had to be approved with an NFA evaluation, a CSO-related bypass must have been authorized. The JMEUC requests that the NJDEP indicate its concurrence with this conclusion and that the Draft Permit include a specific statement indicating that CSO-related bypasses are authorized as an anticipated bypass in accordance with federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. For example, we suggest that Part IV CSM G.5. be reworded as follows:

“This renewal permit action identifies that adequate and effective CSO control measures are being implemented consistent with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. CSO-related bypasses are therefore authorized as an anticipated bypass in accordance with Federal and State law. This renewal permit sets forth an implementation schedule in Part IV.G.8.” [11]

RESPONSE (130): Refer to **RESPONSE (127)**.

- 131. COMMENT:** Part IV CSM G.8.a includes a summary of agreements executed between the City and the JMEUC to maximize flow through the TAPS to the WWTF but does not impose any conditions on the permit. Section G.8.a should be removed from the permit because it does not impose any conditions on the permittees. Section G.8.b requires the JMEUC to continue coordination with the City to accept additional flows as set forth in the LTCP and explore revising the agreements to accept additional flow. Section G.8.b should be amended to indicate that revised agreements will be explored to accept additional flow in accordance with the approved LTCP. [11]

RESPONSE (131): Part IV CSM G.8.a and Part IV CSM G.8.b are as follows:

“8. Implementation Schedule

- a. The City of Elizabeth’s (the City) sewer system conveys flow to the Trenton Avenue Pump Station and then pumps to the JMEUC WWTF for treatment. JMEUC and the City’s combined LTCP specifies a combination of CSO control strategies, including sewer separation, off-line storage tanks, and green infrastructure. However, maximizing conveyance to the JMEUC WWTF and providing additional conveyance and treatment capacity is the primary strategy for CSO volume reduction. A pre-existing contract between JMEUC and the City established a daily peak flow rate of 36 MGD that the City can convey to the JMEUC WWTF. During the development of the LTCP, JMEUC and the City executed a resolution to the contract which increased the daily peak flow rate that the City can convey to the JMEUC WWTF from 36 MGD to 55 MGD. This results in increased flows pumped to the JMEUC WWTF which would otherwise have been discharged untreated from CSO outfalls.
- b. JMEUC shall continue to coordinate with the City to accept additional CSO flows to ensure that the City can attain the required projects set forth in the LTCP and explore revising additional agreements to accept additional flow.”

This section serves to present the history of collaboration between the permittees at the TAPS. These efforts resulted in a significant reduction in CSO discharge as described in that section. The Department acknowledges that the permittees have successfully coordinated where needed, and expects the coordination to continue. Part IV CSM G.8.b. expresses and requires coordination as a condition of the permit.

The Department acknowledges that the majority of the CSO control projects that will take place under the five-year NJPDES permit term are being completed by the City of Elizabeth. However, JMEUC plays and will continue to play a critical role in the acceptance of additional combined sewage flow. In addition, Maximization of Flow to the POTW is a Nine Minimum Control that applies to both JMEUC and the City of Elizabeth and is outlined in Part IV CSM F.4. The Department maintains that a condition to describe JMEUC's role in the first five years of the implementation schedule is necessary and included such in Part IV CSM G.8. The Department disagrees that deletion is appropriate for Part IV CSM G.8.a.

Regarding the second portion of this phrase, the Department does not agree that it is necessary to condition the acceptance of additional CSO flow by adding the phrase "in accordance with the approved LTCP." Additional agreements between the two parties may take place after the approval of the LTCP which may be more specific and outside the scope of the approved LTCP. The Department does not agree that a modification of the requirement to indicate that revised agreements will be explored is necessary, as the Department does not feel it appropriate to reference agreements between the permittees that the Department does not have the authority to regulate. The Department maintains that the addition of this phrase is unnecessary.

No changes have been made to the final permit as a result of this comment.

- 132. COMMENT:** Regarding Part IV CSM G.9.h Compliance monitoring requirements on water quality, Section G.9.h of the Draft Permit provides:

"The PCCMP must contain data from the on-going New Jersey Harbor Discharger Group Monitoring Network. This data is required to supplement the existing data to represent future conditions. This will ensure consistency for sampling stations, parameters etc."

JMEUC will work with the NJCSO group to include receiving water quality data in future PCCMP reports when such data become available. This permit condition should be revised to indicate that the PCCMP must contain the most up-to-date data available from the New Jersey Harbor Discharge Group Monitoring Network at the time the PCCMP is being prepared. [11]

RESPONSE (132): The Department agrees that the most up-to-date data should be utilized as part of any PCCMP. The Department maintains that this is understood and the language does not need to be revised. As stated in Part IV CSM G.9.a:

"The permittee shall implement a Compliance Monitoring Program (CMP) adequate to: verify baseline and existing conditions, the effectiveness of CSO control measure, compliance with water quality standards, and protection of designated uses. The CMP shall be conducted before, during and after implementation of the LTCP..."

Note that the Final PCCMP is subject to the Department's review and approval.

No changes have been made to the final permit as a result of this comment.



NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

Permit Number: NJ0108782

Final: Surface Water Renewal Permit Action

Permittee:

City of Elizabeth
50 Winfield Scott Plaza
Elizabeth City, New Jersey 07201

Co-Permittee:

Property Owner:

City of Elizabeth
50 Winfield Scott Plaza
Elizabeth City, New Jersey 07201

Location Of Activity:

City of Elizabeth
50 Winfield Scott Plaza
Elizabeth City, New Jersey 07201
Union County

Authorization Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
CSM – Combined Sewer Management (IP) – Renewal	02/28/2025	04/01/2025	03/31/2030

DEP AUTHORIZATION

Brett Callanan, Chief

Bureau of Surface Water and Pretreatment Permitting

(Terms, conditions and provisions attached hereto)

PART I GENERAL REQUIREMENTS: NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.
- b. General Conditions
 - Penalties for Violations N.J.A.C. 7:14-8.1 et seq.
 - Incorporation by Reference N.J.A.C. 7:14A-2.3
 - Toxic Pollutants N.J.A.C. 7:14A-6.2(a)4i
 - Duty to Comply N.J.A.C. 7:14A-6.2(a)1 & 4
 - Duty to Mitigate N.J.A.C. 7:14A-6.2(a)5 & 11
 - Inspection and Entry N.J.A.C. 7:14A-2.11(e)
 - Enforcement Action N.J.A.C. 7:14A-2.9
 - Duty to Reapply N.J.A.C. 7:14A-4.2(e)3
 - Signatory Requirements for Applications and Reports N.J.A.C. 7:14A-4.9
 - Effect of Permit/Other Laws N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
 - Severability N.J.A.C. 7:14A-2.2
 - Administrative Continuation of Permits N.J.A.C. 7:14A-2.8
 - Permit Actions N.J.A.C. 7:14A-2.7(c)
 - Reopener Clause N.J.A.C. 7:14A-6.2(a)10
 - Permit Duration and Renewal N.J.A.C. 7:14A-2.7(a) & (b)
 - Consolidation of Permit Process N.J.A.C. 7:14A-15.5
 - Confidentiality N.J.A.C. 7:14A-18.2 & 2.11(g)
 - Fee Schedule N.J.A.C. 7:14A-3.1
 - Treatment Works Approval N.J.A.C. 7:14A-22 & 23
- c. Operation And Maintenance
 - Need to Halt or Reduce not a Defense N.J.A.C. 7:14A-2.9(b)
 - Proper Operation and Maintenance N.J.A.C. 7:14A-6.12
- d. Monitoring And Records
 - Monitoring N.J.A.C. 7:14A-6.5
 - Recordkeeping N.J.A.C. 7:14A-6.6
 - Signatory Requirements for Monitoring Reports N.J.A.C. 7:14A-6.9
- e. Reporting Requirements
 - Planned Changes N.J.A.C. 7:14A-6.7
 - Reporting of Monitoring Results N.J.A.C. 7:14A-6.8
 - Noncompliance Reporting
 - Hotline/Two Hour & Twenty-four Hour Reporting N.J.A.C. 7:14A-6.10 & 6.8(h)
 - Written Reporting N.J.A.C. 7:14A-6.10(c) & (d)
 - N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
 - Duty to Provide Information N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
 - Schedules of Compliance N.J.A.C. 7:14A-6.4
 - Transfer N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

- a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.
 - i. Surface Water Quality Standards N.J.A.C. 7:9B-1
 - ii. Water Quality Management Planning Regulations N.J.A.C. 7:15

B. General Conditions

1. Scope

- a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances.

2. Permit Renewal Requirement

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. Submit a complete permit renewal application at least 180 calendar days prior to the expiration date of the permit.

3. Notification of Non-Compliance

- a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-WARNDEP (1-877-927-6337).
- b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

4. Notification of Facility Changes

- a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.

5. Notification of Change in Ownership and/or Permittee/Operating Entity

- a. As set forth at N.J.A.C. 7:14A-16.2, prior to any change in ownership and/or the permittee/operating entity, the current permittee shall provide written notice to the Department at least thirty (30) days prior to the proposed transfer date.

- i. Written notice to the Department shall be in the form of a completed Application for Transfer of a NJPDES Permit form, which is available on the Department's website or by contacting the appropriate permitting program.

6. Notification of Changes to the Facility/Permit Contacts

- a. The permittee shall notify the Department within thirty (30) days of a change in contact information for any of the following persons associated with the facility/permit:
 - i. Permittee/Operating Entity Contact;
 - ii. Property Owner Contact;
 - iii. Facility Contact; or
 - iv. Fees/Billing Contact.
- b. Notification to the Department shall be in the form of a completed Contact Information Update form (i.e. NJPDES-2 form), which is available on the Department's website or by contacting the appropriate permitting program.

7. Access to Information

- a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access / copy any records that must be kept under the conditions of this permit.

8. Standard Reporting Requirements – Monitoring Report Forms (MRFs)

- a. All MRFs shall be electronically submitted to the Department's MRF Submission Service.
- b. MRF data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee.
- c. MRFs shall be submitted at the frequencies identified in Part III of this permit.
- d. All MRFs shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.
- e. The highest ranking official may delegate responsibility to certify the MRFs in his or her absence. Authorizations for other individuals to certify shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- f. Monitoring results shall be submitted in accordance with the current NJPDES MRF Reference Manual and any updates thereof.
- g. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.
- h. If, for a monitored location, there are no discharge events during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results by checking the "No Discharge this monitoring period" box on the paper or electronic version of the monitoring report submittal form.

9. Standard Reporting Requirements - Electronic Submission of NJPDES Information

- a. The below identified documents and reports shall be electronically submitted to the NJDEP via the Department's designated Electronic Submission Service.

- i. Non-compliance reports required by N.J.A.C. 7:14A-6.10 and 40 CFR 122.41(1)(6) and (7) related to combined sewer overflows(see Part II.B.3.c).

10. Operator Certification

- a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.
 - i. Notifications shall be submitted to:
NJDEP
Bureau of Water System Engineering
Mail Code 401-04Q
PO Box 420
Trenton, New Jersey 08625 - 0420
(609) 292-2957
or via email to www@dep.nj.gov
- b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

11. Operation Restrictions

- a. The operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state or any standing or ponded condition for water or waste, except as specifically authorized by a valid NJPDES permit.

C. Custom Requirement

1. CSO Reopener Clause

- a. This reopener clause authorizes the NJDEP to reopen and modify the permit upon determination that the CSO controls as contained in a LTCP fail to meet WQS or protect designated uses.

2. Water-Quality Based Requirements for CSOs as a Numeric Performance Standard

- a. CSOs are point sources subject to NJPDES permit requirements including both technology-based and water-quality based requirements of the Clean Water Act.
- b. Water quality-based effluent limits under 40 CFR Sections 122.44(d)(1) and 122.44(k) require, at a minimum, compliance with, no later than the date allowed under the State's WQS, the numeric performance standards for the selected CSO controls, based on average design conditions. Because the permittee selected the Presumption Approach, as specified in Part IV.G.4.a.ii, the numeric performance standard for the selected CSO controls is a minimum percentage capture of combined sewage by volume for treatment under specified design conditions consistent with II.C.4.a.ii of the CSO Control Policy.

3. Approval of the LTCP

- a. This renewal permit implements the initial five years of the LTCP Implementation Schedule as established by the permittee and as approved in the Administrative Compliance Agreement executed by the Department and the permittees dated February 27, 2025. The LTCP as approved by the Administrative Compliance Agreement also addresses the CSO control measures within the Implementation Schedule that extend beyond the five-year NJPDES permit term for the City of Elizabeth and Joint Meeting of Essex & Union Counties.

PART III

LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:

001A CSO

RECEIVING STREAM:

Peripheral Ditch

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 001A located at Airport South Area into the Peripheral Ditch at latitude 40° 40' 50.7" N and longitude 74° 11' 30.444" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

For this outfall, Precipitation may be reported from a rain gauge representative of the area, and Duration of Discharge shall be reported as a whole day for any day when a discharge occurs. The total quantity of Solids/Floatables removed from all outfalls shall be reported here when the solid waste is measured for disposal.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Solids/Floatables	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	CU YARDS	1/Month	Measured
January thru December	QL	***	***		***	***	***			
Precipitation	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# INCHES	1/Month	Measured
January thru December	QL	***	***		***	***	***			
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

002A CSO

RECEIVING STREAM:

Great Ditch

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 002A located at Dowd Avenue into the Great Ditch at latitude 40° 40' 19" N and longitude 74° 11' 26" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - B - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

003A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

FW2-NT(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 003A located at Westfield Avenue and Magie Avenue into the Elizabeth River at latitude 40° 40' 4.44" N and longitude 74° 13' 9.3" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - C - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

005A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

FW2-NT(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 005A located at Westfield Avenue into the Elizabeth River at latitude 40° 40' 4.512" N and longitude 74° 13' 9.804" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - D - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

008A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

FW2-NT(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 008A located at West Grant Street/Price Street into the Elizabeth River at at latitude 40° 39' 58.68" N and longitude 74° 13' 6.96" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - E - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

010A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

FW2-NT(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 010A located at Murray Street/Cherry Street into the Elizabeth River at latitude 40° 39' 47.232" N and longitude 74° 13' 7.752" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - F - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

012A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

FW2-NT(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 012A located at Rahway Avenue into the Elizabeth River at latitude 40° 39' 41.76" N and longitude 74° 13' 2.712" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - G - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

013A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

FW2-NT(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 013A located at Rahway Avenue/Burnet Street into the Elizabeth River at latitude 40° 39' 41.22" N and longitude 74° 13' 3.072" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - H - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

014A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 014A located at Broad Street/Rahway Avenue into the Elizabeth River at latitude 40° 39' 39.816" N and longitude 74° 12' 54.612" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - I - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

016A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

FW2-NT(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 016A located at Washington Avenue/Pearl Street into the Elizabeth River at latitude 40° 39' 39.096" N and longitude 74° 12' 59.472" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - J - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

021A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 021A located at South Spring Street/Third Avenue into the Elizabeth River at latitude 40° 39' 33.192" N and longitude 74° 12' 31.248" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - K - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

022A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 022A located at South Sreet into the Elizabeth River at latitude 40° 39' 28.152" N and longitude 74° 12' 37.404" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - L - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

026A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 026A located at John Street into the Elizabeth River at latitude 40° 39' 16.056" N and longitude 74° 12' 30.276" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - M - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

027A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 027A located at Summer Street/Arnett Street into the Elizabeth River at latitude 40° 39' 1.224" N and longitude 74° 12' 35.748" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - N - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

028A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 028A located at Summer Street/Arnett Street into the Elizabeth River at latitude 40° 38' 59.208" N and longitude 74° 12' 35.748" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - O - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

029A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 029A located at South Front Street into the Elizabeth River at latitude 40° 38' 40" N and longitude 74° 11' 26" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - P - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

030A CSO

RECEIVING STREAM:

Arthur Kill

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 030A located at Front Street/East Jersey Street into the Arthur Kill at latitude 40° 38' 46.46" N and longitude 74° 11' 10.212" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - Q - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

031A CSO

RECEIVING STREAM:

Arthur Kill

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 031A located at Front Street/Livingston Street into the Arthur Kill at latitude 40° 38' 48.444" N and longitude 74° 11' 7.548" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - R - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

032A CSO

RECEIVING STREAM:

Authur Kill

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 032A located at Front Street/Magnolia Avenue into the Arthur Kill at latitude 40° 38' 51.576" N and longitude 74° 10' 53.292" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - S - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

034A CSO

RECEIVING STREAM:

Newark Bay

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 034A located at Atalanta Place into the Newark Bay at latitude 40° 39' 6.084" N and longitude 74° 10' 16.464" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - T - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

035A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 035A located at South First Street/Third Avenue into the Elizabeth River at latitude 40° 38' 36.132" N and longitude 74° 11' 42.756" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - U - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

036A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

FW2-NT(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 036A located at Irvington Avenue/Dod Court into the Elizabeth River at latitude 40° 40' 15.708" N and longitude 74° 13' 9.264" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - V - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

037A CSO

RECEIVING STREAM:

Arthur Kill

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 037A located at Bayway/South Front Street into the Arthur Kill at latitude 40° 38' 6.972" N and longitude 74° 11' 55.932" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - W - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

038A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 038A located at Third Avenue into the Elizabeth River at latitude 40° 38' 50.568" N and longitude 74° 12' 16.092" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - X - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

039A CSO

RECEIVING STREAM:

Newark Bay

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 039A located at Schiller Street/Great Ditch into the Newark Bay at latitude 40° 39' 46" N and longitude 74° 12' 52" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - Y - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

040A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 040A located at Pulaski Street/Clifton Street into the Elizabeth River at latitude 40° 38' 47.796" N and longitude 74° 12' 30.528" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - Z - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

041A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

FW2-NT(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 041A located at Morris Avenue/Sayre Street the Elizabeth River at latitude 40° 40' 10.668" N and longitude 74° 13' 9.696" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - AA - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

042A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 042A located at Bridge Street/Elizabeth River into the Elizabeth River at latitude 40° 39' 39.744" N and longitude 74° 11' 40.788" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - BB - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

043A CSO

RECEIVING STREAM:

Elizabeth River

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):CSM - Combined Sewer Management
(IP)**Location Description**

The permittee is authorized to discharge combined sewage from Outfall 043A located at Army Corp Flood Control Structure into the Elizabeth River at latitude 40° 38' 37.5" N and longitude 74° 11' 44.124" W.

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Duration of Discharge shall be reported as whole day for any day when a discharge occurs.

Table III - CC - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2025

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Estimated
January thru December	QL	***	***		***	***	***			

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Notes and Definitions

A. Footnotes

1. These notes are specific to this permit

- a. EDP means the Effective Date of the Permit which can be found on the final permit authorization page

2. CSO related resources are listed below with a link to the current webpage

- a. NJDEP's CSO main website and related links can be found at <http://www.nj.gov/dep/dwq/cso.htm>
- b. EPA's Combined Sewer Overflows Principal Guidance Documents can be found at <http://water.epa.gov/polwaste/npdes/cso/Guidance-Documents.cfm>
- c. The Nine Minimum Control requirements from the National CSO Policy along with EPA's guidance document can be found at N.J.A.C. 7:14A-11.12-Appendix C and <http://www.epa.gov/npdes/pubs/owm0030.pdf>
- d. The Nine elements of a Long Term Control Plan from the National CSO Policy along with EPA's guidance document can be found at N.J.A.C. 7:14A-11.12-Appendix C and <http://water.epa.gov/polwaste/npdes/cso/upload/owm0272.pdf>.
- e. EPA's Post Construction Compliance Monitoring Guidance document can be found at http://www.epa.gov/npdes/pubs/final_cso_pccm_guidance.pdf
- f. EPA's Guidance: Coordinating Combined Sewer Overflow (CSO) Long-Term Planning with Water Quality Standards Reviews (PDF)
- g. EPA's Capacity, management, operation and maintenance (CMOM) guidance document can be found at http://www.epa.gov/npdes/pubs/cmom_5.pdf
- h. Dry-Weather Deposition and Flushing for Combined Sewer Overflow Pollution Control: <http://nepis.epa.gov/Adobe/PDF/30000821.PDF>
- i. Combined sewer overflow control (manual): <http://nepis.epa.gov/Adobe/PDF/30004MAO.pdf>
- j. EPA's Storm Water and Combined Sewer Overflows Publications can be found at <http://water.epa.gov/polwaste/wastewater/StormwaterPubs.cfm>

B. Definitions

1. These definitions are specific only to this permit

- a. "Dry weather overflow (DWO)" means a combined sewer overflow that cannot be attributed to a precipitation event, including snow melt, within the hydraulically connected system. DWOs include the following flows: domestic sewage, dewatering activities, commercial and industrial wastewaters, ground water and tidal infiltration upstream of the regulator, and any other non-precipitation event related flows downstream of the regulator to the outfall pipe.

Groundwater infiltration and tidal infiltration originating downstream of the regulator are allowable sources of discharges from a CSO during dry weather. On a case-by-case basis, the Department reserves the right to allow temporary use of the CSO outfall structures for other types of discharges to address extraordinary circumstances. Such use must be specifically approved by the Department.

- b. "Green Infrastructure" means methods of stormwater management that reduce wet weather/stormwater volume, flow, or changes the characteristics of the flow into combined or separate sanitary or storm sewers, or surface waters, by allowing the stormwater to infiltrate, to be treated by vegetation or by soils; or to be stored for reuse. Green infrastructure includes, but is not limited to, pervious paving, bioretention basins, vegetated swales, and cisterns
- c. "Hydraulically connected system" means the entire collection system that conveys flows to one Sewage Treatment Plant (STP). On a case-by-case basis, the permittee, in consultation with the Department, may segment a larger hydraulically connected system into a series of smaller inter-connected systems, based upon the specific nature of the sewer system layout, pump stations, gradients, locations of CSOs and other physical features which support such a sub area. A hydraulically connected system could include multiple municipalities, comprised of both combined and separate sewers

C. NINE MINIMUM CONTROL REQUIREMENTS

- 1. Proper operation and regular maintenance programs for the sewer system and the CSOs**
- 2. Maximum use of the collection system for storage**
- 3. Review and modification of pretreatment requirements to assure CSO impacts are minimized**
- 4. Maximization of flow to the POTW for treatment**
- 5. Prohibition of CSOs during dry weather**
- 6. Control of solid and floatable materials in CSOs**
- 7. Pollution prevention**
- 8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts**
- 9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls**

D. NINE ELEMENTS OF THE LONG TERM CONTROL PLAN

- 1. Characterization, Monitoring, and Modeling of the Combined Sewer Systems**
- 2. Public Participation**
- 3. Consideration of Sensitive Areas**

- 4. Evaluation of Alternatives**
- 5. Cost/Performance Considerations**
- 6. Operational Plan**
- 7. Maximizing Treatment at the Existing POTW Treatment Plant**
- 8. Implementation Schedule**
- 9. Compliance Monitoring Program**

Combined Sewer Management (IP)

A. MONITORING REQUIREMENTS

1. CSO Monitoring Requirements

- a. All monitoring shall be conducted as specified in Part III.
- b. All monitoring frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported on the Monitoring Report Forms.
- c. Discharges shall be directly monitored or predicted using a DEP approved up-to-date model.

B. RECORDKEEPING

1. Recordkeeping Requirements

- a. The permittee shall identify the Combined Sewer System (CSS) complaint, maintenance, inspection, and repair documentation forms and related tracking forms and/or systems and the Permittee shall also specify how, where and when this documentation will be maintained.
- b. The permittee shall retain records of all monitoring information for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record, including:
 - i. all calibration and any other methods of monitoring which may be employed, maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable),
 - ii. copies of all reports required by this NJPDES permit,
 - iii. all data used to complete the application for a NJPDES permit, and
 - iv. monitoring information required by the permit related to the permittee's residual use and/or disposal practices, for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record.
- c. Records of monitoring information shall include the following:
 - i. the date, locations, and time of sampling or measurements,
 - ii. the individual(s) who performed the sampling or measurements,
 - iii. the date(s) the analyses were performed,
 - iv. the individual(s) who performed the analyses,
 - v. the analytical techniques or methods used, and
 - vi. the results of such analyses.
- d. The permittee shall retain records to document implementation of the Nine Minimum Controls (NMC) and Long Term Control Plan (LTCP) requirements in Sections F and G. The permittee shall utilize this information when preparing and submitting progress reports required in Section D, including residential complaints, inspection records, and maintenance records. This information shall be made available to the Department upon request.

C. REPORTING

1. Reporting Requirements

- a. The permittee shall submit all required monitoring results to the Department on the forms provided by the Department. The Monitoring Report Forms (MRFs) are provided to the permittee in an electronic file format.
- b. The permittee shall summarize the information for the total quantity of solids/floatables removed from ALL outfalls on the MRF for the first CSO outfall only. This information needs to be reported on the MRF only when the solids/floatables solid waste is measured for disposal. For the months when no solids/floatables are disposed of, the permittee shall report 'CODE = N'.
- c. The permittee shall report Precipitation from a rain gauge representative of the area on the MRF for the first CSO outfall only.
- d. The permittee shall report Duration of Discharge on the MRF for each CSO outfall as a whole day for any calendar day when a discharge occurs.
- e. Electronic data submissions shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee.
- f. All MRFs shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the combined sewer system.
- g. The highest ranking official may delegate responsibility to certify the MRFs in his or her absence. Authorizations for other individuals to sign shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- h. Monitoring results shall be submitted in accordance with the current Monitoring Report Form Manual and any updates thereof.
- i. If there are no CSO discharges during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results. This is accomplished by placing a check mark in the "No Discharge this monitoring period" box on the electronic version of the monitoring report submittal form.

D. SUBMITTALS

1. CSO Submittal Requirements

- a. The permittee shall respond to all deficiencies cited by the Department within 30 days of notification. With adequate justification provided by the permittee, the Department may extend this deadline an additional 30 days.
- b. All reports submitted to the Department pursuant to the requirements of this permit shall comply with the signatory requirements of N.J.A.C. 7:14A-4.9., and contain the following certification (or such revised form as previously approved in writing by the Department):

- i. I certify under penalty of law that those portions of this document relating to the treatment and collection system owned and operated by the permittee and all attachments related thereto were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system owned and operated by the permittee, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information.
- c. Since multiple municipalities own separate portions of the hydraulically connected sewer system, the permittee shall work cooperatively with all other appropriate municipalities/permittees in the hydraulically connected sewer system to ensure that the Nine Minimum Controls (NMC) & Long Term Control Plans (LTCP) activities are being developed and implemented consistently. The permittee shall identify their joint and separate responsibilities with all other appropriate municipalities in the hydraulically connected sewer system regarding implementation of the NMCs and LTCPs. This information shall be provided/updated in the Progress Reports.
- d. The permittee shall also notify the Joint Meeting of Essex and Union Counties of all CSO construction related activities in their collection system on a semi-annual basis. Notification through the TWA process is sufficient for this purpose.
- e. The permittee shall submit all information required by this permit via email or other electronic format acceptable to the Department to NJCSOProgram@dep.nj.gov.

2. CSO Progress Report Submittal Requirements

- a. The permittee shall submit a progress report on February 1st and August 1st of every year beginning from the effective date of the permit. The Progress Reports shall be prepared in accordance with the following requirements:
 - i. The Progress Report shall include a summary of all CSO control measures implemented to date and the effectiveness of those control measures.
 - ii. Each Progress Report must include a verification that the Operation and Maintenance Manual, including the SOPs, Asset Management Plan and Emergency Plan, have been updated in accordance with this permit and amended annually, as necessary. Detail shall also be provided regarding the System Cleaning Program.
 - iii. A discussion of the continued implementation of the NMCs including maintenance of the telephone hotline/website pursuant to Section F.8.
 - iv. Each Progress Report shall include a list of any complaints received by the permittee regarding CSO related flooding including location and duration.

E. FACILITY MANAGEMENT

1. CSO Discharge Requirements

- a. The permittee shall discharge at the location(s) specified in PART III of this permit.
- b. The permittee shall not discharge foam or cause foaming of the receiving water that 1) forms objectionable deposits on the receiving water, 2) forms floating masses producing a nuisance, or 3) interferes with a designated use of the waterbody.

- c. The permittee's discharges shall not produce objectionable color or odor in the receiving stream.
- d. The permittee's discharges shall not exhibit a visible sheen.

2. Interstate Environmental Commission (IEC)

- a. The permittee shall comply with the Interstate Environmental Commission's (IEC) "Water Quality Regulations", where applicable.

F. NINE MINIMUM CONTROL REQUIREMENTS

1. Proper Operation and Maintenance Programs for the Sewer System and CSOs

- a. The permittee shall operate the treatment works using a licensed operator in accordance with N.J.S.A. 58:11-66(a), N.J.A.C. 7:14A-6.12(b) and N.J.A.C. 7:10A.
- b. The permittee shall provide adequate operator staffing for the treatment works.
- c. The permittee shall continue to implement and review annually, and update as needed, an Operations & Maintenance (O&M) Program and corresponding Manual, including an Emergency Plan, in accordance with N.J.A.C. 7:14A-6.12, to ensure that the treatment works, including but not limited to collection system, the CSO outfalls, solids/floatables facilities, regulators, and related appurtenances including any green infrastructure which are owned/operated by the permittee are operated and maintained in a manner to achieve compliance with all terms and conditions of this permit.
- d. The permittee shall provide documentation that demonstrates that employees were provided with appropriate training to perform the operation and maintenance duties required and to follow the Standard Operating Procedures (SOPs) in the O&M Program and corresponding Manual. This shall include a current training program for the purpose of informing new employees and maintaining training levels for current employees in regards to the CSO O&M Program and corresponding Manual, including safety related concerns.
- e. The permittee shall implement an O&M Program & Manual that includes, at a minimum the following:
 - i. A directory of appropriate O&M staff, including a description of their individual responsibilities and emergency contact information.
 - ii. A description of the permittee's Fats, Oils and Greases (FOG) Program (if applicable).
 - iii. Details regarding operations for the treatment works owned/operated by the permittee as set forth in SOPs as described in Part IV.F.1.f, Part IV.F.1.g and Part IV.F.1.h.
 - iv. An Emergency Plan as described in Part IV.F.1.i.
- f. The permittee shall include in the O&M Program and corresponding Manual, a System Cleaning Program to address the following:
 - i. The System Cleaning Program shall be designed to ensure the entire collection system, including, but not limited to, tide gates, outfalls and regulators, is sufficiently clean in order to function properly and minimize CSO-related street flooding.

- ii. The System Cleaning Program shall be designed to ensure that the entire collection system is sufficiently clean which can be accomplished through regular inspection and, if necessary, cleaning. Such inspection and cleaning should be done, such that within five years, the entire system has been covered. Specifically, for the City of Elizabeth, the total system is approximately 200 miles long. Critical portions of the system, such as regulators, solids/floatables facilities, and tide gates, may benefit even more from frequent inspection.
- iii. The System Cleaning Program shall include an annual certification that a minimum of 20% of the system (by linear feet/miles) shall have been inspected and, if necessary, cleaned, within the last year. Alternatively, if less than 20% of the system has been completed within the last year, the certification shall include a statement of how much of the system was inspected and, if necessary, cleaned, within the last year and a plan to ensure that 100% of the system is inspected and if necessary cleaned, by the expiration date of the permit. This is an annual requirement based on the calendar year, due February 1 of the following year and is part of the Operation and Maintenance Manual. The total length of the system in linear/feet shall also be defined. Updates on the System Cleaning Program shall also be provided in Progress Reports.
- g. The permittee shall also include SOPs in the O&M Program and corresponding Manual for the operation, inspections, and scheduled preventative maintenance in accordance with the appropriate manufacturer's recommendations and equipment manuals at a minimum, to ensure that the entire collection system that is owned/operated by the permittee that conveys flows to the treatment works will function properly.
- h. At a minimum, the SOPs shall contain detailed instructions for system operations, such as frequency of inspections, regular maintenance, and the timely repair, and documentation of such information, of the entire collection system that conveys flows to the treatment works. These SOPs shall include procedures to address the following items:
 - i. SOPs shall be designed to ensure that the entire collection system owned/operated by the permittee that conveys flows to the treatment works functions in such a way as to not result in sewage overflows (except from designated CSO outfalls) including to basements, streets and other public and private areas, or bottlenecks/constrictions that limit flow in specific areas and prevent the downstream STP treatment capacity from being fully utilized, in accordance with Section F.4.
 - ii. SOPs shall be designed to ensure that the storage and conveyance of combined sewage to the STP is maximized in accordance with Sections F.2 and F.4.
 - iii. SOPs shall be designed to ensure that the impacts from SIUs contributing to the CSOs that are owned/operated by the permittee are minimized in accordance with Section F.3.
 - iv. SOPs shall be designed to ensure there will be no dry weather overflows from any CSO that is owned/operated by the permittee in accordance with Section F.5.
 - v. SOPs to conduct a visual inspection program of sufficient scope and frequency of the CSS that is owned/operated by the permittee to provide reasonable assurance that unpermitted discharges, obstructions, damage, and DWOs will be discovered.
 - vi. SOPs shall be designed to ensure the solids/floatables appurtenances that are owned/operated by the permittee will be maintained and the solids/floatables will be removed from the CSO discharge and disposed of properly at such frequency so as not to cause obstructions of flow for any future CSO discharges, in accordance with Part II of this permit and Section F.6.

- vii. SOPs designed to prevent the Intrusion upstream due to high tides and/or receiving water flooding into the entire collection system owned/operated by the permittee that conveys flows to the treatment works through proper operation and maintenance.
- viii. SOPs designed to provide a gravity sewer and catch basin inspection schedule and clean as necessary for the collection system that is owned/operated by the permittee.
- ix. SOPs shall be designed to provide a system for documenting, assessing, tracking, and addressing residential complaints regarding blockages, bottlenecks, flow constrictions, sewer overflows including to basements, streets and other public and private areas, or related incidents for the collection system that is owned/operated by the permittee.
- x. Unless written extension is granted by the Department for extraordinary circumstances, the SOP shall be designed to ensure removal within seven (7) calendar days of the permittee becoming aware of any obstructions within the collection system that is owned/operated by the permittee that are directly causing any CSO overflows due to debris, Fats, Oils and Greases and sediment buildup, or other foreign materials.

The SOP shall be designed to ensure removal of any other obstructions that are contributing to overflows due to debris, Fats, Oils and Greases and sediment buildup, or other foreign materials in the collection system owned/operated by the permittee on a scheduled basis as necessary for the proper operation of the system.

- xi. Require immediate steps to take corrective action(s) to repair damage and/or structural deterioration, address unpermitted discharges, and eliminate DWOs of the entire collection system owned/operated by the permittee that conveys flows to the treatment works.
 - xii. Provide reduction strategies to resolve excessive I/I through the identification of I/I sources and the prioritization and implementation of I/I reduction projects within the collection system that is owned/operated by the permittee.
 - xiii. Provide procedures whereby wet weather flows are maximized for conveyance to the STP.
- i. The O&M Manual shall specifically address, at a minimum, the following details for the treatment works' infrastructure owned/operated by the City of Elizabeth:
- Normal and Alternate operating positions;
 - Start-up, shut-down, and draining procedures;
 - Process control;
 - Fail-safe features;
 - Emergency operating procedures;
 - Common operating and control problems;
 - Out-of-service procedures;
 - Alternate operating procedures;
 - Instrumentation and controls;
 - Engineering design information;
 - and
 - Schedules and procedures of the preventative maintenance program and corrective maintenance procedures, or references to these procedures in the manufacturer's maintenance manuals for the treatment works' infrastructure.

- j. The permittee shall also include an Emergency Plan (https://www.nj.gov/dep/dwwq/erp_home.htm) in the O&M Program and corresponding Manual in accordance with N.J.A.C. 7:14A-6.12(d). The Emergency Plan shall provide for, to the maximum extent possible, uninterrupted treatment works operation during emergency conditions using in-house and/or contract based including those emergencies caused by natural disaster, civil disorder, strike, sabotage, faulty maintenance, negligent operation or accident. At a minimum, the Emergency Plan shall include:

- SOPs which ensure the effective operation of the treatment works under emergency conditions, such as extreme weather events and extended periods of no power.

- A Vulnerability Analysis" that estimates the degree to which the treatment works would be adversely affected by each type of emergency situation which could reasonably be expected to occur. A Vulnerability Analysis shall include, but is not limited to, an estimate of the effects of such an emergency upon the following: power supply; communication equipment; supplies; personnel; security and emergency procedures to be followed."

- k. The permittee shall review annually the O&M Program & Manual and update it as needed to reflect updated information and changes in the characterization, design, construction, operations, maintenance, Emergency Plan, and SOPs as listed in Section F.1, and include verification that the O&M Program and corresponding Manual has been prepared and updated in accordance with Section D.
- l. The permittee shall continue to update an Asset Management Plan (<https://www.nj.gov/de/assetmanagement/pdf/asset-management-plan-guidance.pdf>), as part of the overall O&M strategy, which shall be updated on an annual basis. The Asset Management Plan shall include the following, at a minimum:

- Five basic components: asset inventory/mapping and condition assessment; level of service; criticality/prioritization assessment; life-cycle costing; and long-term funding strategy of the treatment works.

- Infrastructure inventory with infrastructure repair/replacement needs listed and scheduled according to priority/criticality, that demonstrates the entire collection system owned/operated by the permittee that conveys flows to the treatment works is perpetually and proactively managed with the appropriate resources (capital, staffing, training, supplies, equipment).

2. Maximum use of the collection system for storage

- a. The permittee shall continue to use the entire collection system owned/operated by the permittee for in-line storage of sewage for future conveyance to the STP when sewer system flows subside by ensuring that the sewage is retained in the sewer system to the extent practicable to minimize CSO discharges (i.e. volume, frequency and duration), while not creating or increasing sewage overflows, including to basements, streets and other public and private areas.
- b. The permittee shall minimize the introduction of sediment and obstructions in the entire collection system owned/operated by the permittee that conveys flows to the treatment works pursuant to Sections F.1. and F.7.
- c. The permittee shall operate and maintain the entire collection system owned/operated by the permittee that conveys flows to the treatment works pursuant to Section F.1.

- d. The permittee shall identify and implement minor modifications, based on the ongoing evaluations, to enable appropriate segments of the collection system owned/operated by the permittee to store additional wet weather flows to reduce any CSOs until downstream sewers and treatment facilities can adequately convey and treat the flows.

3. Review and modification of pretreatment requirements to assure CSO impacts are minimized

- a. For the SIU dischargers upstream of any CSO outfall which is owned/operated by the permittee, the permittee shall: (1) determine the locations of the SIUs; (2) identify the CSO outfalls associated with each of the SIUs; and (3) determine the discharge volume and loading of SIU-permitted parameters for each SIU. In the case of a municipal permittee or non-delegated STP permittee, information to satisfy (1) and (3) shall be obtained from the delegated local agency that regulates the SIU or, if there is no delegated local agency, from the Department. The permittee should continue to implement selected CSO controls to minimize CSO impacts resulting from nondomestic discharges. This information shall be used to prioritize O&M activities in portions of the CSS affected by SIU discharges.

4. Maximization of flow to the POTW for treatment

- a. The permittee shall continue to operate and maintain the entire collection system owned/operated by the permittee that conveys flows to the treatment works to maximize the conveyance of wastewater to the STP for treatment subject to existing capacity.
- b. The permittee shall continue to implement alternatives for increasing flow to the STP.
 - i. Capacity evaluations of the entire collection system owned/operated by the permittee that conveys flows to the treatment works in accordance with Section F.1.f to determine the maximum amount of flow that can be stored and transported.
 - ii. Identification of other activities conducted and/or planned to further maximize flow to the POTW.

5. Prohibition of CSOs during dry weather

- a. Dry weather overflows (DWOs) are prohibited from any CSO outfall in the entire collection system owned/operated by the permittee.
- b. All DWOs must be reported to the Department as incidents of non-compliance in accordance with the requirements at N.J.A.C. 7:14A-6.10(c) and (e), along with a description of the corrective actions taken.
- c. The permittee shall inspect the combined sewer system as required under Section F.1 to minimize the potential of DWOs and to abate DWOs that occur.
- d. The permittee shall prohibit any connections, including but not limited to construction dewatering, remediation activities or similar activities, downstream of a CSO regulator, that will convey flow to the CSO during dry weather. On a case-by-case basis, the Department reserves the right to allow temporary use of the CSO outfall structures for other types of discharges to address extraordinary circumstances. Any use under this provision must be specifically approved by the Department.

6. Control of Solids/Floatables in CSOs

- a. The permittee shall continue to implement measures to capture and remove solids/floatables which cannot pass through a bar screen having a bar or netting spacing of 0.5 inches from all CSOs.
- b. The permittee shall not utilize treatment, including mechanical measures used to reduce the particle size of the solids/floatables in the wastewater collection system prior to discharge to the waters of the state to achieve compliance with paragraph F.6.a.
- c. The captured debris shall be removed from each solids/floatables control system as necessary to ensure that there will be no flow restrictions during the next CSO discharge event.
- d. All captured debris removed from the solids/floatables control system must be disposed of properly at a permitted solid waste facility authorized to accept grit and screening materials from wastewater treatment facilities in accordance with N.J.A.C. 7:14A and Part II of this permit.

7. Implementation of Pollution Prevention Measures

- a. The permittee shall continue to implement and upgrade pollution prevention measures necessary to prevent and limit contaminants from entering the entire collection system owned/operated by the permittee that conveys flows to the treatment works. Unless demonstrated to the Department to be impracticable measures, shall include, but not be limited to, the following:
 - i. Implementation of a regular street cleaning program.
 - ii. Retrofitting of existing storm drains to meet the standards in Appendix A, where such inlets are in direct contact with repaving, repairing (excluding repair of individual potholes), reconstruction, resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen) or alterations of facilities owned/operated by the permittee. For exemptions to this standard see "Exemptions" listed in Appendix A.
 - iii. Implementation of stormwater pollution prevention rules and ordinances.
 - iv. Implementation of solid waste collection and recycling ordinances.
 - v. Implementation of public education programs.
- b. The permittee shall enforce rules and regulations on illegal connections and unauthorized discharge(s) into the POTW.

8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts

- a. The permittee shall ensure that CSO Identification Signs are posted and maintained at every CSO outfall location identified in Part III of this permit. The signs shall conform to the following specifications unless alternatives have been approved by the Department.
 - i. Signs shall be installed in such a manner as to have the same information visible from both the land and from the water, within 100' from the outfall pipe along the shoreline.
 - ii. Signs shall be at least 18" x 24" and printed with reflective material.
 - iii. Signs shall be in compliance with applicable local ordinances.

iv. The signs shall depict the following information below:

- Warning, possible sewage overflows during and following wet weather. Contact with water may also cause illness.
- Report dry weather discharge to NJDEP Hotline at 1 (877) 927-6337 (WARN-DEP).
- Report foul odors or unusual discoloration to NJDEP Hotline or (Permittee) at (phone number).
- NJPDES Permit Number NJ0108782
- Discharge Serial No. (eg. 001A).
- www.state.nj.us/dep/dwq/cso.htm
- Signs that depict symbols prohibiting swimming, fishing and kayaking.

b. The permittee shall continue to employ measures to provide reasonable assurance that the affected public is informed of CSO discharges in a timely manner. These measures shall include, but are not limited to, the items listed below:

- i. Posting leaflets/flyers/signs with general information at affected use areas such as beaches, marinas, docks, fishing piers, boat ramps, parks and other public places (within 100 feet of outfall) to inform the public what CSOs are, the location(s) of the CSO outfall(s) and the frequency and nature of the discharges and precautions that should be undertaken for public health/safety and web sites where additional CSO/CSS information can be found.
- ii. Notification to all residents by either US Postal Service or email, (with copies sent to the NJDEP) in the permittee's sewer service area. This notification shall provide additional information as to what efforts the permittee has made and plans to continue to undertake to reduce/eliminate the CSOs and related threat to public health. Updated notifications shall be mailed on an annual basis.
- iii. The permittee shall maintain on a daily basis a CSO Notification System website to inform interested citizens of CSO discharges that are occurring or have occurred.

9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls

- a. The permittee shall monitor the CSO discharge events and record the date, "duration of discharge", rainfall, location of rain gauge and quantity of solids/floatables removed for each CSO and discharge event through appropriate modeling or by an appropriately placed flow meter/totalling device, level sensor, or other appropriate measuring device, and report the required information on the MRF as required by Part III of this permit.

G. LONG TERM CONTROL PLAN REQUIREMENTS

1. Characterization Monitoring and Modeling of the Combined Sewer System

- a. As required by the 2015 NJPDES CSO permit, the City of Elizabeth submitted the "Sewer System Characterization Work Plan: Quality Assurance Project Plan" dated December 2015, revised May 12, 2016 and amended June 13, 2016 and the System Characterization Report dated the June 27, 2018 and revised December 5, 2018. The work plan and the System Characterization Report were approved by the Department on May 26, 2016 and January 17, 2019, respectively.
- b. The major elements of the sewer system characterization are noted below where additional detail is included on these topics within the report:
 - i. Rainfall Records;

- ii. Combined Sewer System Characterization;
- iii. CSO Monitoring; and
- iv. Modeling

2. Public Engagement

- a. The permittee shall conduct a public engagement process to inform, educate and engage members of the hydraulically connected communities. The goal of this process is to generate participation and collect input from the affected community and interested public.
- b. The permittee shall develop a CSO Supplemental Team to serve as a liaison between the affected community, interested public and the decision makers for the permittee regarding the implementation of the CSO control alternatives. The CSO Supplemental Team shall be reconstituted with the goal of including members of the following groups, at a minimum, where possible: mayor's office, local planning board, local community groups and residents from the affected areas and from any affected areas that are also overburdened communities. The permittee shall solicit members of its community to join the CSO Supplemental Team through various outreach and public notice activities. The permittees efforts to recruit CSO Supplemental Team members shall be documented on the permittee's website.
- c. The permittee is required to hold regular CSO Supplemental Team meetings that are open to the public (virtual, in person or a combination of both) in order to:
 - i. Inform the affected community and interested public of the ongoing process of implementing the LTCP including reports of project status and its present impact on the local community including consideration of locating specific meetings in the affected neighborhood.
 - ii. Continue to identify areas of combined sewer-related flooding.
 - iii. Allow the affected community and interested public an opportunity to provide input on the siting of GI as required by the permit.
 - iv. Engage the affected community and interested public in solutions they can implement to reduce CSOs. Examples may include an adopt-a-catch-basin program, rain barrels, water conservation, the removal of impervious surfaces, and the installation of green infrastructure projects.
 - v. Neighborhood specific information on construction of CSO control projects throughout the process including before and during construction in order to receive feedback from the community. This should include the posting of information on scheduling of street closures as well as any potential impacts to the residents in the vicinity of any CSO mitigation projects.
- d. The frequency of CSO Supplemental Team meetings that are open to the public shall be determined by the milestones in the Implementation Schedule (See G.8.) and by input from the affected community and interested public. Meetings should be held with accessibility for the interested public in mind. This may include varying start times and attendance options (availability of public transit or parking and virtual meetings), as fits the needs of interested public and affected community.

- e. The permittee shall engage with overburdened communities (OBC) within combined sewer service areas in order to solicit representation and engagement, ensure the OBCs' awareness of the meeting schedule, and encourage participation. The Department published a list of overburdened communities in the State and associated electronic mapping available at <https://www.nj.gov/dep/ej/communities.html>.
- f. The permittee must designate one LTCP outreach coordinator. This coordinator (or any another person designated by the permittee) should be available to maintain regular communication with the affected community and interested public including, but not limited to.
 - i. Maintain a website that acts as a clearinghouse for information regarding implementation of the LTCP.
 - The website shall contain public engagement information and include a platform for the interested public to sign up and attend any meetings.
 - The website shall contain any progress reports required to be submitted by this permit.
 - The website shall also list the construction status of any project identified in the Implementation Schedule in Section G.8. below.
 - ii. Engage the affected community and interested public in order to solicit individuals who are willing to become involved.
 - iii. Post meeting invitations (including dates and times) on the website at least one month in advance.
 - iv. Post handouts or other meeting materials on the website within one week after the meeting.
 - v. Make data available on the amount of public feedback received including the number of meeting attendees.
 - vi. Any project identified in the Implementation Schedule in Section G.8. below must display signage indicating that the project is required by the LTCP.
- g. The Department's Office of Environmental Justice (see <https://dep.nj.gov/ej/>) shall be given 30 days advance notice of the meeting schedule so that it can be shared with Environmental Justice community leaders.
- h. Public meetings shall be live streamed and made available to the affected community and interested public for viewing afterwards including materials in the language(s) appropriate to the majority of community demographics.
- i. Outreach materials, including physical handouts and websites, should be produced in the language(s) appropriate to the majority of community demographics.

3. Consideration of Sensitive Areas

- a. This renewal permit action requires that the CSO outfalls identified in the Identification of Sensitive Areas Report as discharging to a Sensitive Area be given priority with respect to controlling overflows through the LTCP implementation of CSO control projects to meet the minimum 85% wet weather capture requirement consistent with the Presumption Approach.

- b. The permittee is required to prohibit new or significantly increased CSOs and to eliminate or relocate CSOs that discharge to sensitive areas wherever physically possible and economically achievable. Additionally, where elimination or relocation is not physically possible and economically achievable, or would provide less environmental protection than additional treatment, the permittee is required to provide the level of treatment for the remaining CSOs deemed necessary to meet water quality standards for full protection of existing and designated uses.

4. Evaluation of Alternatives

- a. The "Presumption" Approach, in accordance with N.J.A.C 7:14A-11 Appendix C provides:

A program that meets any of the criteria listed below will be presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA, provided the Department determines that such presumption is reasonable in light of the data and analysis conducted in the characterization, monitoring, and modeling of the system and the consideration of sensitive areas described above.

Combined sewer flows remaining after implementation of the NMCs and within the criteria specified in this Section at G.4.f.i. and ii. shall receive minimum treatment in accordance with the items below:

- Primary clarification (removal of floatables and settleable solids may be achieved by any combination of treatment technologies or methods that are shown to be equivalent to primary clarification),
- Solids and floatables disposal, and
- Disinfection of effluent, if necessary, to meet WQS, protect designated uses and protect human health, including removal of harmful disinfection chemical residuals/by-products (e.g. chlorine produced oxidants), where necessary.

The permittee must demonstrate any of the following three criteria below:

- i. No more than an average of four overflow events (see below) per year from a hydraulically connected system as the result of a precipitation event that does not receive the minimum treatment specified below. The Department may allow up to two additional overflow events per year. For the purpose of this criterion, an 'event' is:
 - In a hydraulically connected system that contains only one CSO outfall, multiple periods of overflow are considered one overflow event if the time between periods of overflow is no more than 24 hours.
 - In a hydraulically connected system that contains more than one CSO outfall, multiple periods of overflow from one or more outfalls are considered one overflow event if the time between periods of overflow is no more than 24 hours without a discharge from any outfall.
- ii. The elimination or the capture for treatment of no less than 85% by volume of the combined sewage collected in the CSS during precipitation events on a hydraulically connected system-wide annual average basis.

- iii. The elimination or removal of no less than the mass of the pollutants, identified as causing water quality impairment through the sewer system characterization, monitoring, and modeling effort, for the volumes that would be eliminated or captured for treatment under Section G.4.f.ii.
- b. This renewal permit action identifies that adequate and effective CSO control measures are required to be implemented that are consistent with the Federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. These permit conditions are included in Part IV.G.8.
- c. This permit renewal includes an implementation schedule as well as specific requirements to track and assess compliance with the attainment of wet weather percent capture. In order to evaluate the performance of the CSO control measures, the permittees are required to demonstrate progress in percent reduction through the use of the H&H model to attain greater than 85% wet weather capture upon completion of CSO LTCP measures.

5. Cost Performance Considerations

- a. This renewal permit action identifies that adequate and effective CSO control measures are being implemented consistent with the Federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. This renewal permit sets forth an implementation schedule in Part IV.G.8.

6. Operational Plan

- a. Throughout implementation of the LTCP as appropriate, the permittee shall update the Operational Plan, including Operation & Maintenance (O&M) Manual, Emergency Plan, and Asset Management Plan in accordance with F.1, to address the LTCP CSO control facilities and operating strategies, including but not limited to: the implementation, operation, maintenance of Green Infrastructure; staffing and budgeting; and I/I. Climate change resilience requirements shall also be considered in the update of these plans.

7. Maximizing Treatment at the Existing STP

- a. The permittee shall continue to operate and maintain the entire collection system owned/operated by the permittee that conveys flows to the treatment works to maximize treatment at the hydraulically connected STP.

8. Implementation Schedule

- a. The permittee shall implement CSO control projects in accordance with the LTCP construction schedule
- b. Implementation Schedule is as follows:.
 - i. Year One (EDP to EDP + 1 year): Complete construction of South Second Street Stormwater Control Project; Complete construction Sewer Separation for CSO Basin 012 Sewer Separation; Commence construction of Atlantic Street CSO Storage Facility; Commence design for Trenton Avenue Pumping Station – Phase 2 upgrade.
 - ii. Year Two (EDP + 1 year to EDP + 2 years): Complete construction of Atlantic Street CSO Storage Facility.
 - iii. Year Three (EDP + 2 years to EDP + 3 years): Award detailed design contract for Park Avenue Stormwater Control Project (contingent on legal agreement with Roselle Park for removal of storm sewer connection).

- iv. Year Four (EDP + 3 years to EDP + 4 years): Award detailed design contract for CSO Basin 037 Sewer Separation.
- v. Year Five (EDP + 4 years to EDP + 5 years): Solicit bids for construction of Green Infrastructure Pilot Program; complete detailed design of Trenton Avenue Pumping Station - Phase 2 upgrade.

9. Compliance Monitoring Program (CMP) – Post Construction Compliance Monitoring Plan (PCCMP)

- a. The permittee shall implement a Compliance Monitoring Program (CMP) adequate to: verify baseline and existing conditions, the effectiveness of CSO control measure, compliance with water quality standards, and protection of designated uses. The CMP shall be conducted before, during and after implementation of the LTCP. The NJCSO Group Compliance Monitoring Program Report dated June 30, 2018, revised October 5, 2018 was submitted and subsequently approved by the Department on March 1, 2019.
- b. The portion of the CMP conducted during and after implementation of the LTCP is referred to as the Post Construction Compliance Monitoring Plan (PCCMP). The main elements of the PCCMP shall include:
 - i. A process to determine whether the CSO control measures are meeting the interim required percent capture milestone set forth in the LTCP or the final required percent capture of no less than 85% by volume of the combined sewage collected in the CSS during precipitation events is eliminated or captured for treatment on a system-wide annual average basis as defined in the Federal CSO Policy. The PCCMP shall provide data to evaluate the effectiveness of the CSO control measures constructed during and after the implementation of the LTCP.
 - ii. A monitoring schedule, regulator monitoring locations, receiving water sampling locations, and rain gauge locations.
 - iii. The approach for analysis of the PCCMP data for assessing the performance of CSO control measures and for reporting progress to regulatory agencies and the general public. The PCCMP shall evaluate the incremental reduction in overflow rates and volumes as the CSO control measures are placed into operation.
 - iv. A Public Notification System to notify the public of the occurrence of combined sewer overflows for each receiving water body.
- c. The PCCMP shall include the implementation of a rainfall and hydraulic monitoring program, as well as a detailed analysis and evaluation of the CSO control measures' efficacy. Through a calibrated/validated H&H model, a continuous simulation on the system-wide annual average shall be run to compare the remaining CSO discharge volume to baseline conditions and determine whether the CSO control measures have achieved the interim required percent capture or the final required percent capture.
- d. During and after the implementation of the LTCP, the PCCMP shall use the following steps to determine if the CSO control measures are meeting the interim required percent capture or the final required percent capture:
 - i. Collect flow monitoring for a 1-year period and rainfall data for a 1-year period during the effective NJPDES permit. Perform QA/QC on the data. Note that this is separate from the monthly monitoring form data;

- ii. At the end of the effective NJPDES permit, update the H&H model to include all completed CSO control measures and any other modifications to the CSS since the H&H model was calibrated for the LTCP;
 - iii. Calibrate and/or validate the updated H&H model, if needed, using the flow and rainfall data collected during the effective NJPDES permit. Any recalibration of the H&H model shall be approved by the Department; and
 - iv. Perform continuous simulation using the updated H&H model on the system-wide annual average and calculate the percent capture to determine if the interim required percent capture or the final required percent capture is being achieved.
- e. The permittee shall conduct interim post-construction compliance monitoring every five years as established in the LTCP. Such monitoring shall assess the projects and implementation schedule including attainment of percent capture milestones set forth in the LTCP. These projects shall be monitored and analyzed to determine if they are operating as intended and whether the implementation of projects under the LTCP are achieving the interim required percent capture milestones set forth in the LTCP. If the PCCMP determines that the implemented CSO control measures do not meet the interim required percent capture or the final required percent criteria, an evaluation must be included in the Adaptive Management Plan in accordance with H. below.
- f. The permittee shall submit an Interim PCCMP Report on or before 54 months from the effective date of the permit (EDP). The report shall include:
- i. A statement setting forth the deadlines and other terms that the permittees were required to meet in the effective NJPDES permit;
 - ii. A summary of principal contacts with the Department during the effective NJPDES permit relating to CSOs or implementation of the LTCP;
 - iii. NJPDES permit violations, including but not limited to dry weather overflows;
 - iv. A summary of flow and hydraulic monitoring data collected by the permittees during the effective NJPDES permit;
 - v. A description of the CSO control measures completed within the effective NJPDES permit and a projection of CSO control measure work to be performed during the subsequent renewal NJPDES permit;
 - vi. An evaluation of the effectiveness of the CSO control measures constructed in the effective NJPDES permit to determine if the interim required percent capture is achieved; and
 - vii. A summary of any proposed adjustments to the components of the LTCP.
- g. Upon implementation of all the LTCP CSO control measures, the monitoring information collected from the ambient baseline monitoring phase of the BCMP shall be compared to the post-construction compliance monitoring to evaluate the effectiveness of CSO control measures implemented to verify that the remaining CSOs are not precluding the attainment of water quality standards.
- h. The PCCMP must contain data from the on-going New Jersey Harbor Discharger Group Monitoring Network. This data is required to supplement the existing data to represent future conditions. This will ensure consistency for sampling stations, parameters etc.

- i. A Final PCCMP Report shall be submitted to the Department within 30 months after the last LTCP project has been constructed and is in operation. The single Final PCCMP Report shall evaluate and document the system-wide performance of the LTCP CSO control measures. The Report shall include an assessment of whether the control measures are meeting the final required percent capture and complying with water quality standards. The report shall include:
 - i. A complete post-construction compliance monitoring period data summary and analysis;
 - ii. A reporting of all of the CSO control measures that have been constructed, implemented, and that are in operation;
 - iii. An evaluation of the CSO control measures' performance, and whether the controls meet the final required percent capture;
 - iv. A description of any actions that were needed to be implemented to meet the interim required percent capture or the final required percent capture; and.
 - v. An assessment of whether the control measures are complying with water quality standards

10. Permittee's LTCP Responsibilities

- a. The City of Elizabeth (NJPDES Permit No. NJ0108782) and JMEUC (NJPDES Permit No. NJ0024741) are a hydraulically connected combined sewer system. The permittees own/operate separate portions of one hydraulically connected combined sewer system.
- b. The permittee is responsible for implementing CSO control measures to ensure compliance with the Federal CSO Control Policy and N.J.A.C. 7:14-11, Appendix C as outlined in the Implementation Schedule located in Section G.8. Since multiple permittees own/operate different portions of a hydraulically connected CSS, the permittee is required to work cooperatively and provide the necessary information with all other CSO permittees to ensure overall compliance. In addition, each permittee is required to institute necessary measures in accordance with the Implementation Schedule for only the portion of the hydraulically connected system that the permittee owns/operates and provide this information to the other permittees for compliance with the Federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C.

H. Custom Requirement

1. Precipitation Trends

- a. The following information shall be submitted to the Department as part of the NJPDES permit renewal application:
 - i. The permittee shall analyze and submit the annual precipitation depth obtained by the National Oceanic Atmospheric Administration (NOAA) at the Newark Liberty International Airport in order to determine the annual precipitation depth during the effective period of the permit.
 - ii. The permittee shall determine and submit the annual precipitation depth for each calendar year, such that by the end of the permit, the most recent five calendar years of data has been collected. The permittee shall compare this data to assumptions utilized in the development of the LTCP.
 - iii. This information shall be submitted to the Department with the NJPDES renewal application with an assessment of any change in precipitation trends.

2. Adaptive Management Plan

- a. An Adaptive Management Plan shall be submitted on or before 54 months from the effective date of the permit (EDP) if any of the following occurs:
 - i. An Interim or the Final PCCMP Report determines that the implemented CSO control measures do not meet the interim required percent capture or the final required percent capture as per Part IV.G.9.e. above;.
 - ii. A permittee requests to modify the implementation schedule and/or CSO control measures in the implementation schedule; and/or
 - iii. The precipitation trends required in Part IV.H.1 above demonstrates a change in the assumptions used in the development of the LTCP.
- b. If an Interim or the Final PCCMP Report determines that the implemented CSO control measures do not meet the interim required percent capture or the final required percent capture, the Adaptive Management Plan shall include:.
 - i. Modified or additional CSO control measures to achieve the interim required percent capture or the final required percent capture;.
 - ii. A detailed analysis and a modified implementation plan and schedule of the CSO control measures; and
 - iii. Inclusion of any adaptive management modifications based on an Interim or the Final PCCMP Report.
- c. If a permittee requests to modify the implementation schedule and/or CSO control measures in the implementation schedule by incorporating new technologies, group similar control measures to reduce cost, increase wet weather, change the order of the control measures and/or accelerate the schedule. If such a request occurs, the Adaptive Management Plan shall include:.
 - i. A detailed analysis of the modified and/or new CSO control measures including verification that the interim required percent capture or the final required percent capture will be achieved; and.
 - ii. A modified implementation plan and schedule of the CSO control measures.

Appendix A

Design Standards for Storm Drain Inlets

Grates in pavement or other ground surfaces, such as roads (including bridges), driveways, parking areas, bikeways, plazas, sidewalks, lawns, fields, open channels and stormwater basin floors used to collect stormwater from the surface into a storm drain or surface water body, shall meet the following standards:

1. The New Jersey Department of Transportation (NJDOT) bicycle safe grate standards described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines (April 1996).
2. A grate where each individual clear space in that grate has an area of no more than seven (7.0) square inches, or is not greater than 0.5 inches across the smallest dimension.
3. For curb-openings inlets, including curb-opening inlets in combination inlets, the clear space in the curb opening, or each individual clear space if the curb opening has two or more clear spaces, shall have an area of no more than seven (7.0) square inches or be no greater than two (2.0) inches across the smallest dimension.

The following exemptions apply:

1. Where each individual clear space in the curb opening in existing curb-opening inlets do not have an area of more than nine (9.0) square inches.
2. Where the review agency determines that the standards would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets.
3. Where flows from the water quality design storm as specified in N.J.A.C. 7:8 are conveyed through any device (e.g., end of pipe netting facility, manufactured treatment device, or a catch basin hood) that is designed, at a minimum, to prevent delivery of all solid and floatable materials that could not pass through one of the following:
 - a. A rectangular space four and five-eighths inches long and one and one-half inches wide (this option does not apply for outfall netting facilities); or
 - b. A bar screen having a bar spacing of 0.5 inches.
4. Where flows are conveyed through a trash rack that has parallel bars with one inch (1") spacing between the bars, to the elevation of the water quality design storm as specified in N.J.A.C. 7:8.
5. Where the Department determines, pursuant to the New Jersey Register of Historic Places Rules at N.J.A.C. 7:4-7.2(c), that action to meet the standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property.