



State of New Jersey

PHIL MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
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SHAWN M. LATOURETTE
Commissioner

TAHESHA L. WAY
Lt. Governor

Via Email Only
February 7, 2024

Richard J. Wolff, Executive Director
North Hudson Sewerage Authority
1600 Adams Street
Hoboken, NJ 07030

Re: Draft Surface Water Renewal Permit Action
Categories: A – Sanitary Wastewater (IP)
CSM – Combined Sewer Management (IP)
NJPDES Permit No. NJ0026085
Adams Street Wastewater Treatment Plant (WWTP)
Hoboken City, Hudson County

Dear Mr. Wolff:

Enclosed is a **final** NJPDES permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. The existing facility discharges treated and disinfected domestic wastewater into the Hudson River classified as SE2 (C2) waters. The existing facility has a NJPDES permitted flow value of 20.8 million gallon per day (MGD) through outfall Discharge Serial Number (DSN) 001A. This existing facility also owns/operates seven (7) combined sewer overflow (CSO) outfalls which are equipped with solids/floatables controls. These CSO outfalls discharge into the Hudson River which is classified as SE2 (C2) waters.

Comments were received on the draft permit issued on March 3, 2023. The public comment period began on March 13, 2023 when the public notice was published in the *Jersey Journal*, as shown here: <https://www.njpublicnotices.com>. It ended on May 15, 2023, encompassing a total of sixty-four (64) days. A Public Notice was also published in the *DEP Bulletin* on March 15, 2023, as shown here: <http://www.state.nj.us/dep/bulletin>. 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.

Please note that semi-annual Wastewater Characterization Report (WCR) sampling, as required by the existing permit, shall be conducted between January 1, 2024 and June 30, 2024 in accordance with the schedule as included in the

Department's on-line portal (<http://www.nj.gov/dep/online/>). The new semi-annual WCR sampling for the purposes of this renewal permit shall be conducted between July 1, 2024 and December 31, 2024 (and subsequent monitoring periods thereafter according to the same schedule). The new quarterly WCR sampling shall be conducted between April 1, 2024 and June 30, 2024 (and subsequent monitoring periods thereafter according to the same schedule).

Please note, the draft permit issued on March 3, 2023 contained minor errors in Part III. See Attachment A of this cover letter for more information.

This renewal permit serves to implement the initial five years of the Long Term Control Plan Implementation Schedule as established by the permittee and as approved in the Administrative Compliance Agreement executed by the Department and NHSA dated February 6, 2024. 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.

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 Molly Jacoby either by phone at (609) 292-4860 or email at Molly.Jacoby@dep.nj.gov.

Sincerely,

A handwritten signature in blue ink that reads "Susan Rosenwinkel". The signature is written in a cursive, flowing style.

Susan Rosenwinkel
Assistant Director
Water Pollution Management Element

Enclosures

cc: Permit Distribution List
Masterfile #: 7579; PI #: 46440

Attachment A

In the draft permit issued on March 3, 2023, two parameters (Alpha Endosulfan and Sulfide-Hydrogen Sulfide) were inadvertently included in the Quarterly WCR in Table III-A-3 in Part III, as shown here:

Alpha Endosulfan	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Sulfide-Hydrogen Sulfide(undissociat)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Alpha Endosulfan was intended to be included in the semi-annual WCR and has been moved to Table III-A-4.

Sulfide-Hydrogen Sulfide was not intended to be included in this permit action since there are no certified laboratories in New Jersey that test for the parameter. Additionally, Dissolved Oxygen and Odor serve as indicator parameters for this pollutant. Therefore, this parameter was removed from the final permit action.

Table of Contents

This permit package contains the items below:

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- 2. Table of Contents**
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- 6. Part I – General Requirements: NJPDES**
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- 10. Appendix A: RWBR Approval Status List**
- 11. Appendix B: 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
STP	Sanitary Treatment Plant
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 NJPDES draft Surface Water Renewal Permit Action No. NJ0026085 issued on March 3, 2023 to North Hudson Sewerage Authority (NHSA) for its Adams Street Wastewater Treatment Plant (WWTP). The public comment period began on March 13, 2023 when the Public Notice was published in the *Jersey Journal*. It ended on May 15, 2023, encompassing a total of sixty-four (64) days. 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 April 17, 2023 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 YouTube channel at <https://www.youtube.com/channel/UC2C011O4mVInYzqqwvFvSw>. 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 permit is available at www.nj.gov/dep/dwq/cso.htm and was posted on March 3, 2023.

It is important to note that NHSA owns and operates two WWTPs, Adams Street and River Road. While the Department issued draft permits for Adams Street WWTP and River Road WWTP on March 3, 2023 and March 6, 2023, respectively, and conducted a joint public comment period and joint hearings, this Response to Comments document only addresses those comments that apply to Adams Street WWTP. Comments on the River Road WWTP draft NJPDES permit will be addressed in a separate Response to Comments document in the final permit action for NJ0025321.

The Department has summarized the written comments and public testimony received on the draft NJPDES permit. To the best extent practicable, the Department has grouped the comments according to similar issues then by specific sections of the draft permit. 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	Supervisor, Clean Water Regulatory Branch, United States Environmental Protection Agency (US EPA) Region 2	1
Sewage Free Streets and Rivers	<i>Advisory Board Members:</i> Jose Amarte, Perth Amboy Green Team Suzanne Aptman, Program Manager, SFSR & New Jersey Future Amy Goldsmith, State Director, Clean Water Action Michele Langa, Staff Attorney, NY/NJ Baykeeper Nicole Miller, Co-Chair, Newark DIG (Doing Infrastructure Green) <i>Technical Advisors:</i> Rosana Pedro Nobre, The New York - New Jersey Harbor Estuary Program Chris Obropta, Rutgers Cooperative Extension Water Resources Program	2

	<i>Comments also signed by:</i> Association of New Jersey Environmental Commissions (Statewide) Clean Water Action (Statewide) Embankment Preservation Coalition (Jersey City, NJ) Future City Inc. (Elizabeth, NJ) Hackensack Riverkeeper (Hudson County, NJ) Hudson River Waterfront Conservancy (Hudson County, NJ) NewarkDIG (Newark, NJ) New Jersey Future (Statewide) NY/NJ Baykeeper Passaic River Coalition (Northern NJ) Pershing Field Park Neighborhood Association (Jersey City, NJ) Raritan Riverkeeper (Middlesex, Monmouth and Somerset Counties, NJ) Waterspirit (Statewide)	
Jersey Water Works CSO Committee	<i>Comments signed by:</i> Jersey Water Works CSO Committee Andy Kricun, CSO Committee co-chair Andrea Sapal, Program Coordinator	3
New Jersey Future	Patricia Dunkak, Policy & Program Coordinator	4
Amanda Jones	Resident, Jersey City, NJ	5

Testimony at Public Hearing on April 17, 2023		
Morning Session		
Person	Title / Affiliation	Commenter Number
Suzanne Aptman	Sewage Free Streets & Rivers New Jersey Future	6
Nicole Miller	Newark D.I.G.	7
Patricia Dunkak	New Jersey Future	4
Michele Langa	New York/New Jersey Baykeeper Hackensack River Keeper	8
Hailey Benson	North Bergen Earth Talks	9
Donald Stitzenberg	President, Hudson River Waterfront Conservancy	10
Noel Thurlow	Resilience Adventures or Resilience Paddle Sports	11
Evening Session		
Person	Title / Affiliation	Commenter Number
Suzanne Aptman	Sewage Free Streets & Rivers New Jersey Future	6
Donald Stitzenberg	President, Hudson River Waterfront Conservancy	10
Peter Farley	Self	2
Rachel Dawn Davis	Waterspirit	13

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

<u>Topics</u>	<u>Comment Numbers</u>
General	1-18
Fact Sheet Comments	19-20
Nine Minimum Control Requirements (Part IV.F)	21-39
Long Term Control Plan Requirements (Part IV.G)	40-121
Custom Requirement (Part IV.H)	122-131

GENERAL COMMENTS

1. **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 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 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]

2. **COMMENT:** We support the added elements that direct public engagement, climate resiliency, and environmental justice concerns, particularly where the permit language is clear and direct. We also see these first draft permits (this permit and the North Bergen MUA/Town of Guttenberg permit) as an opportunity to better address the concurrent issues around local flooding concerns, municipal stormwater planning and maintenance, and community-led efforts to improve the overall safety and wellbeing of residents. These permits are a meaningful step toward reducing, and in some instances eliminating, CSOs and related impacts in New Jersey. [2]
3. **COMMENT:** The Jersey Water Works CSO Committee thanks the NJDEP for all of its work on the CSO LTCP process from the very beginning of the initiative to its release of the first five-year CSO permits. [3]
4. **COMMENT:** Thank you to all of the NJDEP Division of Water Quality (DWQ) folks. I know you've been working really hard to get all these permits out and there's more to come, and so we're very thankful for that. [7]
5. **COMMENT:** Overall, New Jersey Future supports this draft permit as it will improve water quality and reduce combined sewer overflows. We appreciate that the permit addresses the following issues: climate resilience, green infrastructure, environmental justice, and increased public engagement. [4]
6. **COMMENT:** Thank you, NJDEP, for your hard work over the years getting us to this important point and for having these hearings, and for giving us ample opportunity to speak and share. [6]
7. **COMMENT:** I was born and raised in North Bergen, but as you know, this is a situation that affects all of us in Hudson County. I've borne witness to so many torrential downpours and the resulting sewage in my basement following. I'm so grateful that our nearby towns of West New York and Hoboken are being granted one of the seven regional permits to fix our destitute sewer systems. Thank you all for creating such a thorough permit. We are hopeful that these hearings will help to refine the documents so future permits have guidelines and a standard. [9]

RESPONSE (1-7): The Department appreciates the commenters' support of the work involved on the development of the NJPDES CSO permits and Long Term Control Plans (LTCP) which has led to the issuance of the draft NJPDES Discharge to Surface Water (DSW) permit for North Hudson Sewerage Authority (NHSA) Adams Street Wastewater Treatment Plant (WWTP). NHSA submitted the LTCP for this facility in June 2020 as required by the March 12, 2015 NJPDES CSO permits. This subject permit action serves to renew the 2015 NJPDES CSO Permit for NHSA Adams Street and incorporate the findings of the LTCP. NHSA Adams Street WWTP services the City of Hoboken, portions of Weehawken Township, and portions of the City of Union City.

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 development 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 provided comments on the NJPDES CSO permits. The Department also 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 the issues raised in these comments including climate change, environmental justice, water quality, and public engagement are a priority of the Department as evidenced by specific sections of the NJPDES permit which target these issues.

8. **COMMENT:** We appreciate the bilingual opportunity of virtual hearing. Are more languages going to be offered going forward before, during and after to achieve maximum engagement? [13]

RESPONSE (8): The Department issued the draft NJPDES CSO permit on March 3, 2023 and distributed the permit via email to an extensive stakeholder list which included notice of the virtual public hearings. A complete copy of the draft permits was also included on the Department's website on both the Division of Water Quality page and the NJDEP CSO page at www.nj.gov/dep/dwq/cso.htm. Consistent with N.J.A.C. 7:14A-15, the Department published a public notice in the *Jersey Journal* on May 15, 2023. The public notice specified a 60-day public comment period and scheduled two public hearings to be held on April 17, 2023 given the significant degree of public interest.

As noted in this comment, the public hearings were held virtually where a link was distributed via email to stakeholders in advance of the hearing. The opening statements for the public hearings were read in both English and Spanish given the prevalence of Spanish-speaking households within the hydraulically connected system. While the Department acknowledges that it may be beneficial to include additional languages at future public hearings, there has not been demand for additional languages at this time.

9. **COMMENT:** There are nine CSO outfalls into the Hudson River associated with this permit. That means the Hudson River is being impacted by pollution in this region more than in other areas. Therefore, water quality enhancements and enforcement should be accelerated. The importance of properly monitored water quality around CSO outfalls is key to the protection of public health and the environment and cannot be understated. This further underscores the need to accelerate the CSO reduction projects (namely the storage tanks) that are currently slated to be constructed in 2045. Common uses of the NJ waterways impacted by CSOs include secondary contact recreation such as paddling, fishing, and boating, as well as primary contact recreation like swimming and wading. According to information published by swim event organizers and compiled by Hudson Riverkeeper, as many as 7,700 people have taken part annually in open water swim events in the Hudson River, New York Harbor, and other waters affected by combined sewer overflows from both New York City and New Jersey communities. On average over the last 10 years, 4,500 people have participated annually in such events.

Of particular relevance to Hoboken, West New York and Weehawken are the New York City Triathlon, the 8 Bridges Hudson River Swim, and the 20- and 40-Bridges Swims which take place in the Hudson River in the stretch of river affected by overflows from these communities. These are among the highest profile swim events in the region, drawing both residents from New York and New Jersey, as well as athletes from around the world. Each of the 20- and 40-Bridges Swim events invite swimmers to circle Manhattan, and are part of the Triple Crown of Open Water Swimming (along with the English Channel and Catalina Channel). The New York City Triathlon is also the event that draws the most participants annually.

The bi-state nature of the Hudson River highlights the importance of coordination of CSO control efforts between NJDEP, New York State Department of Environmental Conservation, and New York City Department of Environmental Protection, and also shows the wide-ranging—and previously unforeseen—uses of the Hudson River, a formidable international icon and symbol of hope and renewal. While the current water quality criteria and designated uses may not currently support every use, these are the ways our communities regularly use their waters. The process of regular testing of outfalls, particularly when active, and easily accessible public notifications is a crucial resource to protect our communities and guests who use our waterways. [2]

- 10. COMMENT:** We know that the CSOs affect water quality. My group provides paddleboarding, kayaking, and environmental education to adults and youth. We serve several thousand people each year. While we're not running swimming events, per se, we are in the water, touching the water, and jumping in. My view is that the water belongs to all people. And for many urban communities, the Hudson River represents the only access to nature that they may have. We serve youth that maybe aren't going away on vacations to other places. It's an important resource. I use the water body advisory system from the North Hudson Sewerage Authority. I look at it, I check it, and I make decisions based on the fact that it's an important resource. However, it's limited, and so my questions are around, how, will, and can that be expanded? How will it be continued to, to provide real time information about CSO discharge or public health issues related to recreational use of the water? [12]

RESPONSE (9-10): The Department acknowledges that waters in and around CSO outfalls in New Jersey and New York are being used for recreation. The implementation of the LTCP for NHSA Adams Street WWTP will lead to a reduction of CSO discharges. Implementation of certain projects that will address street flooding and improve water quality by reducing CSOs began prior to this permit and are nearing completion. This includes integration of a 1-million gallon storage tank at ResilienCity Park (formerly known as Northwest Resiliency Park) to prevent stormwater from entering the combined sewer system (CSS) as well as improvements to Boulevard East to address street flooding. The Department maintains that these improvements should serve to enhance the designated uses of the waterbodies which could lead to more recreational opportunities. Additional information regarding the length of the implementation schedule and the additional storage tank is available in **RESPONSE 81** and **RESPONSE 89-92**.

The CSO Waterbody Advisory System pages on the NHSA's website (available at <https://www.nhudsonsa.com/waterbody-advisor-system>) provide the public with real-time information on CSO occurrences and CSO impacts. An interactive map of CSO outfall locations is provided to alert the public when a dry or wet weather CSO discharge occurs at an NHSA outfall to the Hudson River. The system uses level sensors in the sewer system to monitor and report CSO activity in real-time.

The Department has created a locational map of CSO outfalls as part of the NJDEP CSO Outfall Interactive Map in addition to other educational materials on the statewide CSO issue. Refer to the Department's website at <https://www.nj.gov/dep/dwq/cso.htm>.

Furthermore, it is not considered safe to swim around a CSO during a discharge event. Contaminants contributed by CSOs can include potentially high concentrations of suspended solids, biochemical oxygen demand (BOD), oils and grease, toxics, nutrients, floatables, pathogenic microorganisms, and other pollutants. Effluent sampling of CSOs during rain events has demonstrated that these levels are not safe for recreational use, and it is unlikely that additional water quality sampling would prove otherwise. Nevertheless, reduction of CSOs and the associated contaminants is consistent with the goals of the Clean Water Act and the Department.

- 11. COMMENT:** We encourage the NJDEP to work with the New York-New Jersey Harbor & Estuary Program (HEP) and other partners to expand on a public access tool for collecting recreational uses (both primary and secondary recreational uses) through this digital tool: <https://wikimapping.com/water-recreation.html>. Initiated by the Hudson Riverkeeper, Pratt Institute, Save the Sound, and assisted by HEP, the tool enables the public to document the various locations and defining routes that recreators use in New York State waters, including the shared waters of the Hudson River, Arthur Kill, Kill van Kull, Raritan Bay, and the Lower New York Bay. We believe expanding the scope of this tool would similarly be a very useful tool for New Jersey and recommend that NJDEP work with HEP and partners to expand this tool for recreational uses in New Jersey waters, specifically in the state's CSO-impacted

bodies of water. This information should inform reclassification of waters, particularly where swimming or other primary contact recreation is taking place in waters not currently managed for that use, and water quality standards should be updated to ensure that primary contact users are protected. LTCPs and permits should ultimately be updated accordingly to ensure that water quality standards are met. [2]

12. **COMMENT:** Regarding water quality, we recommend the Department partner with organizations such as New York-New Jersey Harbor & Estuary Program to expand this digital tool (<https://wikimapping.com/water-recreation.html>) for recreational uses in New Jersey waters, specifically in the state's CSO-impacted bodies of water. This information should inform reclassification of waters, particularly where swimming or other primary contact recreation is taking place in waters not currently managed for that use, and water quality standards should be updated to ensure that primary contact users are protected. [3]

RESPONSE (11-12): 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. The Department has reviewed the public access tool provided in this comment and notes that it is a survey that is designed to collect data on recreational uses by the public in the area of New York State. The Department applauds all efforts to enhance recreation to allow the enjoyment of our state's valuable water resources for the public and agrees that this tool could be expanded for New Jersey waters. However, while this is a useful tool, particularly in helping to understand public recreational uses, the Department maintains that a public access survey is separate from NJPDES permit conditions and is outside the purview of the federal CSO Control Policy, which has been adopted into the Department's NJPDES regulations at N.J.A.C. 7:14A-11, Appendix C.

The Department's Division of Water Monitoring, Standards and Pesticides Control regularly assesses New Jersey's waters in order to protect and manage public drinking water supplies, recreational uses, shellfish harvesting and the health of aquatic organisms in accordance with state and federal regulations. New Jersey employs an integrated approach to assessing water quality by compiling a vast amount of water monitoring data and related information collected by numerous sources throughout the State and evaluating it to determine the health of New Jersey's surface waters. Additional information is available at <https://www.nj.gov/dep/wms/>.

13. **COMMENT:** We recommend that the NJDEP strengthens requirements in certain areas as described in our provided comments. Where strengthening requirements is not possible by NJDEP, we recommend that the NJDEP provide separate, concurrent guidance (in a document) for permittees. And when providing guidance, we recommend NJDEP be as specific and prescriptive in their overall guidance as possible. If the guidance is vague, it leaves too many openings for interpretation and inconsistency. It would also be beneficial to incorporate language into the permit itself that references this guidance document and encourages permittees to incorporate the included guidance.

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. As NJDEP drafts the permits for the subsequent NJ CSO regions and finalizes this permit and the North Bergen MUA/Guttenberg permit, we encourage NJDEP to similarly ensure the shortest timeline possible while still ensuring affordability. Permittees sometimes seek to use cost as a rationale for extending implementation timelines. However, this leaves communities bearing an extended burden to environmental and public health.

It is very concerning that this NHTA permit has an extended timeline until 2045, especially regarding critical storage tank construction. We urge NJDEP to work with the permittee to shorten and speed up the timeline for construction of this key CSO control strategy in an affordable way. [2]

14. **COMMENT:** We recommend that the NJDEP strengthens requirements in certain areas as described in our provided comments. Where strengthening requirements is not possible by NJDEP, we recommend that the NJDEP provide separate, concurrent guidance (in a document) for permittees. When providing guidance, we recommend NJDEP be as specific and prescriptive in their overall guidance as possible.

We appreciate NJDEP's requirement that a financial capability analysis be conducted. We recommend NJDEP issue concurrent guidance to permittees to assist them with tracking and demonstrating their work on affordability. [3]

15. **COMMENT:** We ask that the Department strengthen language and requirements in all areas, especially regarding public engagement. 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. Where updated permit requirements are not possible, we request that NJDEP provides separate supplemental guidance documents to permittees.

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]

16. **COMMENT:** We recommend the NJDEP strengthen the requirements of this permit to be very specific and prescriptive in a number of areas, especially in the area of public engagement, so there are not many openings for interpretation and inconsistencies. [6]

RESPONSE (13-16): 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.

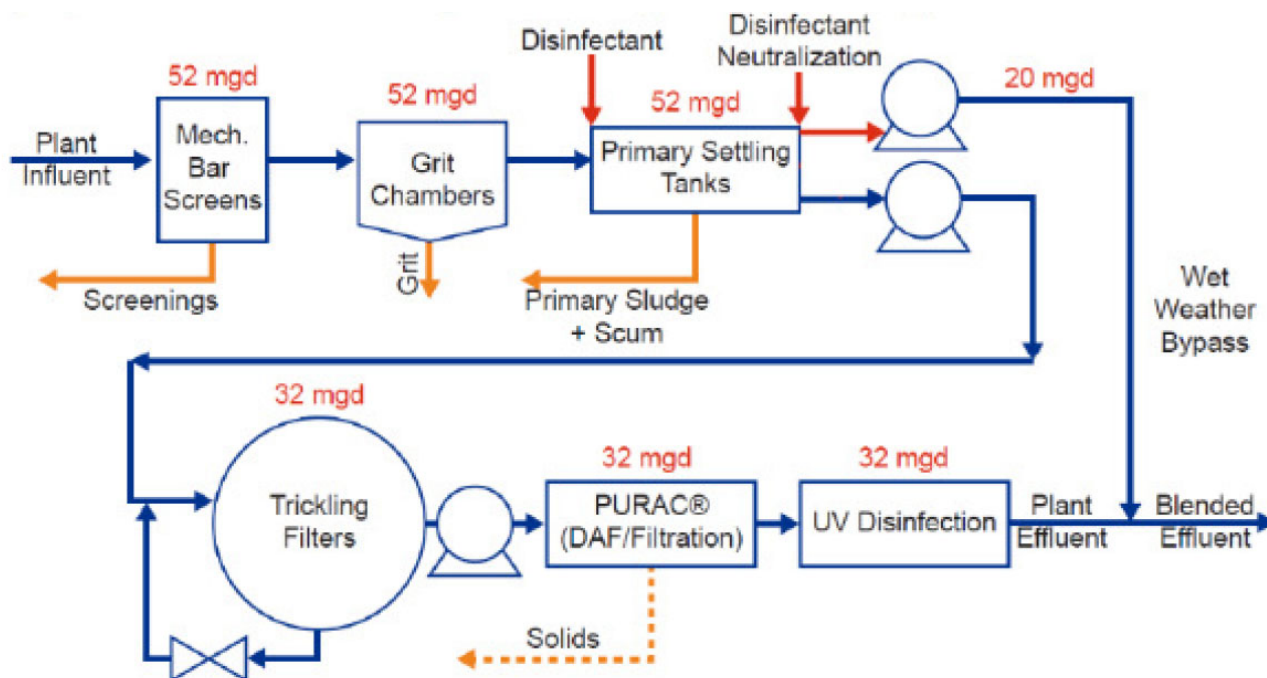
17. **COMMENT:** Water conservation by community members and businesses is a named tool for reducing CSO impacts in many, if not all, of the CSO LTCPs. We recommend NJDEP provide concurrent guidance to permittees outlining best practices on engaging communities on water conservation methods to ensure this control alternative is properly utilized. [2]
18. **COMMENT:** We recommend the Department provide concurrent guidance documents to permittees outlining best practices on engaging communities on water conservation methods to ensure this control alternative is properly utilized. [3]

RESPONSE (17-18): The Department agrees that water conservation can be an effective measure in reducing the amount of flow in a combined sewer system (CSS) and encourages all permittees to educate the community in this regard. NJDEP guidance materials are available at <https://dep.nj.gov/conserves-water/>. Water conservation can serve to increase the effective capacity of the CSS to store and transfer wet weather flows for treatment. Additionally, water conservation can be a topic for public education and outreach. Water conservation measures are often addressed through building codes and other relevant requirements that are outside the purview of the NJPDES CSO permits.

FACT SHEET COMMENTS

19. **COMMENT:** The permit should more clearly identify the effluent monitoring location in relation to the treated and proposed bypassed flows; a diagram would be helpful. [1]

RESPONSE (19): The Adams Street WWTP effluent monitoring location, which includes bypassed flows when applicable, is after UV disinfection and prior to discharge into the Hudson River. Since a flow diagram is not included in the final permit, a flow diagram provided on May 20, 2022 by NHSA is included below to better demonstrate the effluent monitoring location. This diagram is hereby incorporated into the Administrative Record.



To better identify the effluent monitoring location as per EPA's request, the Department has also clarified the Location Description for Monitored Location DSN 001A in Part III as follows:

Location Description

The influent monitoring location shall be before any treatment, other than degritting, and before the addition of any internal waste streams. ~~The permittee shall sample the effluent after treatment.~~ All effluent sampling, including CSO related bypass flows, shall be after disinfection and prior to discharge into the Hudson River at latitude: 40° 54' 13"N and longitude: 74° 01' 15"W.

This change affects Part III of the final permit.

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

RESPONSE (20): This comment appears to be requesting clarification for CSOs within the fact sheet. The Department agrees that it is appropriate to clarify 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 WWTP discharge and CSO discharges by including a reference to the Permit Summary Table. Sections 7 and 8 from the draft permit action are hereby modified as follows for the purposes of the Administrative Record:

7 Summary of Permit Conditions for WWTP

The Permit Summary Tables within this fact sheet contains a summary of the quantity and quality of pollutants treated and discharged from the facility and the proposed effluent limitations for outfall DSN 001A.

8 Permit Summary Table for DSN 002A, 003A, 005A, 006A, 008A, 012A, 013A, 015A

The Permit Summary Table within this fact sheet contains a summary of certain parameters for the above referenced CSO outfalls

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

NINE MINIMUM CONTROL REQUIREMENTS (PART IV.F) COMMENTS

21. **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 was inspected, and cleaned as needed, during the term of the permit. EPA notes that certain critical portions of the system, such as regulators and screening/netting facilities, may benefit from even more frequent inspections. [1]
22. **COMMENT:** The planning, designing, and construction of CSO controls has been (and will be) a long, arduous process for permittees and likely, the most costly component of the process overall. It is therefore critical to ensure the work is well-planned, properly funded, and maintained accordingly. As potentially one of the largest public investments a municipality or utility will make, it is critical to allow for transparency with the public on progress, sources of funding, avenues for monitoring compliance, and ways to ensure that construction and maintenance occurs as planned to eliminate future system failures.

We support that the permit contains the nine minimum CSO controls that were also contained in the 2015 permit. The first control requires “Proper Operation and Maintenance Programs for the Sewer System and CSOs.” A system cleaning program must be implemented, requiring the system components be inspected and cleaned. The permittee is required to submit annual progress reports on this system cleaning with the intention that 20% of the system be inspected and cleaned annually.

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]

23. **COMMENT:** The Jersey Water Works CSO Committee sincerely thanks the NJDEP for accepting and incorporating its earlier comments regarding the necessity of cleaning the sewers on a regular basis in order to maximize wet weather storage and conveyance. The requirement of an affirmative certification of the cleaning is very important as well.

We suggest that the permit include some sort of compliance and enforcement language that makes it clear to the permittees that there will be serious consequences if this permit requirement is not met on a continual basis. The permit should include language that explains the steps that the Department will take if the permittee does not comply annually on the system cleaning program and if they do not meet the 100% inspection and cleaning of the system at the end of the respective permit (five years). We further recommend that the Department create a mechanism of enforcement to ensure that the permittee implements the System Cleaning Program. The permit should require performance factors and deficiencies to be communicated to the public. [3]

RESPONSE (21-23): The 2015 NJPDES CSO permits contain Proper Operation and Regular Maintenance Program Requirements in Part IV.F.1 which has 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 are 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. 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 NHSA Adams Street WWTP. 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 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. Specifically, for NHA Adams Street the total system is 76 miles. Critical portions of the system, such as regulators and solids/floatables facilities, 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. The Department conducts routine compliance inspections where inspection reports are available on-line for the public 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 permit.

24. **COMMENT:** There has been a great deal of concern among impacted community members that they are being 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. Given that 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 measure the amount of raw sewage released in localized flooding and report that back to the community. We also recommend the Department require alerts and notification systems, not just for Hudson River 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. [2]

25. **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 back-ups. [4]

26. **COMMENT:** There's been a great deal of concern among impacted community members that are being exposed to E. coli and other harmful bacteria, viruses, and chemicals during sewage backups into homes and streets. This fear of not knowing causes panic and a sense of urgency to disinfect homes and take action to feel safe. So, given this it's imperative that community members have time to prepare since this permit and subsequent permits will not completely solve the local flooding issues. So, can we require that the permit holder measure the amount of raw sewage released in localized flooding and report that back to the community? Can we require alerts and notifications not just for the Hudson River discharges, which is critical, but in advance of potential sewer backups and basement flooding? [6]
27. **COMMENT:** This area is very heavily trafficked and so we ask that the NJDEP require that the permittee measure the raw sewage released and localized flooding. We also ask that NJDEP develop reporting to the community not just of the river discharges but also for potential sewer backups and street basement flooding and that they make sure that the permittees are sharing that through municipal outreach option opportunities. [7]

RESPONSE (24-27): 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. 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, 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 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.x. 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 combined sewer system, 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.

Based on these comments, it appears that real-time water/wastewater sampling for raw sewage is being requested of the permittee as a required permit condition. While there are parameters such as pH, temperature, chlorine, and flow that can be sampled and measured in real-time, this does not apply to bacteriological parameters such as Fecal Coliform, Enterococci, and E. coli. Bacteriological analyses require incubation times for detection of the respective organism to grow on a specific media. Therefore, bacteriological parameters must go through the required incubation time to determine their presence once the analysis is set up. Currently, there are no rapid tests for bacteriological parameters that are approved by the Department as an allowable option for compliance testing, and as such, real-time bacteriological testing cannot be implemented as part of this permit action.

28. **COMMENT:** Reducing sewage overflows into the Hudson River and sewage backups needs to be done effectively, equitably, and affordably, and soon. [5]

RESPONSE (28): As per **RESPONSE 24-27**, sewage backups are prohibited by the NJPDES CSO permit as per Part IV.F.1. For further information regarding the reduction of CSOs into the Hudson River, see **RESPONSE 81** regarding the implementation schedule, **RESPONSE 76** regarding funding, and **RESPONSE 40-41** regarding Public Engagement.

29. **COMMENT:** Catch basin cleaning is sometimes the culprit all throughout the state and something as easy as this does require ongoing intergenerational maintenance. [13]

RESPONSE (29): The Department agrees that periodic catch basin cleaning is critical to the operation and maintenance of the combined sewer system. Part IV.F.1.h includes requirements for a number of SOPs that require operation and maintenance of the entire collection system which includes catch basins. Specifically, Part IV.F.1.h.viii requires the permittee to develop SOPs for the collection system that are designed to provide a gravity sewer and catch basin inspection schedule and to clean as necessary.

30. **COMMENT:** It is encouraging that an Asset Management Plan (AMP) is included in this permit. However, it is not clear if affordability is assessed in this plan. Is affordability considered in the AMP and where is that described? How will the NJDEP ensure the CSO Supplemental team can provide meaningful input on the AMP and how it is establishing rates? [2]

31. **COMMENT:** We recommend the Department ensure the CSO Supplemental Team provides input on the Asset Management Plan and how the wastewater utility or municipality is establishing rates. [3]

RESPONSE (30-31): 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>.

As noted in the comments, 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 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 based in part on costs of LTCP projects and presently available funding.

32. **COMMENT:** We request that the role of the Department staff be clarified with respect to inspecting and enforcing all projects, including gray and green infrastructure and maintenance, be clarified. How will the NJDEP inspect and enforce all projects, including green infrastructure? How is the NJDEP going to ensure the permittee is complying with their maintenance plan for all projects? [2]
33. **COMMENT:** Well-designed and constructed green infrastructure projects, like all stormwater management solutions, require regular maintenance to retain effectiveness. Hoboken is planning for and constructed green infrastructure projects including permeable pavement and rain garden implementation at the Southwest Resiliency Park, Northwest Resiliency Park, Jackson Street Resiliency Park, and the Washington Street Rehabilitation and Redesign projects. NJDEP should require documentation that all green infrastructure projects and installations are being inspected and maintained in accordance with the NJDEP's requirements for the permittees' Operations & Maintenance program and manual. What will be the enforcement mechanism for NJDEP to ensure that these green infrastructure practices are being maintained with adequate staffing, training, regularly-scheduled inspection and maintenance, etc.? [2]
34. **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. [2]
35. **COMMENT:** The Department should ensure that the permit requires the permittee to provide documentation that all green infrastructure practices are being inspected and maintained in accordance with the operations and maintenance manual. A cross-reference to New Jersey Administrative Code 7:8 and New Jersey Administrative Code 7:14A requirements for stormwater practice maintenance would be useful. We also recommend the Department create a system of enforcement to ensure that green infrastructure practices are being maintained. [3]
36. **COMMENT:** Regarding Construction, Operations, and Maintenance, we recommend the Department define more clearly NJDEP's role in inspecting and enforcing all projects, including gray and green infrastructure. [3]
37. **COMMENT:** We support that the Operational Plan includes O&M of all LTCP CSO elements including Green Infrastructure. [2]

RESPONSE (32-37): 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.

The CSO control measures for the NHSA Adams Street WWTTP are still in the process of being implemented. The majority of these remaining gray infrastructure improvements are at the treatment plant and will therefore be inspected as part of that routine inspection. 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.

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.

- 38. COMMENT:** Concerning Part IV.F.3, it is recommended that permittees with an approved pretreatment program be required to evaluate the CSO impacts from Significant Industrial Users and 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 (38): NHSA Adams Street WWTP does not currently have an approved pretreatment program as it is not a delegated POTW pursuant to N.J.A.C. 7:14A-19. The Department agrees that this language can be clarified to meet EPA's intent. Changes are as follows:

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.

This change affects Part IV.F.3 of the final permit.

- 39. COMMENT:** These towns of Hoboken, Weehawken, Union City, etc., should equally take the outdoors in the surrounding environments that compose and comprise their towns, and the recreational areas around them as seriously by really making this an important initiative to clean up the waterways. If there is an individual or a group who wants to go kayaking in the Hudson River and it rained the prior day, where and how would we get information from the Department about water safety levels and contaminants prior to going into water and exposing ourselves or potentially exposing ourselves? [12]

RESPONSE (39): 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. 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://www.nhudsonsa.com/waterbody-advisor-system>. This map shows the locations of the CSO outfalls and indicates where CSOs may be occurring due to rainfall.

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

40. **COMMENT:** We support the shift in focus from public participation to public engagement in order to inform, educate, and engage specific to implementation of the CSO control projects. 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. We also support that Supplemental Team meetings and project based meetings are required of permittees. [2]
41. **COMMENT:** We commend the NJDEP for shifting the focus from public participation to public engagement to better inform and involve the community in the implementation of the CSO control projects. It is important for this engagement to be ongoing and effective to ensure that the public is fully included in the implementation process and are made aware of the project's potential impact. [3]

RESPONSE (40-41): The 2015 NJPDES CSO permit required that public participation occur throughout all three stages of the LTCP development where major submissions were required on July 1, 2018 and July 1, 2019 which culminated with the submission of the LTCP in 2020. NHSA held multiple meetings throughout the three steps of LTCP development. This meeting frequency was discussed and decided with the CSO Supplemental Team members at the first meeting and all CSO Supplemental Team meetings were open to the public. However, the Public Participation requirements in the 2015 NJPDES CSO permit served a different objective, namely informing the LTCP, whereas this subject renewal permit now serves to implement CSO controls since LTCP selection was completed with submission of that document in 2020.

The Department appreciates the commenters' support of the Public Engagement requirements as included in Part IV.G.2 a through i. The goal of these requirements is to require permittees to inform, educate and engage members of the hydraulically connected communities regarding CSOs and the status of the implementation of the CSO control measures. The Public Engagement requirements in this renewal permit serves 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. The Department is committed to active public outreach and engagement specific to the implementation of the CSO control projects included in the Implementation Schedule. Thus, Public Engagement conducted as per this renewal permit must include education of the public about the status of the program; document progress in implementing the program; and inform neighborhood residents before, during, and after construction.

Regarding this topic, the DWQ posted the final guidance entitled "A Guide to CSO Public Engagement" on January 5, 2024 on DWQ's CSO webpage (<https://www.nj.gov/dep/dwq/cso.htm>) and notified interested parties on that date. This guidance serves to revise the first set of guidance as posted on DWQ'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 guidance, DWQ 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.

42. **COMMENT:** The permit language regarding the CSO Supplemental Team is vague as to ensure that members of the community, especially those from overburdened communities, are meaningfully included in public engagement. The permit uses the phrase "with a goal of including members of the following groups, at a minimum, where possible." We request that NJDEP develop minimum requirements on methods used to recruit and replace CSO Supplemental team members that ensures a cross-sector representation from the community, based specifically on

the makeup of the particular community, and requires that a majority of community members are aware of the opportunity to participate on the team. How will the permittee ensure that a cross-sector representation of the community is part of the team and that the majority of community members are aware of the opportunity? [2]

43. **COMMENT:** We request that NJDEP develop minimum requirements on methods that should be used to recruit members of overburdened communities to ensure their representation and engagement. For example, obtain input from a minimum of three relevant community based organizations with input from the NJDEP's Environmental Justice Department to make those connections. How will NJDEP ensure that overburdened communities are fairly and meaningfully represented on the Supplemental Team? [2]
44. **COMMENT:** Certain public engagement methods should be required, at a minimum, reflecting the methods that have the highest engagement numbers and broadest reach. These methods should also ensure that overburdened communities are aware of Supplemental Team meetings, including requiring outreach via social media, through municipal outreach channels, and through traditional print methods to reach the broadest audience within each community. [2]
45. **COMMENT:** We recommend that the Department clarify the role and responsibilities of the CSO Supplemental Team. We recommend that the language be adjusted to ensure that members of the community, and especially those from Environmental Justice or overburdened communities, are actively included in public engagement. The Supplemental Team should have a transparent process for recruiting members and that process should be shared publicly. We recommend the Department develop minimum requirements on methods used to recruit and replace CSO Supplemental Team members that ensures a cross-sector representation from the community, given the particular community's makeup.

We also recommend that the Department require that a majority percentage of community members are aware of the opportunity to participate on the team. We recommend the Department clarify minimum outreach requirements to ensure overburdened communities are aware of Supplemental Team meetings, including through social media and traditional print. [3]

46. **COMMENT:** We support the requirement of permittees to hold a combination of virtual and in-person meetings that are accessible must be a requirement 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 they are able to 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 the Department ensure that overburdened communities are fairly represented on Supplemental Teams. [4]

47. **COMMENT:** The permit is vague as to ensuring that members of the community and especially those from overburdened communities are included in public engagement. How will the permittee ensure that the community can contribute to the supplemental team and that majority community members are aware of the opportunity? I hope that NJDEP can develop minimum requirements for a method used to recruit the CSO team. [9]
48. **COMMENT:** I'm concerned that overburdened communities are not involved enough in the implementation of this process. [5]

RESPONSE (42-48): 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 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 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 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. Specifically, CSO Supplemental Team meetings should be accessible to all community members by being open to the public. As a result, 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.

Regarding this topic, the DWQ posted the final guidance entitled "A Guide to CSO Public Engagement" on January 5, 2024 on DWQ's CSO webpage (<https://www.nj.gov/dep/dwq/cso.htm>) and notified interested parties on that date. This guidance serves to revise the first set of guidance as posted on DWQ'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 guidance, DWQ 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.

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

49. COMMENT: The exception for not adding meetings due to lack of attendance should trigger some requirements to prove that properly-executed efforts to engage were unsuccessful. If the community is not attending meetings, it should be the responsibility of the permit holder to ensure that meeting attendance is accessible and representative of the community. The permit holder should rethink their outreach and engagement activities to ensure a minimum number of community members are present at meetings and that those members represent a cross-section of the community, including those from overburdened communities. The community should feel that they are being meaningfully engaged in the process and that their concerns are being heard and acknowledged by permittees. Transparency in the process is important to meet this goal. Another means of ensuring this is to hold these meetings in the various diverse neighborhoods rather than expecting community members to travel to a location that is inconvenient. That way, the permit holder is more likely to ensure a broader number of community members are present. Does NJDEP have a method for ensuring permittees prove a baseline effort for making meetings accessible, promoted specifically to affected community members and stakeholders, and that said stakeholders are notified in a timely manner? [2]

50. COMMENT: This permit has incorporated and required some key elements that will enhance public engagement from the original permit such as requiring a LTCP Coordinator, continuing a CSO Supplemental Team and related Team meetings, and a website with certain public notifications. Including elements like these better engage and serve the surrounding communities on the path toward reducing or eliminating CSOs.

However, the permit does not go far enough to ensure all affected community members (not only those with easy access) are informed and consulted. It is also important that environmental justice, accessibility (in all forms), and language justice are not merely acknowledged but addressed and required of permittees. There must also be a consistent, clearly defined feedback loop with the public, so that the general public (and not only the CSO Supplemental Team) is able to provide input as projects are implemented and see how/if their input is incorporated into final decisions made by permittees. These recommendations can be achieved either by enhancing current and future permit requirements, and/or by providing separate, clear, concurrent guidance to permittees.

In addition, meeting accessibility is described as something to be “kept in mind” with a few suggestions. Instead, meeting accessibility should be a minimum requirement with clearly defined terms for accessibility for language, visual, audio, and physical access. As with previous and later recommendations, minimum requirements in the permit and/or concurrent guidance ensures consistency across permits. Will NJDEP clearly define accessibility as described above and require this accessibility as part of all meetings? [2]

51. COMMENT: The frequency of meetings being determined by the milestones in the LTCP implementation is understandable. However, not requiring any minimum number of meetings leaves too wide an opening for permittees to avoid responsibility around communicating progress and status. We request there be a minimum number of Supplemental Team meetings required annually or quarterly to provide updates to the CSO Supplemental Team and the public to maintain transparency, consistency, and engagement. The longer the period of time between meetings and outreach, the less likely it is to maintain the same level of engagement from the community. For example, we recommend requiring a minimum of two meetings annually, outside of any project- specific meetings and require that these meetings also be an opportunity to share funding, employment, and training opportunities. Moreover, we suggest all meetings be held in a hybrid format to ensure as many community members as are interested are able to attend. [2]

52. COMMENT: We recommend the Department develop minimum requirements around the number of Supplemental Team meetings to be held annually so that meetings are not only held when a project is occurring, but with a frequency that will keep the public informed. For example, require a minimum of two meetings annually, outside of any project-specific meetings. Require that these meetings also be an opportunity to share funding, jobs, and training opportunities. We also recommend the Department require a minimum number of LTCP milestone meetings with successful efforts in engaging the community. Lastly, we recommend the Department require Permittee’s public meetings to be held online, in person, or in a hybrid setting and require meeting accessibility with clearly defined terms for accessibility for language, visual, audio, and physical access. [3]

53. **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. [4]
54. **COMMENT:** I would also love to see the development of minimum requirements around the number of supplemental meetings to be held annually, as well as require a mechanism to capture input and feedback. [9]

RESPONSE (49-54): 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 that 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 prepared guidance specific to this topics as available at <https://www.nj.gov/dep/dwq/cso.htm> and held stakeholder meetings specific to this topic. This guidance was a direct result of specific requests and public comments on this topic.

The primary goal of this NJPDES 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.

55. **COMMENT:** Understandably, not every LTCP project will trigger legal review under NJ's Environmental Justice (EJ) Law. That said, the principles of serving EJ communities as outlined in NJDEP's "Furthering the Promise Guidance Document" must be considered before implementing projects in overburdened communities. Will NJDEP specifically reference this NJDEP "Furthering the Promise Guidance Document" in the permits and/or the guidance materials? [2]
56. **COMMENT:** We have horrible economic times right now, for everybody, and especially people who already have low wealth and people of color, and so I would be remissive if I didn't just mention that the Environmental Justice Law is now into effect. I really want to emphasize the opportunity to completely overhaul these processes and procedures to incorporate multilingual opportunities to, to really demonstrate trust, and I think when we, we really like prioritize that I think that that's where we can really focus on even thinking about environmental justice actually becoming implemented, and I think that you have a really great opportunity to do that here in this particular area. [13]

RESPONSE (55-56): The NJDEP has begun implementation of New Jersey's Environmental Justice Law, N.J.S.A. 13:1D-157, et seq. in order that all New Jerseyans, regardless of race, ethnicity color, national origin or income enjoy the protection of our laws including the right to live, work, and recreate in a safe and healthy environment and have equal access to natural and clean energy resources. Implementation of the Environmental Justice law is being accomplished through Executive Order 23, issued on April 20, 2018 and "Furthering the Promise: A Guidance Document for Advancing Environmental Justice Across State Government" dated September 2020, among other initiatives.

The 2015 NJPDES CSO permits and the Clean Water Act predate the Environmental Justice Law; however, public participation was a significant requirement of those permits where public participation is consistent with the objectives of the Environmental Justice Law. As required by the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C, the NJPDES CSO permit has been subjected to an extensive public participation process throughout the three steps of the LTCP development process which has continued as part of the preparation of this renewal permit. This is summarized and described in Part IV.G.2 where the goal is to continue meaningful engagement and opportunities in permitting decisions. Most recently, these permits were the subject of a 64-day comment period and two public hearings to allow a means for the affected community to participate in these permit actions. Permit requirements under Public Engagement found in Part 4 G.2. require the permittee to inform, educate and engage members of the community in order to generate participation and collect input. This is to be done via establishment of 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, including siting of GI as required by the permit.

- 57. COMMENT:** We support the requirement for an LTCP Coordinator to be hired as a single point of contact between permittees and the community, and that a Supplemental Team be reconstituted. Inclusion of the requirement that the efforts to recruit members of this team be documented and shared publicly offers a positive step toward transparency. However, the criteria for selecting the LTCP Coordinator is not defined. We request that the final permit include a baseline requirement for what the LTCP Coordinator role is and what their responsibilities are, including the minimum requirements for communication and outreach to the community. Leaving the role open to interpretation in these and future permits would only serve to fail the intent of the position and allow permittees to “check the box” by doing the bare minimum. Setting clear minimum requirements here eliminates the issue and standardizes the role across all permits, making the role more efficient and effective. Does NJDEP have a standard expectation in mind for the LTCP Coordinator role and its responsibilities so the position is not open to interpretation? If so, can that be added to the permit as minimum requirements to meet for permittees?

There is no clear guidance on how the permittee shall select an LTCP Coordinator and what training the LTCP Coordinator should receive to perform the role effectively. Along with the Permit, we request concurrently releasing a training manual for selecting and onboarding a new LTCP Coordinator including what skills, experience, and certifications are required. We urge NJDEP to consider requiring that the LTCP Coordinator be a member of that local community and someone who represents those living in overburdened neighborhoods. Important skills and experience should include an understanding of community engagement best practices and past success with that work. Clear guidance and requirements would create a consistent application across permits. Does the NJDEP have a set of criteria for selecting and onboarding a new LTCP Coordinator and how will this be shared with the permit holder? If so, can that be added to the permit or released concurrently in guidance as minimum requirements for permittees? [2]

- 58. COMMENT:** We recommend the Department draft a baseline requirement for what the LTCP Coordinator role is and what their responsibilities are, including the minimum requirements for communication and outreach to the community. We further recommend the Department release a training manual for selecting and onboarding a new LTCP Coordinator and provide clear guidance on how the permittee shall select an LTCP Coordinator including what training the LTCP Coordinator should receive to perform the role effectively. We recommend the Department strongly encourage the permit holder to select an LTCP Coordinator who is a current community member from an overburdened community, as this will increase the chances that community voices are part of the public engagement process. [3]

59. **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. 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 language justice.

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]

60. **COMMENT:** We applaud the creation of the LTCP coordinator position. We do hope that this position will be more firmly codified with requirements for training to be standardized across the state and that the information they will be sharing, though specific to the individual permittee area, will be cohesive so people aren't getting different messages across the state. [7]

RESPONSE (57-60): 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.

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.

Regarding this topic, the DWQ posted the final guidance entitled "A Guide to CSO Public Engagement" on January 5, 2024 on DWQ's CSO webpage (<https://www.nj.gov/dep/dwq/cso.htm>) and notified interested parties on that date. This guidance serves to revise the first set of guidance as posted on DWQ'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 guidance, DWQ 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.

61. **COMMENT:** There is no process established for developing a feedback loop where Supplemental Team input is captured, incorporated, and made public. Similarly, there is no process defined to ensure the general public can give input to the Supplemental Team and track how that input is applied or considered. We request that a clear and effective feedback loop process and a process for responding to public questions including a Frequently Asked Questions page on the website be required. How will NJDEP provide guidance and/or permit language with clear instructions around implementing a feedback loop to ensure transparency and consistency across permits? [2]
62. **COMMENT:** We recommend the Department clearly establish a process for how Supplemental Team input will be documented, incorporated into the planning and design process, and made public. We also recommend the Department clearly define the process on how the public within and outside of the community can give input to the Supplemental Team.

Regular progress updates on the implementation of the LTCP should be posted on the Supplemental Team and CSO public engagement website. In case of any significant changes to the LTCP, the Supplemental Team should notify the website viewers and provide them with an opportunity to comment. The website should also be updated with meeting materials including presentation slides and materials, flyers, and meeting minutes. The permittee should be required to provide responses to all questions regarding the LTCP, either from the Supplemental Team or from the public through the website, and both questions and answers should be readily available on the website to ensure full responsiveness and transparency. [3]

RESPONSE (61-62): The Department maintains that the NJPDES CSO permit conditions encourage a feedback loop. 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 does not agree that it is appropriate 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.

The DWQ posted the final guidance entitled “A Guide to CSO Public Engagement” on January 5, 2024 on DWQ’s CSO webpage (<https://www.nj.gov/dep/dwq/cso.htm>) and notified interested parties on that date. This guidance serves to revise the first set of guidance as posted on DWQ’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 guidance, DWQ 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.

63. COMMENT: We support the requirement that permittees are required to hold regular public meetings (live streamed, in-person, or a combination of both). Public meetings are required to be livestreamed and made available to the affected community for viewing afterwards, including materials in the language(s) appropriate to the majority of community demographics. We also support the requirement for outreach materials, including physical handouts and websites, should be produced in all major languages spoken in a given community. [2]

64. COMMENT: We also hope that NJDEP will bring back the supplemental teams and focus on the public outreach methods. [7]

RESPONSE (63-64): The Department acknowledges the commenter’s support. As noted within the permit at Part IV.G.2.h, CSO Supplemental Team meetings are open to the public and required to 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. In addition, as specified in Part IV.G.2.i, outreach materials, including physical handouts and websites, should be produced in the language(s) appropriate to the majority of community demographics.

65. COMMENT: We request that once team members are identified, they are listed on the website with clear methods to get in contact with them. How will the permittee ensure the community is aware of the Supplemental Team members and how to contact them? [2]

66. COMMENT: We recommend that once CSO Supplemental Team members are identified, they are listed on the website with clear methods to get in contact with them. [3]

67. COMMENT: Once team members are identified for the CSO Supplemental Team their names should be listed on the website with clear methods to get in contact with them. [9]

RESPONSE (65-67): The Department maintains that the CSO Supplemental Teams should be formed and managed based upon the needs of the affected community. The Department does not feel it is appropriate to strictly define how the permittees manage their CSO Supplemental Team. 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.

68. COMMENT: We request that the Department apply the same requirements and framework regarding public notice and follow-up, to project-based meetings and how public input is incorporated into projects, especially as it relates to the performance of projects and project deficiencies. [2]

RESPONSE (68): The purpose of the Public Engagement requirements is to solicit input on the selected CSO

controls in the LTCP which are being implemented through the NJPDES permit. It is not the role of the CSO Supplemental Team to provide input on project engineering as that must conform with applicable laws and regulations.

However, it is the role of the CSO Supplemental Team to provide input on the siting of GI. This enables public input on the most advantageous locations for GI within the community. The implementation schedule at Part IV.G.8 requires GI but the specific locations have not yet been determined and the CSO Supplemental Team could provide that input. This is an objective of the required CSO Supplemental Team meetings and is stated in Part IV.G.2.c.iii as follows:

- iii. Allow the affected community and interested public an opportunity to provide input on the siting of GI as required by the permit.

The Department maintains that this will allow the CSO Supplemental Team to provide meaningful input that utilizes their local area knowledge without requiring technical engineering expertise.

69. **COMMENT:** We support the requirement stating that 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 as a way to incorporate overburdened communities in the process. [2]
70. **COMMENT:** We support the requirement of permittees to hold Supplemental Team meetings that require permittees to notify the Department of Environmental Justice 30 days in advance of a meeting, in order to include overburdened communities. [4]

RESPONSE (69-70): 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.

71. **COMMENT:** Permittees must reassess overflows to sensitive areas. Section IV.B.2. of the CSO Control Policy identifies the following as a permitting provision in Phase II CSO permits:

"e. 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 economic achievability;". [1]

RESPONSE (71): The Department acknowledges that NHSA outfalls discharge to waterbodies classified as sensitive areas. As noted on page 41 of the Fact Sheet in the NHSA Adams Street WWTP draft permit, all outfalls discharge to sensitive areas based on potential habitat for *Atlantic sturgeon* and *Shortnose sturgeon* making prioritization of certain outfalls moot as sensitive areas. Nonetheless, the Department acknowledges that the language provided in this comment is included in the federal CSO Control Policy as well as in N.J.A.C. 7:14A-11, Appendix C as included within the draft permit Fact Sheet. Language has been included to address this 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 of the final permit.

- 72. COMMENT:** Phase II CSO permits must include water quality-based effluent limitations expressed as a numeric performance standard for the selected 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. 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 Sections 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 [water quality standards], 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 (72): 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 NHSA, 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 NHSA has 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 NHSA on December 11, 2023 to notify them of this change. Part II.C.2 is 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.

Note that Part IV.G.4.c of the March 3, 2023 draft permit contained an erroneous reference to 92% which is hereby corrected and clarified as follows:

- 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 percent reduction through the use of the H&H model to attain no less than 92.85% wet weather capture.

These changes affect Part II and Part IV.G.4.c of the final permit.

73. **COMMENT:** Will NJDEP include guidance on innovative funding strategies to be given concurrently with the release of the final permit? Could the LTCPs be implemented more rapidly and with less impact on ratepayers if North Hudson obtained funding, especially principal forgiveness, via the Water Bank/State Revolving Fund? Can NJDEP work more closely with the permit holder to ensure this takes place?

Will NJDEP provide guidance and technical assistance for municipal CSO permittees to conduct stormwater utility fee feasibility studies to determine if this assessment opportunity would be beneficial for their communities? Similarly, if North Hudson were to implement a stormwater fee, could this generate revenue that would enable expedited implementation of the LTCPs and lower ratepayer burden? Can NJDEP work more closely with the permit holder to ensure that a stormwater utility and feasible methods have been seriously considered before finalizing timelines? [2]

74. **COMMENT:** We recommend the Department specify guidance to permit holders around other cost-effective, innovative financing opportunities to help finance this work equitably, such as stormwater utilities, Water Bank low-interest loan programs, utilizing more green infrastructure, grants, and more. This guidance on innovative funding strategies should be given concurrently with the release of the final permit so that it may be incorporated into the final implementation plans with a goal of shortening timelines around critical projects while maintaining affordability for ratepayers.

We recommend that the Department provide guidance and technical assistance for municipal CSO permittees to conduct stormwater utility fee feasibility studies to determine if this assessment opportunity would be beneficial for their communities. [3]

75. **COMMENT:** We recommend the Department specify 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. We also recommend the Department provides ongoing grant opportunities for stormwater utility feasibility studies to encourage permittees to explore the creation of a dedicated and equitable stormwater fee to comply with LTCP obligations.

We recommend the Department provide guidance to permittees on tracking and demonstrating how affordability is incorporated. Additionally, there should be guidance regarding alternative calculations that will reduce the burden to ratepayers, accelerate community benefits, and improve water quality. These calculations would include the revenue generated by implementing a stormwater utility and assuming that the most expensive projects would be funded by the Water Bank. We recognize that the Department cannot require a permittee to seek Water Bank funding or implement a stormwater utility. However, requiring the permittee to make the associated calculations, can

demonstrate how timelines may be shortened and rate burdens could be reduced resulting in environmental and public health benefits that could be realized more quickly and at a lower cost to ratepayers. [4]

RESPONSE (73-75): 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 (DACs). For additional information visit <http://nj.gov/dep/dwq/cwpl.htm>.

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.

The New Jersey Water Bank also offers free technical assistance to DACs 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/njpdessstormwater/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.

76. **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 (76): As noted in **RESPONSE 73-75**, the Department recognizes the importance of providing robust funding opportunities for CSO projects. To this end, the Department has been proactively working with NHSA to inform it of funding opportunities, and permitting staff along with funding staff have met with NHSA numerous times since the submission of the June 2020 LTCP. In accordance with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C, a December 4, 2023 letter to NHSA from the Department urged NHSA to explore New Jersey Water Bank funding, which it has historically done, particularly in light of new opportunities presented by the Bipartisan Infrastructure Law and American Rescue Plan Act. NHSA has historically aggressively pursued funding through the New Jersey Water Bank and has recently submitted its 43rd application for funding and the Department is confident NHSA will continue to do so. In a January 9, 2024 letter to the Department, NHSA noted that it recently received loan forgiveness from the New Jersey Water Bank on three Adams Street WWTP LTCP projects, namely H6/H7 Resiliency Park Phases 2 and 3 (also known as ResilienCity Park) and Boulevard East. This loan forgiveness enabled NHSA to expedite its implementation schedule for commencement of construction for Phase 3 of H6/H7 Resiliency Park from 2026 to 2023.

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, combined sewer system, and stormwater management projects have been financed through the New Jersey Water Bank. NHSA's engineering consultant firms have a long-standing relationship and

an extensive history of developing New Jersey Water Bank projects, including planning, design, and construction management activities.

77. COMMENT: EPA strongly encourages the NJDEP and the permittees to take advantage of EPA's technical assistance intake form which begins the formal process for communities, utilities, and states to request assistance with financial capability assessments and with finding and applying for funding opportunities. [1]

78. COMMENT: Is NJDEP informing the permit holders about the EPA's funding opportunities to support technical assistance for their financial capability analysis before permits are finalized? [2]

RESPONSE (77-78): 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>. The Department has shared information regarding available funding and the EPA technical assistance program with NHSA.

79. COMMENT: These permits do not mention distribution of costs between the municipal and utility permit holders. Is there a consideration of fair distribution of costs between municipal and utility permit holders applied across all permittees? [2]

RESPONSE (79): User fees and rate structures are outside the purview of the NJPDES regulations and therefore outside the terms of the permit. However, the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C suggests that permittees should consider "user fees and rate structures" in their implementation schedule. As detailed further in **RESPONSE 82** and **RESPONSE 87-88**, NHSA has taken these items into account in developing its implementation schedule.

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

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 of the 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 a 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 their Phase I permit."

To ensure compliance with this Phase II CSO permit requirement, these judicial or administrative orders, which include the fastest practicable schedules and dates for implementing the CSO controls, 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. A 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 below shows how the permit may be modified 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> [Insert name of activity]	<u>Completion Date</u> [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 (80): The Department agrees that CSO control measures should be implemented as discussed below in **RESPONSE 81**. The Department also agrees that wet weather percent capture should be maximized in the short term to attain the minimum 85%. The significant element of the Adams Street WWTP LTCP is the upgrade of the WWTP to increase the capacity from 20.8 MGD to 35 MGD which is currently underway.

The Department is aware that interim project deliverables for larger projects are required and are intended to help the permittee stay on schedule. Accordingly, the Department requested that the permittee expand the Implementation Schedule as originally included in the June 2020 LTCP to include engineering, bid, and construction phases. The first five years of this Implementation Schedule are included in Part IV.G.8 which includes final project deliverable dates.

The NJPDES permit term is limited to a five-year period pursuant to N.J.A.C. 7:14A-2.7(a). Therefore, as NHSA’s implementation schedule goes beyond five years, it will not be possible for NHSA to implement all CSO controls within the term of this NJPDES permit. As such, NHSA’s 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 any 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 6, 2024 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 permit as follows:

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 NHSA dated February 6, 2024. 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 Adams Street WWTP.

- 81. COMMENT:** The CSO LTCP 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 WQS 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 for implementing the controls. We note that the Adams Street draft permit and the River Road draft permit both contain 22-year implementation schedules with CSO construction end dates of December 2045. [1]

RESPONSE (81): 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 the Adams Street WWTP. Significant CSO control projects for the Adams Street WWTP are already in various stages of completion. These projects include the installation of a one-million-gallon storage tank to alleviate flooding and increase the capacity in the conveyance system; installation of combined sewer improvements at Boulevard East to alleviate flooding; construction of a new Adams Street WWTP outfall; and construction of planning major STP upgrades to increase capacity from 20.8 MGD to 35 MGD. The timeline included in the March 3, 2023 draft permit was shortened for certain projects and expanded with additional detail for all projects as compared to the June 2020 LTCP. In fact, the Boulevard East improvement project was not originally included in the June 2020 LTCP schedule and was added to the Implementation Schedule as a significant CSO control measure. At the Department’s request, NHSA front-loaded its Implementation Schedule with significant CSO control projects so that percent capture is increased in the short term to minimize CSOs as quickly as practicable. Specifically, wet weather percent capture will increase from a baseline of 72% to 82% by 2037. NHSA has proactively completed projects and commenced construction prior to approval of the LTCP and any issued final permit.

From a practical standpoint, STP improvements must be completed prior to conveyance improvements so that the STP 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 NHSA 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. The Department finds NHSA's schedule to be reasonable where capacity upgrade of the plant is scheduled to be completed by January 2029, and conveyance and storage would begin after that. These conveyance and storage improvements include construction of a parallel 48-inch Park Avenue siphon; increased capacity of the 5th and 11th street pump stations; construction of a parallel force main and parallel Hoboken siphon; and construction of a two- and eight-million-gallon storage tank.

Throughout the LTCP submittal and approval process, the Department has actively discussed and negotiated the Implementation Schedule with NHSA. This includes a meeting on January 5, 2023, which resulted in submission of an improved implementation schedule on January 26, 2023. Additionally, in direct response to comments received from EPA and the public during the draft permit public comment period, the Department met with NHSA on November 15, 2023; December 11, 2023; and January 12, 2024 to discuss the length of the schedule. The Department also issued a letter to NHSA on December 4, 2023 requesting justification as to why the timeframes of the Implementation Schedules included in the LTCPs for both permits exceed the recommendations specified in the FCA guidance. A response to that letter dated January 9, 2024 highlighted many of the same concerns as identified above.

NHSA has successfully obtained financing through the New Jersey Water Bank for numerous projects over the years, as discussed in further detail in **RESPONSE 76**. 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.

- 82. COMMENT:** As noted in the fact sheets, EPA developed a guidance document to assist in the development of CSO control implementation schedules and to this end, includes guidance on performing a FCA (US EPA, 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 LTCPs, the North Hudson Sewerage Authority utilized the FCA guidance and determined the implementation of CSO Controls would represent a "Low-Medium" burden. As noted in the fact sheets, 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 "Low" financial burden on the permittee. Consistent with the EPA FCA guidance, an implementation schedule following a Normal Engineering/Construction schedule or up to a maximum of 10 years is suggested. In 2023, EPA finalized its updated FCA Guidance (US EPA, 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. While we note that this 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 (82): As an initial matter, the Department notes that NHSA submitted its LTCP in June 2020 and, as such, evaluated its financial capability under EPA’s 1997 FCA guidance. Subsequent to the LTCP submission, EPA issued updated FCA guidance in February 2023. The Department maintains that the Adams Street WWTP Implementation Schedule identified in the draft and final permit is 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 lengthy negotiations 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 and 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 permittee’s circumstances, has determined that the Adams Street WWTP schedule nevertheless is 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 NHSA’s implementation of CSO controls as soon as practicable based on its given circumstances. As discussed at length in **RESPONSE 81**, the Department undertook an exhaustive course of negotiations with the permittee in regard to the length of the schedule, which resulted in significant improvements. Of note, the permittee shortened the schedule and prioritized 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 permittee. As noted in the draft permit and described in the June 2020 LTCP, NHSA proposed a 24-year timeline for construction to ensure that adequate funds are available while NHSA, as one authority, concurrently implements two separate LTCPs. As an initial matter, the Department notes that the permittee has consistently been proactive in seeking and securing funding for its CSO projects, as discussed in detail in **RESPONSE 76**. Nevertheless, the permittee’s financial situation is a unique one. While the 1997 FCA guidance suggests a “medium burden,” according to the LTCP, the median household income (MHI) is not uniform throughout the permittee’s service area and cost of living in the service area is “likely to be higher than many other sections of the country” so that income may not reflect the proportionally higher MHI. The Department is aware that there is a significant disparity in MHI across NHSA’s service area. According to NHSA’s January 9, 2024 letter, Union City and West New York, which make up 58% of NHSA’s total service area, have an MHI of approximately \$50,000. NHSA’s remaining service area has an MHI of approximately \$128,000. Additionally, although NHSA has actively pursued New Jersey Water Bank funding as described in **RESPONSE 76**, its debt service will not end until 2045 which impacts its ability to commit to significant projects. As stated in

NHSA's January 9, 2024 letter, taking on new debt "will create a burden on NHSA's budget and may necessitate a rate increase beyond NHSA's capability."

Furthermore, 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." In the case of NHSA, state law, specifically the Clean Stormwater and Flood Reduction Act (P.L. 2019 c. 42), restricts NHSA "to a 2% cap on its revenue and budget appropriations," according to NHSA's January 9, 2024 letter. Additionally, the permittee has indicated that project costs have significantly increased since submission of its LTCP.

- 83. COMMENT:** We urge NJDEP to follow the approach of EPA's just released final 2023 Clean Water Act FCA Guidance, the goal of which is to help communities "seek ways to minimize financial impacts, while ensuring residents also enjoy the benefits of infrastructure investments and improved water quality." It places the onus on permittees to develop a financial alternatives analysis, documenting that all feasible steps and a range of options have been taken to mitigate financial impacts of potential rate increases on low-income households. EPA provides a list of options it expects the utility to consider and then to either implement them or explain why they cannot. The options include adopting low-income affordability programs and equitable rate designs to reduce the costs borne by low-income households; accessing all available grant funding and subsidized loans to reduce the total cost borne by all residents and other ratepayers. As EPA notes in the proposed guidance:

"Where CWA compliance costs may impact on residents with incomes in the lowest quintile, a longer schedule may not always be the best solution to address impacts to those residents. In particular, if a community shows strong economic indicators in other categories, there may be better options for the community to address the potential financial burden faced by its lowest quintile residents. If the intended goal is to help a community's lowest income residents, an extended CWA schedule may, in fact, have the opposite effect if it delays addressing pollution in the neighborhoods where they live." And in deciding innovative funding strategies, we recommend engaging community members in these discussions.

Will NJDEP and permit holders, for this permit and subsequent regional CSO permits, follow the EPA's 2023 Clean Water Act FCA Guidance to limit residents' impacts of longer implementation schedules while minimizing financial impacts on lower income households? [2]

- 84. COMMENT:** In February 2023, the EPA released the final 2023 Clean Water Act FCA Guide, which was 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 set forth in the Clean Water Act. To ensure that rate-payers are not affected by the impacts of longer schedules while minimizing financial impacts on lower income households, NJF asks that NJDEP and permittees for this permit and subsequent CSO permits, follow the EPA's 2023 Clean Water Act FCA Guidance. [4]

- 85. COMMENT:** Will NJDEP and permit holders utilize the new US EPA FCA guidelines to lessen the impact on residents during longer implementation schedules while minimizing financial impacts on lower income households? [3]

RESPONSE (83-85): The permittee conducted a FCA, as required by the 2015 NJPDES CSO permit, as outlined in the June 2020 LTCP. As previously described, the purpose of this analysis is to evaluate the financial capability of the Authority and its sewer rate payers to fund future investments in combined sewer infrastructure. As required by the 2015 NJPDES CSO permit, the permittee's financial capability must be submitted along with the implementation schedule. To complete the assessment, the permittee utilized the 1997 FCA guidance which outlines the process for determining financial impacts and affordability associated with mitigating CSOs.

The Department acknowledges that US EPA announced its updated CWA FCA Guidance on February 1, 2023. 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 87-88**, further financial analyses as suggested by these comments 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 NHSA Adams Street serves to incorporate the findings of the June 2020 LTCP which was required based on the Department's issuance of the 2015 NJPDES CSO permit. 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. This schedule is front loaded where significant projects such as ResilienCity Park (formerly known as Northwest Resiliency Park) and Boulevard East are partially or almost fully completed in advance of the LTCP approval. In addition, STP upgrades and expansion are underway to ensure that planned conveyance improvements can occur so additional combined sewage that would otherwise be discharged as overflows can be conveyed to the STP. These significant projects occurring at the beginning of the implementation schedule 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.

- 86. COMMENT:** If not able to be required by permit, we do ask that the NJDEP release concurrent guidance following the recommendations of the EPAs financial assessment guidance released in 2023. [7]

RESPONSE (86): Given the comprehensive nature of the 2023 FCA guidance, the Department does not intend to create its own NJDEP guidance on the FCA.

- 87. COMMENT:** We recognize that it is vital to consider the financial impact on lower income rate- payers and overburdened households. We recommend that a review of the permit holder's financial capability analysis, including interest and inflation rates and related calculations be incorporated into the permit and clarify how affordability for lower income households is reflected. [4]

- 88. COMMENT:** We appreciate NJDEP's requirement that a financial capability analysis be conducted; however, we are concerned that innovative funding mechanisms are not being fully considered and taken advantage of at present. The impacts of this includes delayed timelines, increases in rates to ratepayers, and a risk to project completion in the long term. Permittees sometimes seek to use cost as a rationale for extending implementation timelines. However, this leaves communities bearing an extended burden to environmental and public health.

Permittees should conduct a more thorough review of funding alternatives to see if they can reduce the costs and shorten timelines. In the case of NHSA it is anticipated that they would exceed the required 85% capture rate. However, this result is not expected until 2045. This is too long of a time-frame for the Hudson River and communities to experience poor water quality.

It is also contradictory to regulations stating 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 CFR 122.47(a)(1). The CSO Control Policy requires that "each long-term CSO control plan . . . should 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). Ultimately, there is a fine line to walk between practicability and affordability, with an emphasis on reducing CSOs as quickly as possible to protect human health and the environment.

Moreover, with such a long time-frame, the risks of higher construction costs or future political administrations renegotiating requirements increase. During that time, communities might miss out on the current once-in-a-generation federal funding opportunity through the Infrastructure Investment and Jobs Act. Accessing federal water infrastructure funding now means that projects can become more affordable and therefore, more can be achieved. It also means permit holders will not be burdened by increasing interest rates. [2]

RESPONSE (87-88): The Department agrees that the permittee should assess all available funding alternatives. The Department agrees with the commenter that practicability and affordability must be balanced with reducing CSOs and CSO-related flooding as quickly as possible. Please refer to **RESPONSE 76** for additional information. Please refer to **RESPONSE 81** regarding the implementation schedule.

As recognized by the commenter, 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 more fully discussed in **RESPONSE 76**, NHSA has historically aggressively pursued funding through the New Jersey Water Bank. Of course, 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. Of course, 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 completing interests. The Department is presently satisfied that NHSA has vigorously pursued available funding opportunities. Similarly, NHSA submitted a FCA with its June 2020 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 for the Adams Street WWTP strikes the appropriate balance between all considerations.

Lastly, the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C contemplates memorialization of approved LTCPs and implementation schedules in an appropriate enforceable mechanism. The Department has determined that a separate enforceable instrument is necessary in order to formalize and solidify any 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 6, 2024 to solidify the LTCP and Implementation Schedule, as referenced in **RESPONSE 80**.

- 89. COMMENT:** All controls should be prioritized to have the greatest impact on CSOs and local flooding in the shortest time frame, while maintaining affordability for lower income households. We are concerned that the timelines for this LTCP are too long, leading to unnecessary prolonged sewage discharges and the associated pollution and public health issues. There is mention that some construction may get in the way of public activities; however, the water quality and health issues should take priority. For example, the Adams Street WWTP Implementation Schedule calls for increasing Adams Street WWTP capacity by 2029. This project is valuable for improving water quality and should be considered for moving to an earlier time frame. Expediting treatment plant expansion provides the ability to capture more CSO earlier in the Implementation Plan.

Can NJDEP work with the permit holder to shorten these timeframes for the Adams Street WWTP capacity expansion and the storage tank installations? Can NJDEP encourage the permit holder to take advantage of the once-in-a-lifetime federal funding from Water Bank, etc. to get these and the other projects underway much sooner? [2]

90. COMMENT: All controls should be prioritized to have the greatest impact on CSOs and local flooding in the shortest timeframe, while maintaining affordability for lower income households. For this permit, the greatest concern is the 20-year timeframe for constructing the storage tanks. We recommend the Department work with the permit holder to shorten timeframes for the Adams Street WWTP capacity expansion and the storage tank installations. If funding is required to support this, encourage the permit holder to take advantage of the once in a lifetime federal funding from NJ Water Bank, etc. to get projects underway sooner. We recommend the Department ensure the shortest timeline possible, while still ensuring affordability. [3]

91. COMMENT: We recommend the Department collaborate with the permittee to ensure the shortest timeline practicable, especially for the critical storage tank project that will provide high impact CSO volume reduction. To reduce the timeline of 2045 as stated in the permit, the permittee should be encouraged to apply for federal water infrastructure funding that was not available when the LTCP was released. 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.

We encourage the NJDEP to ensure the shortest timelines possible, in order to reduce the time that the community faces environmental and public health issues related to CSOs while still ensuring affordability. We are concerned that the timeline for implementing the storage tanks is stretched until 2045, which increases the impact on water quality and public health. The permit holder explains that they delayed these projects in order to not incur more debt. Given that the LTCP was crafted prior to the availability of federal water infrastructure funding, we suggest that NJDEP and NHSA revisit financing of these critical storage tank projects and find ways to shorten the timeline while maintaining affordability. [4]

92. COMMENT: The extended implementation timeline is concerning. [5]

RESPONSE (89-92): The Department agrees that CSO control projects should be implemented as soon as practicable and that all available funding sources should be pursued. As described in **RESPONSE 73-75**, NHSA has historically used the New Jersey Water Bank and Department staff have made NHSA aware of other funding sources. A fact sheet specific to CSO funding was recently developed to assist permittees and can be found at <https://dep.nj.gov/wp-content/uploads/wiip/combined-sewer-overflow-cso.pdf>. This document includes a summary about funding opportunities for the upcoming State Fiscal Year. See also **RESPONSE 77-78** and **RESPONSE 97-98** regarding available technical assistance and funding.

As noted in other responses, specifically **RESPONSE 81**, significant CSO control projects for the Adams Street WWTP are already in various stages of completion. These projects include the installation of a one-million-gallon storage tank to alleviate flooding and increase the capacity in the conveyance system; installation of combined sewer improvements at Boulevard East to alleviate flooding; construction of a new Adams Street WWTP outfall; and construction of planning major STP upgrades to increase capacity from 20.8 MGD to 35 MGD. The timeline included in the March 3, 2023 draft permit was shortened for certain projects and expanded with additional detail for all projects as compared to the June 2020 LTCP. As per the Department's request, NHSA has front-loaded its implementation schedule with significant CSO control projects so that percent capture is increased in the short term to minimize CSOs as quickly as practicable. Specifically, wet weather percent capture will increase from a baseline of 72% to 82% by 2037. NHSA has proactively completed projects and commenced construction prior to approval of the LTCP and any issued finalized permit.

From a practical standpoint, STP improvements must be completed prior to conveyance improvements so that the STP can accept the additional flow. As such, it is reasonable for STP improvements to occur prior to initiating major conveyance and storage improvements. The Department finds NHSA's schedule to be reasonable where capacity upgrade of the plant is scheduled to be completed by January 2029, and conveyance and storage would begin after that. These conveyance and storage improvements include construction of a parallel 48-inch Park Avenue siphon;

increased capacity of the 5th and 11th street pump stations; construction of a parallel force main and parallel Hoboken siphon; and construction of a two- and eight-million-gallon storage tank.

- 93. COMMENT:** I've lived in Hoboken on and off since 1983. My grandfather used to ship from mainland over here and he lived in Hoboken back, in the early 1900s. I have a great appreciation for the water, the waterfront and its history. I am also a longtime kayaker. I have found that the new version of urban kayaking on the Hudson River has become a huge, not only sport, but also a recreational pastime that evokes the history of Hoboken and all New Jersey's boating history. The necessity of having a clean waterway for both recreation and nautical transportation is essential.

I second those comments that 24 years to enact a change of 7% or even any noticeable increase is underestimating the capabilities of the Department. The timeline could be shortened quite a bit. The waterfront, the water, recreational boaters, and the river can benefit from those changes before a quarter of a century has passed. [12]

- 94. COMMENT:** We are talking about a waterway that is very heavily used by paddlers, boaters, fishermen, and people walking along the water. Water quality is something that is very important in this process, not just for monitoring, but to share with the public to make decisions about how, when, and where they use their waterways. With all the progress that we're making in getting these permits out, it's important to not lose sight of the sense of urgency in ending the CSO flows. Minimizing timelines wherever possible is a really important aspect of what we're doing, especially now that we have some pots of money available more widely to communities. To capitalize on that would be fantastic for the public and for everyone who's facing issues with flooding and CSO water quality issues in their areas. [8]

- 95. COMMENT:** The waterfront has evolved over the past 15, 20 years from an industrial wasteland to a major recreational and residential area of the state. The attraction of the riverfront, and the water itself is an enormous economic benefit to the state of New Jersey. Obviously, dumping wastewater into the river near what is now a recreational area is not advisable and everyone should recognize that. The sooner we can get these actions done and the more wastewater we can keep contained and out of the river is best for everyone.

A 24-year timeframe to me, it's basically a nonstarter and unacceptable. So much can happen in 24 years, in areas of technology in the areas of governance. Plans set now to be implemented in 20 years have really no validity, in my opinion. It is necessary to come up with a plan that follows on from the first couple of steps which go on in the next three or four years to continually improve the process. We don't have any answers at all as to how to shorten it, but I think a plan that spends plans to spend, I believe \$77 million in order to add another 7 or 8% of wastewater over 24 years seems to me to be a non-starter. I encourage NJDEP to come up with a more practical and active solution that we can all enjoy in the near term rather than use the 85% as a mandatory target with a proposal that says we're going to take us 24 years to get there. [10]

- 96. COMMENT:** Allowing the CSO incursions through 2045 will result in unnecessary environmental burden on this community and risk higher construction rates, 20 or more years into the future. [7]

RESPONSE (93-96): The Department agrees that the reduction and/or elimination of CSOs is a high priority and has strived to create this permit with that goal in mind. The Department acknowledges that the Hudson River is an essential resource to the community that is used for a variety of means including recreation. The implementation of the LTCP for NHSA Adams Street will lead to a reduction of CSO discharges. The Department maintains that these improvements should serve to enhance the designated uses of the waterbodies which could lead to more recreational opportunities. The 2015 NJPDES CSO permit and this subject NJPDES CSO permit contains a myriad of requirements to address CSOs as well as to require public notification measures for recreational use as per Part IV.F.8.

The Department agrees that CSO control projects should be implemented as soon as practicable and that all available funding sources should be pursued. See **RESPONSE 77-78** and **RESPONSE 97-98** regarding available technical assistance and funding. See **RESPONSE 81** and **RESPONSE 87-88** regarding the Implementation Schedule.

COMMENT: Will NJDEP require that permittees not only do the standard calculations but also an alternative calculation that would reduce ratepayer burden and accelerate environmental and community benefits? The NJDEP should consider requiring the permittees to not only do the standard calculations that they have done, but also alternative calculations that would reduce ratepayer burden and accelerate environmental and community benefits. They should also do calculations that factor in receiving funding from the Water Bank, which would lower annual debt service and thereby make it possible to accelerate implementation while still staying within the affordability thresholds. This would also factor in implementing a stormwater fee which would offset costs, and as with the Water Bank funding, would allow for accelerated implementation while staying within the affordability threshold. By requiring them to calculate with and without Water Bank funding, the difference would be more transparent. [2]

97. **COMMENT:** Can NJDEP require that permittees not only do the standard calculations but also an alternative calculation taking into account new federal funding that would reduce ratepayer burden and accelerate environmental and community benefits? In addition, could the LTCP be implemented more rapidly and with less impact on ratepayers if North Hudson Sewerage Authority obtained funding as described above, especially principal forgiveness, via the Water Bank/State Revolving Fund? Similarly, if North Hudson Sewerage Authority were to implement a stormwater fee, could this generate revenue that would enable expedited implementation of the LTCPs and lower ratepayer burden? [3]

98. **COMMENT:** The timeline for this project is really the object of supreme concern. We are suggesting that the NJDEP require all permittees, specifically this one, when possible, review alternative calculations focused on reducing the rate payer burdens. [7]

RESPONSE (97-98): As an initial matter, the Department notes that the permittee submitted its LTCP in June 2020 and, as such, evaluated its financial capability under EPA's 1997 FCA guidance. Subsequent to the LTCP submission, EPA issued updated FCA guidance in February 2023. The Department maintains that the Adams Street WWTP Implementation Schedule identified in the draft and final permit is compliant with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C based upon a thorough review of the permittee's LTCP, requirements of the federal CSO Control Policy, recommendations of the 1997 and 2023 FCA guidance, and lengthy negotiations with the permittee. It is unclear what is intended regarding the reference to alternative calculations as stated in these comments.

The Department agrees that all funding opportunities should be pursued and has shared information regarding available funding and the EPA technical assistance program with NHSA. The Department and the New Jersey Infrastructure Bank 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. Projects eligible for financing include a wide variety of wastewater treatment works, stormwater management, drinking water systems, land acquisition, and landfill activities. For additional information visit <http://nj.gov/dep/dwq/cwpl.htm>. The New Jersey Water Bank also offers free technical assistance to DACs 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/>.

See **RESPONSE 81** regarding the Implementation Schedule and **RESPONSE 73-75** regarding stormwater utility fees.

99. **COMMENT:** I thought that there was a surplus and all those billions of dollars of a surplus could have gone to fixing this problem overall. Could funding surpluses from the state go to fixing CSOs? It's a hazardous waste problem and it's extremely daunting and ongoing for people all throughout the state.

When there was a USA Today article in 2021 about Paterson, I thought that the New Jersey administration would have been embarrassed enough to do something considerable to make a difference regarding CSOs, specifically

maintenance programs, and innovative, intergenerational, targeted green infrastructure analyses. I thought that would have happened already. [13]

RESPONSE (99): 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.

The Department agrees that the reduction and/or elimination of CSOs is a high priority and has strived to create this permit with that goal in mind. The issue of CSOs is statewide and affects 21 municipalities in New Jersey including the City of Paterson. All NJPDES CSO permittees were required to submit LTCPs to set forth CSO controls and these requirements are being included in NJPDES CSO permits. The implementation of the LTCP for NHSA Adams Street, as well as requirements included in other NJPDES CSO permits, will lead to a reduction of CSO discharges. See <https://dep.nj.gov/dwq/combined-sewer-overflow/> for additional information regarding other hydraulically connected systems.

- 100. COMMENT:** We know that well-designed, meaningfully incorporated, and properly maintained green infrastructure (GI) projects can have expanded community impact over gray-only infrastructure projects. This is due to benefits such as enhancing the quality of the built environment throughout the community, improving air quality, reducing the heat island effect, and sequestering carbon on top of their core responsibility of managing stormwater. For example, Hoboken's resilient urban parks and green infrastructure are great ways to capture stormwater runoff that will reduce CSO discharges and localized flooding.

The green infrastructure projects as it relates to this region, will be installed by the municipalities and not the permit holders. However, there is opportunity for the permit holder to install new green infrastructure and leverage planned green infrastructure by considering meaningful green infrastructure project installations as the gray infrastructure projects are designed and installed, as a way to slow and reduce volumes even further, and to enjoy added public and environmental health benefits. The permit holder should also consider including green infrastructure projects in Weehawken and West New York as there does not seem to be many GI projects there. In addition, the Department should require that the permit holder track and report on the impact of municipal green infrastructure projects, especially those in Hoboken, on reducing CSO volume. [2]

- 101. COMMENT:** We recommend the Department require the permittees prioritize controls and projects based on the impact on CSO volume reduction and water quality improvements including well-designed green infrastructure. Ensure that green infrastructure is implemented as much as possible, wherever possible, and as quickly as possible. We recommend the Department advise permit holders to include green infrastructure projects in Weehawken and West New York. [3]

COMMENT: NJDEP should prioritize controls and projects based on the impact of CSO volume reduction and water quality improvements, including well-designed green infrastructure. We have noticed that while green infrastructure is being implemented by the City of Hoboken, the North Hudson Sewerage Authority has not included green infrastructure in its plans. NJDEP should encourage the permittees to explore the feasibility of green infrastructure projects in Weehawken, Union City, and West New York. [4]

- 102. COMMENT:** The benefit from the few green infrastructure projects can be maximized by having them start sooner than projected. [9]

RESPONSE (100-102): This subject permit action serves to renew the 2015 NJPDES CSO Permit for NHSA Adams Street and incorporate the findings of the LTCP. NHSA Adams Street WWTP services the City of Hoboken, portions of Weehawken Township, and portions of Union City.

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. As stated in Appendix E of the revised LTCP dated May 2022, there are currently 125 green infrastructure and stormwater detention systems in Hoboken, Weehawken, and Union City that can store over 1.9 million gallons of stormwater during peak wet weather events, as stated here:

Table 1- Stormwater Detention and Storage Volumes		
Municipality	Number of Detention Systems	Storage Volume, Gallons
Hoboken	56	1,320,000
Weehawken	11	85,000
Union City	58	523,000
West New York	35	426,000
Total	160	2,354,000

In addition, NHSA requires the detention of stormwater runoff from every new development and redevelopment as a condition of the approval of each new or modified sewer connection as per its Sewer Use Policies and Procedures, Resolution 20-052, as included in Appendix E of the revised LTCP dated May 2022. This Resolution applies to all cities in North Hudson's service area including Hoboken, portions of Weehawken, and portions of Union City. As per the Resolution:

- “a) All Applicants within the Authority's service area must provide a stormwater management system. This includes:
- i. New Connections,
 - ii. Site modifications that will convert pervious area to impervious area or that create any amount of increase in impervious area (i.e. additional parking spaces)
 - iii. Site rehabilitation projects, including internal construction that modifies the use of an existing building or property.
- b) Stormwater management for new developments and redevelopments can be achieved using the following Stormwater Management Systems:
- i. Stormwater Detention System (Section 6.3)
 - ii. Green Roofs
 - iii. Rain Gardens
 - iv. A system that satisfactorily meets design requirements as found in the New Jersey Department of Environmental Protection's *New Jersey Stormwater Best Management Practices Manual*.
...

The Department acknowledges that the NHSA Sewer Use Policies and Procedures, Resolution 20-052 is proactive in requiring green infrastructure and the detention of stormwater runoff in new and redevelopment.

In addition to the above, the City of Hoboken submitted the Hoboken Green Infrastructure Strategic Plan in October 2013. The plan outlines strategies to help manage the increasing intensity and frequency of severe weather which contributes to CSOs. The strategies include increasing the City's use of infiltration, detention, and retention of stormwater before entering the CSS to avoid potentially overloading the system leading to flooding. Current green infrastructure elements that are either in planning or already constructed are permeable pavements and rain gardens in Southwest Resiliency Park, multiple gardens and pervious spaces in the ResilienCity Park (formerly known as Northwest Resiliency Park), underground detention systems at 7th and Jackson Street Resiliency Park, and the Washington Street Rehabilitation and Redesign Project that includes 15 rain gardens along Washington Street. These elements will work in parallel with the LTCP to further control CSOs.

As discussed further in **RESPONSE 83-85**, significant projects, such as STP upgrades, are at the beginning of the implementation schedule, which will ensure that the benefits of reductions in CSO volume are realized in the short term.

- 103. COMMENT:** How can NJDEP ensure that new green infrastructure projects are meaningfully explored as part of planned gray infrastructure projects as this is a good opportunity to address both simultaneously, and achieve economies of scale while still ensuring affordability for ratepayers? Can surface-level green infrastructure improvements be implemented in this current draft permit along with gray infrastructure installations? [2]
- 104. COMMENT:** How can the Department ensure that green infrastructure is explored as part as of gray infrastructure projects? How will NJDEP encourage the permittees to explore the feasibility of green infrastructure projects in areas like Weehawken, Union City and West New York?

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]

- 105. COMMENT:** How can the NJDEP ensure that green infrastructure is explored as part of great infrastructure projects? [9]

RESPONSE (103-105): The 2015 NJPDES CSO permit required three stages of LTCP development where major submissions were required on July 1, 2018 and July 1, 2019 which culminated with the submission of the LTCP in 2020. The objective of the Development and Evaluation of Alternatives Report (DEAR) dated June 25, 2019 (available at <https://www.nj.gov/dep/dwq/cso-ltcpsubmittals.htm>) was to provide a comprehensive evaluation of CSO control alternatives including gray and green infrastructure. This was a required deliverable of the 2015 NJPDES CSO permit. The DEAR provided sufficient analysis of the required CSO technologies, including GI. The DEAR was approved by the Department on February 24, 2020. The DEAR evaluated the feasibility of multiple types of green infrastructure including bioretention practices and green roofs.

The DEAR stated that the most common GI technologies in urban areas like the Adams Street WWTP drainage basins include bioretention, bioswales, stormwater planters, permeable pavement, subsurface infiltration/storage, and stormwater tree pits. The DEAR also stated that for less constrained sites with additional space, infiltration basins, ponds, and constructed wetlands could be effective and cost-efficient. In addition, for more constrained sites with limited at grade opportunities, green (vegetated) roofs may a viable GI technology. This NJPDES CSO permit serves to incorporate the LTCP through an Implementation Schedule.

- 106. COMMENT:** Can NJDEP require that all municipal and utility green infrastructure assess the impacts on CSO capture and include that in the reporting? [2]
- 107. COMMENT:** We recommend the Department require the permittees to review the projected CSO reductions from the municipal Green Infrastructure projects and track and report on the impact that they will have on CSO volume. [3]
- 108. COMMENT:** NJDEP should require the permittee to monitor and track the impact on CSOs of green infrastructure projects implemented by the municipality to ensure they are being properly maintained. Will the Department require the permittee to monitor and track the impact on CSOs of green infrastructure projects? [4]
- 109. COMMENT:** I know Hoboken has some very ambitious green infrastructure projects that are referenced in the LTCP, but there hasn't been the proper modeling done to see what the impact is of those plans on the CSO outfalls and measuring as well as GI in other parts of the impacted area for these particular permits. So, I'm just wondering if the NJDEP can acknowledge that Hoboken does have plans, but those plans were not done in collaboration with the water team to sort of measure the impact of the GI on the CSO outfalls and sort of the impact overall. So if those can be sort of combined, then that work can be replicated for other parts of the of the system. [7]

RESPONSE (106-109): 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. Also see Part IV.G.9.e.

Requirements regarding Green Infrastructure were introduced to the CSO permits in the first final individual CSO permit issued in 2015. The focus of that permit was the creation and submission of a LTCP which included Implementation Schedules consisting of projects and timelines. As part of that requirement, NHSA was 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 were required to be evaluated. Green Infrastructure was one of those seven control alternatives. There was no requirement to incorporate or emphasize any particular gray or green infrastructure control alternative in the LTCP. This decision was left to the permittee so long as a path to compliance was presented.

- 110. COMMENT:** We’re asking that the permittee look into more green infrastructure projects as well, and also collaborate with the city to ensure that these projects are being maintained and also find other ways that they can implement green infrastructure.

Specifically, the City of Hoboken has planned for and designed green infrastructure, such as the Southwest Resiliency Park and the Northwest Resiliency Park. It is important that these parks and green infrastructure projects are maintained in order to reduce the amount of stormwater being sent to the wastewater treatment plant after heavy precipitation events. The permittee should collaborate with the City of Hoboken to ensure that their green infrastructure projects are being properly maintained and explore additional green infrastructure projects where feasible. [4]

RESPONSE (110): The objective of the DEAR dated June 25, 2019 was to provide a comprehensive evaluation of CSO control alternatives including green infrastructure. As a result of the DEAR, the LTCP of NHSA Adams Street WWTP selected green infrastructure control measures at ResilienCity Park (formerly known as Northwest Resiliency Park) including rain gardens and a cistern for on-site irrigation. These significant green infrastructure measures were completed in advance of an approved LTCP.

The Department acknowledges the need for proper operation and maintenance of green infrastructure. For that reason, Part IV.G.6 of the NJPDES CSO Permit requires NHSA to have an updated Operational Plan, including Operation & Maintenance (O&M) Manual, Emergency Plan and Asset Management Plan to address the LTCP CSO control facilities including the implementation, operation and maintenance of green infrastructure.

- 111. COMMENT:** New Jersey Future considers urban parks as an important tool to manage stormwater and protect watersheds. Parks can infiltrate, treat, and store stormwater, which reduces the quantity that is sent to the treatment plants and reduces localized flooding. As NJDEP updates the Green Acres rules, the Department should encourage permittees to explore how to work with Green Acres staff on ways to manage stormwater without diverting park land. [4]

RESPONSE (111): The Department agrees that urban parks can be a tool in managing stormwater through infiltration and/or storage of stormwater, which reduces the amount of stormwater from entering the combined sewer system and reducing localized flooding. The LTCP for NHSA Adams Street WWTP includes the implementation of stormwater control measures at ResilienCity Park (formerly known as Northwest Resiliency Park). These measures will detain up to 2 million gallons of stormwater that would have otherwise flooded city streets and residential basements through a 1-million-gallon stormwater detention tank located below ground and up to another 1 million gallons through above-ground green infrastructure such as rain gardens and a cistern for on-site irrigation. As the NJPDES CSO permittees implement the LTCPs, the Department is committed to maintaining open lines of communication between the Department and the NJPDES CSO permittees.

The Department acknowledges that whether CSO controls can be included in urban parks owned by Green Acres is subject to Green Acres regulations. Green Acres regulations are outside the purview of the NJPDES regulations and therefore outside the terms of the permit.

112. **COMMENT:** We request that the Department require that the siting of gray infrastructure will not have negative cumulative impacts on overburdened communities. [2]

113. **COMMENT:** I ask that the permit require a mechanism for ensuring that gray infrastructure will not have negative impacts on overburdened communities. [9]

RESPONSE (112-113): The Department acknowledges that NHSA Adams Street has areas that meet the Department's definition of an overburdened community in accordance with N.J.A.C. 7:1C. The gray infrastructure elements of the LTCP include construction of a larger, replacement WWTP outfall and expansion of capacity of the existing WWTP. These projects will occur on the WWTP grounds (and underground to the Hudson River) in Hoboken, which is not an overburdened community. These projects will also serve to reduce CSO-related flooding in the Adams Street Service area, including overburdened communities.

114. **COMMENT:** The permit should require that implementation of the LTCP, for either gray or green infrastructure, be accomplished in a manner that minimizes impact to the host community, especially during construction activities. This includes but is not limited to obeying local ordinances, dust, noise, traffic control, etc. We recommend that priority be given to the green and gray projects that have the fastest and greatest impact on CSO reduction and water quality improvement. [3]

RESPONSE (114): All local ordinances, which may include those related to dust, noise and traffic control, are required to be obeyed at all times. This is noted in Part II.B.1.a which states "The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances."

As discussed further in **RESPONSE 83-85**, significant projects, such as STP upgrades, are at the beginning of the implementation schedule. This will ensure that the benefits of reductions in CSO volume are realized in the short term.

115. **COMMENT:** NJDEP should ensure that the NJDEP Division of Water Quality's 2018 "Evaluating Green Infrastructure: A Combined Sewer Overflow Control Alternative for Long Term Control Plans" supplemental resource be incorporated in the LTCP and permit and NJDEP should update the resource to include accurate data to control stormwater. [2]

RESPONSE (115): As stated in this comment, the Department released guidance in 2018 regarding GI available at <https://dep.nj.gov/dwq/combined-sewer-overflow/cso-permittees/#resources>. The intent of this document was to provide guidance to CSO permittees to evaluate GI as part of their LTCPs as due in 2020. GI was one of the seven specific CSO control alternatives that was required to be evaluated for the purposes of the LTCP pursuant to Part IV.G.4 of the 2015 NJPDES CSO permits.

Detailed design guidance for GI can be found in the New Jersey Stormwater Best Management Practices Manual (see http://www.njstormwater.org/bmp_manual2.htm) for various types of GI controls.

116. **COMMENT:** In terms of water quality monitoring near CSO outfalls, collecting samples during implementation for fecal indicator bacteria, particularly during wet weather events, would provide beneficial protection to the public. Maintaining transparency and outreach around water quality and sampling is a critical step to further protect the public from the effects of CSO events, particularly for recreational users of these impacted waterways, and the increased risks in the 24–72 hours after an event.

Will the permittee be required to conduct water quality sampling near CSO outfalls during implementation of LTCP projects and during wet weather events that generate overflows? How will the NJDEP utilize information from these permits, including water quality and precipitation data? Will it be used to look at opportunities to improve protections on the waterbody such as a reviewing/updating Surface Water Quality Standards (SWQS), or completion of a Use Attainability Analysis for affected water bodies? Beyond testing for E. coli and fecal coliform, will NJDEP require or suggest permittees analyze water quality samples for Enterococcus and other contaminants of emerging concern that may impact communities? [2]

117. **COMMENT:** We recommend the Department require the permittee to conduct water quality sampling near CSO outfalls during implementation of LTCP projects and during wet weather events that generate overflows. This could further protect the public from the effects of CSO events by maintaining transparency and conducting outreach around water quality and sampling. Due to the increased risks in the 24–72 hours after a CSO event, this information should be communicated to recreational users of the impacted waterways in a timely manner. We also recommend that the Department utilize water quality and precipitation data to look at opportunities to improve protections on the waterbody such as a Use Attainability Analysis. [3]

RESPONSE (116-117): Ambient water quality sampling around CSO outfalls is a required component of the Compliance Monitoring Program (CMP) as contained in the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. Submission of a CMP Report was required by the March 12, 2015 NJPDES CSO permit. The CMP Report generated sufficient data to establish existing ambient water quality conditions for pathogens in the CSO receiving waters. In review of the report, the Department determined that the data collection effort, in concert with the ongoing New Jersey Harbor Discharge Group (NJHDG) Monitoring Network, provided sufficient information for the purposes of data characterization for baseline and existing conditions.

The CMP is a continued requirement in this renewal permit consistent with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. 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 PCCMP will provide data to evaluate the effectiveness of the CSO control measures constructed during and after the implementation of the LTCP including a monitoring schedule, regulator monitoring locations, receiving water sampling locations, and rain gauge locations.

The NJPDES CSO permit requires collection of ambient sampling utilizing the NJHDG monitoring network for ongoing PCCMP data given that this is a comprehensive and longstanding data set. The NJHDG had initiated a Long-Term Ambient Water Quality Monitoring Program for the NJ portion of the NY/NJ Harbor Estuary in 2003. The main objective of the NJHDG program is to develop a comprehensive database on the existing water quality of the NY/NJ Harbor by routinely and extensively monitoring the waters of the Passaic River, Hackensack River, Newark Bay, Arthur Kill, Raritan River, Raritan Bay, and the Hudson River. Monitoring is performed at each station weekly from May through September and monthly from October through April. Additional information is available here at <https://www.nj.gov/pvsc/what/njhdg/>.

A Use Attainability Analysis, as referenced in the comment, refers to a structured scientific assessment of the factors affecting the attainment of uses specified in Section 101(a)(2) of the Clean Water Act. This is separate and distinct from the CMP contained in the NJPDES CSO permits and is outside the scope of this topic. Data collected as part of this process may be utilized to inform New Jersey Surface Water Quality Standards at N.J.A.C. 7:9B; however, it would be premature to determine any effect that may have given that the PCCMP process has not yet begun.

118. **COMMENT:** We have been testing the water in four places along the Hoboken waterfront for the past eight years, but we've been submitting it to groups on the New York side of the river. So how can we or is there a plan to monitor the water at the CSO outfalls or along the New Jersey side of the river? How can we do that? How can we involve the public in that that's a great way to get people interested in what's going on? How can that be done? Is that included?

When we do our water monitoring, we have children involved in the monitoring, including teenagers, and middle and high schoolers. It's a great way to use the water as an outdoor classroom and as an education tool and to involve these young people in the future of their communities. So, I would just like to advocate for thinking about expanding public outreach to include citizen science related topics to the long-term plan. [12]

RESPONSE (118): The Department acknowledges and appreciates any water quality monitoring efforts of citizens and volunteers along the Hoboken waterfront. Community water monitoring is the collection of scientific water quality data by concerned citizens working in partnership with professional scientists and government decision-makers. This data can be used to help determine the ecological condition of local waterbodies as well as identify the causes and sources of water quality impairment. Community water monitoring includes both "citizen science" and

"volunteer monitoring" activities. Community water monitoring is a valuable exercise for both the participants as well as for assisting resource agencies with understanding the health of the waterway.

The Department's Division of Water Monitoring and Standards supports this effort and has program information regarding community water monitoring at https://www.nj.gov/dep/wms/bears/comm_water_monitoring.htm.

EPA also has resources available for water projects as part of Volunteer Water Quality Monitoring. Specifically, volunteers for local organizations can collect water quality data to help assess the health of water bodies. Additional information is available at <https://www.epa.gov/participatory-science/participatory-science-water-projects>.

- 119. COMMENT:** EPA supports the requirements of the PCCMP at Part IV.G.9. 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%. In addition, EPA recommends that the permittee submit its water quality compliance monitoring plan to the NJDEP for review and approval prior to implementation. [1]

RESPONSE (119): 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. 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. 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.

- 120. COMMENT:** We appreciate that models will be required to be updated at the end of the effective NJPDES permit. Similarly, we appreciate that updated Hydrologic and Hydraulic (H&H) models will be required to include all completed CSO control measures and any modifications to the CSS since the previous H&H model was calibrated for the LTCP. In addition, we recommend that at the end of the effective NJPDES permit, the NJDEP should require permittees to recalibrate the H&H model with updated water quality data, precipitation rates, and other climate-related data. [2]

RESPONSE (120): Modeling of a sewer system is recognized as a valuable tool for predicting sewer system response to various wet weather events. Compliance with the final required percent capture value will be determined based on a H&H model consistent with the federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. The portion of the CMP conducted during and after implementation of the LTCP is referred to as the PCCMP and is included in Part IV.G.9. The PCCMP shall be conducted once the CSO controls specified in the implementation schedule in Part IV.G.8 have been completed. Information regarding compliance with the final required percent capture is in Part IV.G.9.d as follows:

- d. The PCCMP shall use the following steps to determine if the CSO control measures are meeting the final required percent capture:
 - i. Collect flow monitoring for the purposes of PCCMP 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 final required percent capture is being achieved.

The implementation of CSO controls will change the way the combined sewer system operates which may require recalibration of the H&H model to ensure that it accurately represents the combined sewer system. As noted above, recalibration may be required, depending on the sewer system operation, and must be approved by the Department.

- 121. COMMENT:** The statement “remaining CSOs are not precluding the attainment of water quality standards for pathogens.” should be revised to remove “for pathogens” as the CSO Control Policy does not limit water quality standards attainment to only pathogens. [1]

RESPONSE (121): 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:

- e. 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.e.

CUSTOM REQUIREMENT (PART IV.H) COMMENTS

- 122. COMMENT:** EPA is very supportive of the requirements in Part IV.H.1, 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 percent capture requirements for CSO controls not be met. [1]

RESPONSE (122): 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.

- 123. COMMENT:** Over the last several years, it has become widely accepted that climate change and the effects of sea level rise are a threat to our wellbeing, especially here in New Jersey. Our state is full of beautiful wetlands, rivers, and coastal beaches under direct threat from rising seas, storm surge flooding, and destruction or degradation of wildlife habitat and estuary systems. This is why it is so important and heartening to see climate change and adaptive management included in these CSO permits.

There is still a lingering vagueness in the language in these permits around how CSO controls address climate change and sea level rise. 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 affects the implementation plan. How will the permit holder consider climate change and sea level rise and how will this be documented and reported on? Can they review the projected CSO removals and whether current projections of precipitation and sea level rise due to climate change affects the implementation plan? [2]

RESPONSE (123): 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.

- 124. COMMENT:** The permit calls for reporting changes in precipitation trends but does not call for the permittee to develop a plan to address or evaluate them. We request that the impacts of these trends be assessed and any projected impact on the Implementation Plan be quantified. If any of the projects in the Implementation Plan are negatively affected and reduce the capture below 85%, then revisions to the plan should be required. Can NJDEP ensure that the permit holder develops a plan to address or evaluate changes in precipitation trends and that quantifies the impact on the implementation plan? [2]

- 125. COMMENT:** We recommend the Department ensure that the permit holder develops a plan to evaluate changes in precipitation trends and quantifies the impact on the implementation plan and makes appropriate changes accordingly. [3]

RESPONSE (124-125): The permittee is required to submit information regarding Precipitation Trends as stated in Part IV.H.1 of the NJPDES CSO permit:

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.

The Department will evaluate this information at the time of permit renewal to determine if any changes need to be made based on these reported trends. Any such change would need to be in accordance with the federal CSO Control Policy as well as N.J.A.C. 7:14A-11, Appendix C.

- 126. 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. [4]

RESPONSE (126): 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 was the subject of the System Characterization Report as submitted on June 1, 2018 and approved by the Department on July 23, 2019.

- 127. COMMENT:** EPA recommends adding specific reporting requirements to Part IV.D.2 including: (1) identify missed milestones/CSO project implementation dates, along with the appropriate reason/justification; (2) identify actions that the permittee will take to bring the project back on schedule and identify any alternate CSO projects to be implemented with an accompanying schedule; and (3) submit these to the NJDEP for approval. Alternatively, these items could be included as part of the post construction compliance monitoring. [1]

RESPONSE (127): Adaptive Management was included as a permit component to build flexibility to include modified CSO control measures in the event that the permittee does not meet the wet weather percent capture at the end of the permit cycle.

The Department maintains that the suggested elements within this comment are already included in Part IV.H.2.b. For example, Part IV.H.2.b requires that the Adaptive Management Plan identify modified or additional CSO control measures to achieve the final required percent capture; a detailed analysis and a modified implementation plan of any modified CSO control measures; and a schedule of any modified CSO control measures.

- 128. COMMENT:** We also appreciate the inclusion of an interim and not just a final adaptive management report. This will also give the permittee the opportunity to assess whether climate change projections will affect the implementation plan. [2]

RESPONSE (128): The Adaptive Management Plan is related to the Post-Construction Compliance Monitoring Plan (PCCMP). Rather, the NJPDES CSO permit requires an interim and final PCCMP as stated in Part IV.G.9. As per Part IV.H.2.a.iii:

- iii. The precipitation trends required in Part IV.H.1 above demonstrates a change in the assumptions used in the development of the LTCP.

However, the NJPDES CSO permit does not require an interim and final adaptive management report.

- 129. COMMENT:** The permittee should review its implementation plan with regard to pending or new New Jersey Protecting Against Climate Threats (NJ PACT) rules and provide a report explaining any impacts. How will NJDEP incorporate NJ PACT rules, including the inland flood rules and resilient environments and landscapes, into this permit and future permits? Will the permittee review its implementation plan with regard to pending or new NJ PACT rules and provide a report explaining any impacts? [2]

130. **COMMENT:** The Department should provide guidance on how to incorporate rules being developed by the NJ PACT process. Additionally, permit conditions should include a requirement to update models reflecting available climate data and incorporate projections from NJ PACT. The Department should require an updated recalibration based on new climate data at the end of each permit cycle. [3]
131. **COMMENT:** The Department should provide clear guidance on how NJ PACT rules, anticipated in 2023, will be incorporated into this permit and future regional CSO permits. The Department should require the permittee to document and report on how climate change impacts CSO removals. [4]

RESPONSE (129-131): 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 permittees are required to comply with all final and applicable regulations.



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: NJ0026085

Final: Surface Water Renewal Permit Action

Permittee:

North Hudson Sewerage Authority
1600 Adams Street
Hoboken, NJ 07030

Co-Permittee:

Property Owner:

North Hudson Sewerage Authority
1600 Adams Street
Hoboken, NJ 07030

Location Of Activity:

Adams Street Wastewater Treatment Plant
1600 Adams Street
Hoboken, NJ 07030
Hudson County

Authorizations Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
A - Sanitary Wastewater (IP) – Renewal	02/07/2024	04/01/2024	03/31/2029
CSM - Combined Sewer Management (IP) - Renewal			

DEP AUTHORIZATION

**Susan Rosenwinkel, Assistant Director
Water Pollution Management Element**

(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 180 days before the expiration date.

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 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. 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.

6. 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.

7. Standard Reporting Requirements - Electronic Submission of NJPDES Information

- a. Effective December 21, 2020, 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 sanitary sewer overflows or bypass events.
 - ii. 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).

8. 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.

9. 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 NHSA dated February 6, 2024. 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 Adams Street WWTP.

PART III

LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:

001A Sanitary Outfall

RECEIVING STREAM:

Hudson River

STREAM CLASSIFICATION:

SE2(C2)

DISCHARGE CATEGORY(IES):

A - Sanitary Wastewater (IP)

Location Description

The influent monitoring location shall be before any treatment, other than degritting, and before the addition of any internal waste streams. All effluent sampling, including CSO related bypass flows, shall be after disinfection and prior to discharge into the Hudson River at latitude: 40° 45' 13" N and longitude: 74° 01' 15" W.

Contributing Waste Types

Sanitary

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 2-Final Phase (flow of 20.8 MGD with CSO bypass conditions): Duration of discharge shall be reported as the # of calendar days/ month that a bypass event occurs. Continuous flow metering for flows into the plant shall be reported as Flow, In Conduit or Thru Treatment Plant as Raw Sew/Influent.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE: 1 - Initial****PHASE Start Date:** 04/01/2024**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	REPORT 12 Month Rolling Av	*****	MGD	Continuous	Metered
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Effluent Gross Value	2365 Monthly Average	3550 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Day	Calculated
January thru December	QL	***	***		***	***	***			

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 2-Final Phase (flow of 20.8 MGD with CSO bypass conditions): Duration of discharge shall be reported as the # of calendar days/ month that a bypass event occurs. Continuous flow metering for flows into the plant shall be reported as Flow, In Conduit or Thru Treatment Plant as Raw Sew/Influent.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE: 1 - Initial****PHASE Start Date: 04/01/2024****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
pH	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	*****	REPORT Instant Maximum	SU	3/Day	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	3/Day	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	2365 Monthly Average	3550 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Day	Calculated
January thru December	QL	***	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Month	24 Hour Composite
January thru December	QL	***	***		***	***	***			

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 2-Final Phase (flow of 20.8 MGD with CSO bypass conditions): Duration of discharge shall be reported as the # of calendar days/ month that a bypass event occurs. Continuous flow metering for flows into the plant shall be reported as Flow, In Conduit or Thru Treatment Plant as Raw Sew/Influent.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE: 1 - Initial****PHASE Start Date: 04/01/2024****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Coliform, Fecal General	Effluent Gross Value	*****	*****	*****	*****	200 Monthly Geo Avg	400 Weekly Geometric	#/100ML	1/Day	Grab
January thru December	QL	***	***		***	***	***			
LC50 Statre 96hr Acu Mysid Bahia	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	*****	*****	%EFFL	1/Quarter	Composite
January thru December	AL	***	***		50	***	***			
Temperature, oC	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	3/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	3/Day	Grab
January thru December	QL	***	***		***	***	***			
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	*****	REPORT Daily Avg Minimum	4.0 Instant Minimum	MG/L	1/Day	Grab
January thru December	QL	***	***		***	***	***			
Mercury Total Recoverable	Effluent Gross Value	63 Monthly Average	REPORT Daily Maximum	GR/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

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 2-Final Phase (flow of 20.8 MGD with CSO bypass conditions): Duration of discharge shall be reported as the # of calendar days/ month that a bypass event occurs. Continuous flow metering for flows into the plant shall be reported as Flow, In Conduit or Thru Treatment Plant as Raw Sew/Influent.

Table III - A - 2: Surface Water DMR Limits and Monitoring Requirements**PHASE:2 - Final****PHASE Start Date:****INACTIVE****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Internal Monitoring	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Metered
January thru December	QL	***	***		***	***	***			
Flow, In Conduit or Thru Treatment Plant	Raw Sew/influent	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	REPORT 12 Month Rolling Av	*****	MGD	Continuous	Metered
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Effluent Gross Value	2365 Monthly Average	3550 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Day	Calculated
January thru December	QL	***	***		***	***	***			
pH	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	*****	REPORT Instant Maximum	SU	3/Day	Grab
January thru December	QL	***	***		***	***	***			

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 2-Final Phase (flow of 20.8 MGD with CSO bypass conditions): Duration of discharge shall be reported as the # of calendar days/ month that a bypass event occurs. Continuous flow metering for flows into the plant shall be reported as Flow, In Conduit or Thru Treatment Plant as Raw Sew/Influent.

Table III - A - 2: Surface Water DMR Limits and Monitoring Requirements**PHASE:2 - Final****PHASE Start Date:****INACTIVE****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	3/Day	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	2365 Monthly Average	3550 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Day	Calculated
January thru December	QL	***	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Month	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Coliform, Fecal General	Effluent Gross Value	*****	*****	*****	*****	200 Monthly Geo Avg	400 Weekly Geometric	#/100ML	1/Day	Grab
January thru December	QL	***	***		***	***	***			

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 2-Final Phase (flow of 20.8 MGD with CSO bypass conditions): Duration of discharge shall be reported as the # of calendar days/ month that a bypass event occurs. Continuous flow metering for flows into the plant shall be reported as Flow, In Conduit or Thru Treatment Plant as Raw Sew/Influent.

Table III - A - 2: Surface Water DMR Limits and Monitoring Requirements**PHASE:2 - Final****PHASE Start Date: INACTIVE****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
LC50 Statre 96hr Acu Mysid Bahia	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	*****	*****	%EFFL	1/Quarter	Composite
January thru December	AL	***	***		50	***	***			
Temperature, oC	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	3/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	3/Day	Grab
January thru December	QL	***	***		***	***	***			
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	*****	REPORT Daily Avg Minimum	4.0 Instant Minimum	MG/L	1/Day	Grab
January thru December	QL	***	***		***	***	***			
Mercury Total Recoverable	Effluent Gross Value	63 Monthly Average	REPORT Daily Maximum	GR/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water WCR - Quarterly Reporting Requirements:

Submit a Quarterly WCR: within twenty-five days after the end of every quarterly monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 3: Surface Water WCR - Quarterly Limits and Monitoring Requirements

PHASE: Final PHASE Start Date: 04/01/2024 PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Arsenic, Total Recoverable (as As)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Thallium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Dieldrin	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Endrin	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Heptachlor Epoxide	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final PHASE Start Date: 04/01/2024 PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Manganese, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2024

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Cyanide, Total (as CN)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Selenium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Beryllium, Total Recoverable (as Be)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Nickel, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Silver, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Zinc, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Cadmium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Lead, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chromium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Copper, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chromium, Hexavalent Dissolved (as Cr)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Antimony, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Acenaphthylene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Acenaphthene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Anthracene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2024

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Benzo(b)fluoranthene (3,4-benzo)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Benzo(k)fluoranthene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Benzo(a)pyrene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethyl) ether	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethoxy) methane	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Bis (2-chloroiso- propyl) ether	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Butyl benzyl phthalate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chrysene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Diethyl phthalate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Dimethyl phthalate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
1,2-Diphenyl- hydrazine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Fluoranthene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Fluorene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Hexachlorocyclo- pentadiene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Hexachloroethane	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2024

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Isophorone	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
N-nitrosodi-n-propylamine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
N-nitrosodiphenyl-amine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
N-nitrosodimethyl-amine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Nitrobenzene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Phenanthrene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Pyrene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Benzo(ghi)perylene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Benzo(a)anthracene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
1,2-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2,4-Trichloro-benzene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Dibenzo(a,h)anthracene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
1,3-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,4-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2024

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2-Chloronaphthalene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,4-Dinitrotoluene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,6-Dinitrotoluene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
3,3'-Dichloro-benzidine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
4-Bromophenyl phenyl ether	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Naphthalene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Di-n-butyl phthalate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Benzdine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Malathion	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Demeton	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Hexachlorobenzene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Hexachlorobutadiene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Mirex	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
1,3-Dichloropropene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2024

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,2,4,5-Tetrachloro-benzene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
N-nitrosodiethyl-amine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
N-nitrosopyrrolidine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Carbon Tetrachloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Dichloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromoform	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chloroform	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Toluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acrolein	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acrylonitrile	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chlorodibromomethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Ethylbenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Methyl Bromide	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2024

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Methyl Chloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Methylene Chloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Tetrachloroethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Trichlorofluoro-methane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1-Dichloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1-Dichloroethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1,1-Trichloro-ethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1,2-Trichloro-ethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro-ethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Dichloropropane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-trans-Dichloro-ethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromodichloromethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Vinyl Chloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Trichloroethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2024

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Methoxychlor	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
N-Nitrosodi-n-butylamine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Asbestos (Fibrous)	Effluent Gross Value	REPORT	FIBERS/L	24 Hour Composite	January thru December
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Parathion	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,4,5-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Delta BHC, Total (ug/l)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Endosulfan Sulfate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Beta Endosulfan	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Alpha Endosulfan	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Endrin Aldehyde	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1016 (Arochlor 1016)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
4,4'-DDT(p,p'-DDT)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2024

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
4,4'-DDD(p,p'-DDD)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
4,4'-DDE(p,p'-DDE)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Aldrin	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Alpha BHC	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Beta BHC	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Gamma BHC (lindane),	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chlordane	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Endosulfans, Total (alpha and beta)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Toxaphene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Heptachlor	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1221 (Arochlor 1221)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1232 (Arochlor 1232)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1242 (Arochlor 1242)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1248 (Arochlor 1248)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1254 (Arochlor 1254)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 04/01/2024

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
PCB-1260 (Arochlor 1260)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Polychlorinated Biphenyls (PCBs)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chlorpyrifos	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2-Chlorophenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2-Nitrophenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,4-Dichlorophenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,4-Dimethylphenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,4-Dinitrophenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,4,6-Trichloro- phenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
4-Chlorophenyl phenyl ether	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
4-Nitrophenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
4,6-Dinitro-o-cresol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Phenol Single Compound	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Pentachlorophenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Pentachlorobenzene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:
Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Semi Annual Limits and Monitoring Requirements
PHASE:Final **PHASE Start Date:** 04/01/2024 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Guthion	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

MONITORED LOCATION:

002A CSO

RECEIVING STREAM:

Hudson River

STREAM CLASSIFICATION:

SE2(C2)

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

The permittee is authorized to discharge combined sewage from Outfall 002A located at Observer Highway and River Street into the Hudson River at latitude 40° 44' 01.0" N and longitude 74° 01' 45.6" 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:

The total quantity of Solids/Floatables removed from this outfall shall be reported when the solid waste is measured for disposal. Precipitation shall 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.

Table III - B - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2024**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:
005A CSO

RECEIVING STREAM:
Hudson River

STREAM CLASSIFICATION:
SE2(C2)

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

Location Description

The permittee is authorized to discharge combined sewage from Outfall 005A located at 4th Street and Sinatra Drive into the Hudson River at latitude 40° 44' 26.7" N and longitude 74° 01' 35.0" 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 a 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: 04/01/2024 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:

006A CSO

RECEIVING STREAM:

Hudson River

STREAM CLASSIFICATION:

SE2(C2)

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

The permittee is authorized to discharge combined sewage from Outfall 006A located at Maxwell Place and Sinatra Drive N into the Hudson River at latitude 40° 44' 57.6" N and longitude 74° 01' 24.8" 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 a 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:** 04/01/2024**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:

Hudson River

STREAM CLASSIFICATION:

SE2(C2)

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

The permittee is authorized to discharge combined sewage from Outfall 008A located at 15th Street and Sinatra Drive N into the Hudson River at latitude 40° 45' 14.5" N and longitude 74° 01' 24.9" 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 a 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:** 04/01/2024**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:
Hudson River

STREAM CLASSIFICATION:
SE2(C2)

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

Location Description

The permittee is authorized to discharge combined sewage from Outfall 012A located at 19th Street and Harbor Boulevard into the Hudson River at latitude 40° 45' 31.9" N and longitude 74° 01' 21.8" 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 a 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: 04/01/2024 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:
Hudson River

STREAM CLASSIFICATION:
SE2(C2)

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

Location Description

The permittee is authorized to discharge combined sewage from Outfall 013A located at Harbor Boulevard and Riverview Drive into the Hudson River at latitude 40°45' 40.5" N and longitude 74° 01' 15.2" 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 a 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: 04/01/2024 PHASE End Date:

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

MONITORED LOCATION:
015A CSO

RECEIVING STREAM:
Hudson River

STREAM CLASSIFICATION:
SE2(C2)

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

Location Description

The permittee is authorized to discharge combined sewage from Outfall 015A located at 49th Street and Avenue at Port Imperial into the Hudson River at latitude 40° 46' 39.1" N and longitude 74° 00' 37.6" 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 a 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: 04/01/2024 PHASE End Date:

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

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Notes and Definitions

A. Footnotes

1. These notes are specific to this permit

- a. The permit conditions in the CSO section apply only to the combined sewer system owned/operated by the permittee and related CSO discharges.

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 Federal 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**

Sanitary Wastewater (IP)

A. MONITORING REQUIREMENTS

1. Standard Monitoring Requirements

- a. Each analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.
- b. The Permittee shall perform all water/wastewater analyses in accordance with the analytical test procedures specified in 40 CFR 136, unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.
- c. When more than one test procedure is approved for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 136, 40 CFR 122.21(e)(3), and 40 CFR 122.44(i)(1)(iv).
- d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.
- e. All monitoring shall be conducted as specified in Part III.
- f. All sample 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.
- g. Annual and semi-annual wastewater testing shall be conducted in a different quarter of each year so that tests are conducted in each of the four permit quarters of the permit cycle. Testing may be conducted during any month of the permit quarters.
- h. Monitoring for Wastewater Characterization Report parameters shall be conducted concurrently with the Whole Effluent Toxicity (WET) monitoring, when feasible.
- i. Flow shall be measured using a meter.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

- a. The permittee shall retain records of all monitoring information, including 1) all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit and 3) all data used to complete the application for a NJPDES permit, for a period of at least 5 years from the date of the sample, measurement, report, application or record.
- b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

C. SUBMITTALS

1. Standard Submittal Requirements

- a. The permittee shall amend the Operation & Maintenance Manual whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures.

2. New Jersey Polychlorinated Biphenyls (PCB) Requirements

- a. The permittee has completed sampling for PCBs as required in a previous permit action. The Department is currently reviewing the sampling data for this and other facilities to determine which facilities are discharging at more elevated levels. Once the Department completes this review and if the permittee's effluent is discharging PCBs at more elevated levels, the Department will require the permittee to develop and submit a PMP for approval by the date specified in the Department's determination consistent with the provisions of N.J.A.C. 7:14A-16.4.
- b. PCB Pollutant Minimization Plan (PMP) Requirement
 - i. If, based on the review of the Final Report, the Department determines that a PMP is required and incorporates such a requirement via a major modification pursuant to N.J.A.C. 7:14A-16.4, the permittee shall prepare and submit a PMP to the Department within 12 months from the effective date of the permit action the requirement is incorporated in.
 - ii. The permittee shall implement the PMP within 30 days after written notification by the Department that the PMP is complete.
 - iii. The PMP shall be developed to achieve maximum practical reduction in accordance with the PMP Technical Manual.
- c. PCB PMP Annual Report Requirement
 - i. The permittee shall submit an annual report in accordance with the Annual Report Guidance Document every 12 months from the implementation of the PMP.
 - ii. Any revisions to the PMP as a result of the ongoing work shall be reported in the annual report.
 - iii. The annual report shall contain, at a minimum, a detailed discussion of the specific progress and actions taken by the permittee during the previous twelve month period that addresses PCB loadings and implementation of the PMP.

D. FACILITY MANAGEMENT

1. 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 discharge shall not produce objectionable color or odor in the receiving stream.
- d. The discharge shall not exhibit a visible sheen.

2. Interstate Environmental Commission

- a. The permittee shall comply with the Interstate Environmental Commission's (IEC) "Water Quality Regulations." Although no monitoring requirements specific to the IEC are included in this permit, compliance may be determined by the IEC based on its own sampling events. IEC effluent requirements shall not be considered effluent limitations for the purpose of mandatory penalties under N.J.S.A. 58:10A-10.1.

3. Applicability of Discharge Limitations and Effective Dates

- a. Surface Water Discharge Monitoring Report (DMR) Form Requirements
 - i. The effluent limitations and monitoring conditions contained in Part III apply for the 1-Initial phase for the flow of 20.8 MGD. This permit also includes requirements for a flow of 20.8 MGD with CSO related bypass for the 2-Final phase. Before the 2-Final phase can be activated, which would authorize discharge at the flow of 20.8 MGD with CSO related bypass, a Treatment Works Approval (TWA) is required and any necessary construction must be completed. The application forms and a checklist for a TWA can be found on the Department's website at https://www.nj.gov/dep/dwq/forms_twa.htm. The permittee shall submit a request to the Department's Bureau of Surface Water and Pretreatment Permitting at least 30 calendar days prior to activating the 2-Final phase.
- b. Wastewater Characterization Report (WCR) Form Requirements
 - i. The final effluent monitoring conditions contained in PART III for DSN 001A apply for the full term of this permit action.

4. Operation, Maintenance and Emergency conditions

- a. The permittee shall operate and maintain treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit as specified in the Operation & Maintenance Manual.
- b. The permittee shall develop emergency procedures to ensure effective operation of the treatment works under emergency conditions in accordance with N.J.A.C. 7:14A-6.12(d).

5. Toxicity Testing Requirements - Acute Whole Effluent Toxicity

- a. Part III of this permit contains an Action Level (AL) for acute Whole Effluent Toxicity. Toxicity Reduction and Implementation Requirements may be triggered based on exceedences of this Action Level. See Toxicity Reduction and Implementation Requirements section below for more details.
- b. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- c. Acute toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- d. Any test that does not meet the specifications of N.J.A.C. 7:18, laboratory certification regulations, must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- e. The permittee shall collect and analyze the concentration of ammonia-N in the effluent on the day a sample is collected for WET testing. This result is to be reported on the Biomonitoring Report Form.
- f. The permittee shall resubmit an Acute Methodology Questionnaire within 60 days of any change in laboratory.
- g. Submit an acute whole effluent toxicity test report within twenty-five days after the end of every quarterly monitoring period beginning from the effective date of the permit (EDP).

h. Test reports shall be submitted to:

i. biomonitoring@dep.nj.gov

6. Toxicity Reduction Implementation Requirements (TRIR)

- a. The permittee shall initiate a tiered toxicity investigation if two out of six consecutive WET tests demonstrate that the effluent does not comply or will not comply with the toxicity limit or action level specified in Part III of this permit.
 - i. If the exceedence of the toxicity limit or action level is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.
- b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the toxicity limits or action levels in Part III. The monitoring frequency for toxicity testing shall be increased to monthly. Up to 12 additional tests may be required.
 - i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the toxicity limit or action level.
 - ii. If two out of any six consecutive, acceptable tests again exceed the toxicity limit or action level in Part III, the permittee shall repeat the Toxicity Reduction Implementation Requirements.
- c. The permittee shall initiate a preliminary toxicity identification (PTI) upon the third exceedence of the toxicity limit or action level specified in Part III during toxicity characterization.
 - i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the DEP and report the results for the most sensitive species on the DMR.
 - ii. As appropriate, the PTI shall include:
 - (1) treatment plant performance evaluation,
 - (2) pretreatment program information,
 - (3) evaluation of ammonia and chlorine produced oxidants levels and their effect on the toxicity of the discharge,
 - (4) evaluation of chemical use and processes at the facility, and
 - (5) an evaluation of incidental facility procedures such as floor washing, and chemical spill disposal which may contribute to effluent toxicity.
 - iii. If the permittee demonstrates that the cause of toxicity is the chlorine added for disinfection or the ammonia concentration in the effluent and the chlorine and/or ammonia concentrations are below the established water quality based effluent limitation for chlorine and/or ammonia, the permittee shall identify the procedures to be used in future toxicity tests to account for chlorine and/or ammonia toxicity in their preliminary toxicity identification report.
 - iv. The permittee shall submit a Preliminary Toxicity Identification Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a CTI.

- d. The permittee must demonstrate compliance with the WET limitation or action level in four consecutive WET tests to satisfy the requirements of the Toxicity Reduction Investigation Requirements. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.
- e. The permittee shall initiate a Comprehensive Toxicity Investigation (CTI) if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the toxicity limit or action level in Part III can not be made.
 - i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.
 - ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the toxicity limit or action level in Part III, a Comprehensive Toxicity Investigation Workplan must be prepared and submitted within 90 days.
 - iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.
 - iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.
- f. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.
 - i. The permittee shall satisfy the requirements of the Toxicity Reduction Implementation Requirements and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the toxicity limit or action level in Part III in four consecutive toxicity tests.
 - ii. If the implemented corrective measures do not result in consistent compliance with the toxicity limit or action level in Part III, the permittee shall submit a plan for resuming the CTI.
 - iii. Documents regarding Toxicity Investigations shall be sent to the following:
New Jersey Department of Environmental Protection
Mail Code 401-02B
Division of Water Quality
Bureau of Surface Water & Pretreatment Permitting
401 East State Street
P.O. Box 420
Trenton, New Jersey 08625-0420

7. Introduction to RWBR Requirements

- a. The following RWBR sections contain the conditions for the permittee to beneficially reuse treated effluent or Reclaimed Water for Beneficial Reuse (RWBR), provided the effluent is in compliance with the criteria specified for the particular use specified below.
- b. There are two levels of RWBR uses. Public Access and Restricted Access.

8. Inactive RWBR Requirements

- a. The following RWBR sections are included in this permit for various reuse applications. For any RWBR category where a reuse application does not show a status of Approved in Appendix A, these sections are inactive and not effective until a permit action where Appendix A shows that an application under this category is approved. Any specific RWBR category not approved in the Appendix, may be approved at a later date by a minor modification permit action once the appropriate submittal requirements have been received and approved by the Department. Those sections related to a RWBR category where an application in Appendix A shows a status of Approved are effective on the effective date of the permit.

9. RWBR Requirements for Public Access

- a. The Public Access reuse types authorized by this permit are those approved in Appendix A. Other Public Access reuse types may be added by minor modification of this permit.
- b. The hydraulic loading rate for land application of RWBR shall not exceed 2 inches per week.
- c. Any water diverted for RWBR shall be monitored and comply with the high level treatment requirements listed below and the operational requirements in the approved Operations Protocol. If any of these requirements are not achieved, the effluent shall not be diverted for RWBR.
 - i. Total Suspended Solids (TSS): Instantaneous maximum of 5.0 mg/L prior to disinfection.
 - ii. Nitrogen, Total (NO₃ + NH₃): Daily maximum of 10.0 mg/L. This requirement only applies when RWBR is land applied.
 - iii. Fecal Coliform: 7-day median maximum of 2.2 colonies per 100 mL and an instantaneous maximum of 14 colonies per 100 mL.
 - iv. Ultraviolet Disinfection: If the permittee disinfects utilizing UV disinfection, a minimum design UV dose of 100 mJ/cm² under maximum daily flow must be used. All aspects of the UV system must meet the requirements of the May 2003 (or most recent) National Water Research Institute's Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, second edition.
 - v. Turbidity for UV systems: Instantaneous maximum of 2.0 NTU.
- d. Monitoring of the diverted public access RWBR shall be conducted in the following manner:
 - i. Sampling for TSS shall be immediately prior to disinfection. Monitoring for TSS shall be a grab sample once per week.
 - ii. Sampling for Turbidity in systems shall be sampled immediately prior to disinfection. The permittee shall establish a correlation between Turbidity and TSS in their effluent as detailed in the Reuse Technical Manual. A statistically significant correlation between Turbidity and TSS shall be established prior to commencement of the RWBR program and shall be incorporated into the Operations Protocol and updated annually. The initial correlation should be done as part of a daily monitoring program for at least 30 days. To ensure continuous compliance with the 5.0 mg/L TSS level, Turbidity must be monitored continuously and achieve the level established in the Operations Protocol.
 - iii. For UV systems, UV lamp intensity, UV transmittance and UV flow rate shall be monitored continuously after full disinfection treatment.

- iv. Monitoring for Fecal Coliform shall be a grab sample, taken in accordance with Part III, at least a minimum of once per week taken immediately after disinfection. Fecal coliform shall be monitored immediately after disinfection.
- v. Monitoring for Total Nitrogen ($\text{NO}_3 + \text{NH}_3$) shall be a composite sample, taken in accordance with Part III, at least once per week taken prior to RWBR diversion. Total Nitrogen ($\text{NO}_3 + \text{NH}_3$) shall be monitored after the appropriate disinfection treatment is achieved.
- e. All monitoring results of the RWBR shall be reported each month on Wastewater Characterization Reports (WCR). Unless noted otherwise, the highest of all measured values for diverted RWBR shall be reported.
 - i. If ultraviolet disinfection is used, the lowest sampling results obtained during the reporting month shall be reported for lamp intensity and UV transmittance.

10. RWBR Requirements for Restricted Access--Land Application and Non Edible Crops

- a. The Restricted Access--Land Application and Non Edible Crops reuse types authorized by this permit are those approved in Appendix A. Other Restricted Access--Land Application and Non Edible Crops reuse types may be added by minor modification of this permit.
- b. The hydraulic loading rate for land application of RWBR shall not exceed 2 inches per week.
- c. Any water diverted for RWBR shall be monitored and comply with the high level treatment requirements listed below and the operational requirements in the approved Operations Protocol. If any of these requirements are not achieved, the effluent shall not be diverted for RWBR.
- d. Nitrogen, Total ($\text{NO}_3 + \text{NH}_3$): Daily maximum of 10 mg/L. Frequency of sampling for Total Nitrogen shall be at a minimum monthly. The sample shall be collected as a composite sample taken prior to diversion for RWBR. Nitrogen, Total ($\text{NO}_3 + \text{NH}_3$) shall be monitored after the appropriate disinfection treatment time is achieved. This requirement only applies when RWBR is land applied, however, this requirement does not apply to spray irrigation within a fenced perimeter or otherwise restricted area.
- e. Fecal Coliform: 200 colonies per 100 ml monthly average Geometric Mean, 400 colonies per 100 ml maximum in any one sample. Frequency of sampling for Fecal Coliform shall be at a minimum weekly. The sample shall be collected as a grab sample taken immediately after disinfection.
- f. Ultraviolet Disinfection: For UV disinfection, a minimum design UV dose of 75 mJ/cm² under maximum daily flow must be used. This dose must also be based on continuous monitoring of UV lamp intensity, UV transmittance and UV flow rate. All aspects of the UV system must meet the requirements of the May 2003 (or most recent) National Water Research Institute's Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, second edition. UV lamp intensity, UV transmittance and UV flow rate shall be monitored continuously after full disinfection treatment.
- g. All monitoring results of the RWBR shall be reported each month on Wastewater Characterization Reports (WCR). Unless noted otherwise, the highest of all measured values for diverted RWBR shall be reported.

11. RWBR Requirements for Restricted Access--Construction and Maintenance Operations

- a. The Restricted Access--Construction and Maintenance Operations reuse types authorized by this permit are those approved in Appendix A. Other Restricted Access--Construction and Maintenance Operations reuse types may be added by minor modification of this permit.
- b. Fecal Coliform: 200 colonies per 100 ml monthly average Geometric Mean, 400 colonies per 100 ml maximum in any one sample. Frequency of sampling for Fecal Coliform shall be at a minimum weekly. Fecal coliform shall be monitored immediately after disinfection. This requirement does not apply to sanitary sewer jetting.

12. RWBR Requirements for Restricted Access--Industrial Systems

- a. The Restricted Access--Industrial Systems reuse types authorized by this permit are those approved in Appendix A. Other Restricted Access--Industrial Systems reuse types may be added by minor modification of this permit.

13. RWBR Submittal Requirements

- a. For Public Access RWBR, the permittee shall submit and receive approval of an Operations Protocol or modify the existing Operations Protocol as detailed in the most recent version of the Department's "Technical Manual for Reclaimed Water for Beneficial Reuse" (Reuse Technical Manual) prior to the commencement of this/these type/s of RWBR activity. A copy of the approved Operations Protocol shall be maintained onsite. Specific requirements for the Operations Protocol are identified in the Reuse Technical Manual.
- b. For all types of Restricted Access RWBR, the permittee shall submit and receive approval of a Standard Operations Procedure or modify an existing Standard Operations Procedure as detailed in the most recent version of the Department's "Technical Manual for Reclaimed Water for Beneficial Reuse" (Reuse Technical Manual) prior to the commencement of this/these type/s of RWBR activity. A copy of the approved Standard Operations Procedure shall be maintained onsite. Specific requirements for the Standard Operations Procedure are identified in the Reuse Technical Manual. This requirement does not apply to sanitary sewer jetting and STP washdown water.
- c. The permittee shall submit a copy of the Reuse Supplier and User Agreement with each request for authorization to distribute RWBR in which the user is a different entity than the supplier. Specific requirements for the Reuse Supplier and User Agreement are identified in the Reuse Technical Manual.
- d. For Public Access RWBR on Edible Crops, the permittee shall submit an annual inventory of edible crop irrigation with the Beneficial Reuse Annual Report. Specific requirements for the annual inventory are identified in the Reuse Technical Manual.
- e. Submit a Beneficial Reuse Annual Report: by February 1 of each year beginning from the effective date of the permit (EDP).
- f. The permittee shall submit and receive approval of an Engineering Report in support of RWBR authorization requests for new or expanded RWBR projects as detailed in the most recent version of the Department's "Technical Manual for Reclaimed Water for Beneficial Reuse" (Reuse Technical Manual) prior to the commencement of this/these type/s of RWBR activity. A copy of the approved Engineering Report shall be maintained onsite. Specific requirements for the Engineering Report are identified in the Reuse Technical Manual.

- g. All submittals shall be mailed or delivered to: New Jersey Department of Environmental Protection, Division of Water Quality, Mail Code 401-02B, Bureau of Surface Water and Pretreatment Permitting, P.O. Box 420, Trenton, New Jersey 08625-0420.

14. RWBR Operational Requirements

- a. Effluent that does not meet the requirements for RWBR established in Part III, Part IV and the operational requirements specified in the facility's approved Operations Protocol or Standard Operations Procedure, as applicable, shall not be diverted for RWBR.
- b. The land application of RWBR shall not produce surface runoff or ponding.
- c. All setback distances shall be consistent with the distances outlined in the Reuse Technical Manual.
- d. Land application sites shall not be frozen or saturated when applying RWBR.
- e. A daily log noting the volume of RWBR distributed to each approved application site shall be maintained on-site by the permittee and made available to the Department upon request. The volume of RWBR to be distributed shall be determined through the use of a totalizing flow meter, or other means of accurate flow measurement.
- f. Any vehicle used to transport and/or distribute RWBR shall be appropriately marked. The vehicle shall not be used to transport water or other fluid that does not meet all limitations and requirements as specified in this permit for water diverted for RWBR, unless the tank has been emptied and adequately cleaned prior to the addition of the RWBR.
- g. The permittee shall post Access Control and Advisory Signs in accordance with the requirements of the Reuse Technical Manual.
- h. There shall be no cross-connections to potable water systems.
- i. All RWBR piping, pipelines, valves, and outlets shall be appropriately color coded, tagged or labeled to warn the public and employees that the water is not intended for drinking. Worker contact with RWBR shall be minimized.
- j. The issuance of this permit for the use of RWBR shall not be considered as a waiver of any applicable federal, state or local rule, regulation or ordinance.

E. INDUSTRIAL PRETREATMENT PROGRAM REQUIREMENTS

1. Requirement to Identify and Locate Industrial Users

- a. The Permittee shall identify all indirect users which meet the significant indirect user definition in N.J.A.C. 7:14A-1.2 or have reasonable potential to:
 - i. interfere with attainment of the effluent limitations contained in the permittee's NJPDES permit
 - ii. pass through the treatment works and impair the water quality of the receiving stream; or
 - iii. affect sludge quality so as to interfere with the use or management of the municipal sludge

2. Notification Requirements

- a. The permittee shall provide adequate notice to the NJDEP, Division of Water Quality, Bureau of Surface Water and Pretreatment Permitting, of the name, address, telephone number and facility contact of all:
 - i. new SIUs at the time the proposed user applies to the permittee for connection to the permittee's system,
 - ii. any substantial change or proposed change in the volume or character of pollutants being introduced into the POTW by existing SIUs, or
 - iii. any substantial change or proposed change in the volume or character of pollutants being introduced into the POTW by a user that causes the user to become an SIU.
- b. For purposes of this subsection, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW and any anticipated impact of such change on the quantity or quality of effluent to be discharged from the POTW.

3. Requirement to Develop Local Limits

- a. If necessary to ensure compliance with the requirements in paragraph ii following, the permittee shall perform a headworks analysis in order to develop local limits or demonstrate that local limits are not necessary. The headworks analysis and, if necessary, development of local limits shall:
 - i. be conducted in accordance with the Local Limits Development Guidance (July 2004, USEPA Office of Wastewater Management), including all supplements and amendments thereto, including: identifying the sources and pollutants which should be limited in order to address environmental protection criteria of paragraph ii.; characterizing industrial discharges; reviewing applicable environmental protection criteria and pollutant effects data; monitoring of IU discharges, POTW collection system and treatment plant; and calculating local limits for the identified pollutants of concern;
 - ii. ensure compliance with the following minimum environmental protection criteria: the numerical effluent limitations in the Part III; The local agency's process inhibition and upset criteria; the local agency's worker health and safety protection criteria; the sludge quality criteria for a chosen method(s) of sludge management; and the limitations in the local agency's Air Pollution Control permit, where applicable.

4. Submittal Requirements

- a. The permittee shall submit updates to its Local Sewer Use Ordinance within 30 days of modification.
- b. The permittee shall prepare an Annual Pretreatment Program Report which consists of a listing of all indirect users which meet the significant indirect user definition in N.J.A.C. 7:14A-1.2. The report shall include the name, address, and type of business for each facility. The report shall be on the form provided by the Department. The form is available on the Department's web site at <http://www.nj.gov/dep/dwq/pdf/non-dla-pt-annual-report-form.pdf>
- c. Submit the Annual Pretreatment Program Report annually beginning on EDP + 1 year.
- d. The reports shall be submitted to: NJDEP, Mail Code - 401-02B, Bureau of Surface Water and Pretreatment Permitting, 401 East State Street, P. O. Box 420, Trenton, NJ. 08625-0420

F. CONDITIONS FOR MODIFICATION

1. Notification requirements

- a. The permittee may request a minor modification for a reduction in monitoring frequency for a non-limited parameter when four consecutive test results of "not detected" have occurred using a sufficiently sensitive quantification level as defined at 40 CFR 136, 40 CFR 122.21(e)(3), and 40 CFR 122.44(i)(1)(iv).

2. Causes for modification

- a. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.
- b. The permittee may request a minor modification to eliminate the monitoring requirements associated with a discharge authorized by this permit when the discharge ceases due to changes at the facility.

G. Custom Requirement**1. Bypass as a CSO Measure**

- a. This permit renewal serves to concur with the selection of CSO related bypass as a CSO control measure. As such, effluent limitations that apply to a bypass of secondary treatment are included in the Final Phase of Part III. In addition, the following conditions shall be met:
 - i. Bypass is prohibited unless and until a Treatment Works Approval is issued for the construction and operation of the bypass line. If issued, operation of the bypass must comply with the terms and conditions of this NJPDES permit and the Treatment Works Approval.
 - ii. As part of the use of the bypass line, bypassing of the secondary treatment is prohibited except during wet weather events when influent flows exceed approximately 32 MGD instantaneous maximum. All bypassed flows shall receive at least screening, primary clarification, and then disinfection. All bypassed flows shall be combined with fully treated effluent flow prior to discharge.
 - iii. All applicable effluent limitations and monitoring conditions included in this permit for DSN 001A are required to be met at all times, including during wet-weather bypassing events using the TWA-approved bypass line.

2. Notification of Bypass

- a. The permittee shall notify the Department of bypass events by submission of Discharge Monitoring Reports. Such notification serves to meet the intent of the notice requirements of 40 CFR 122.41(m)(3). By granting this approval through a permit action, the permittee is not required to notify the Department of every individual bypass event if it complies with the notification requirements contained in this NJPDES permit.

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 summarize on a semiannual basis its CSO construction related activities, as well as those reported to them by the other CSO entities, in their system. Notification through the TWA process is sufficient for this purpose. The permittee shall make these construction related activities available publicly on their website or other acceptable means.
- 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 North Hudson Adams Street the total system is 76 miles long. Critical portions of the system, such as regulators and solids/floatables facilities, 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 [name of permittee]:
 - 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;
 - Bypass operation procedures; 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; extreme weather events, including those due to climate change; 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 encourage municipalities 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 B, 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 B.
 - 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 NJ0026085.
 - 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/totaling 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, NHSA submitted the "System Characterization Work Plan" dated December 31, 2015, revised June 17, 2016 and the "Service Area System Characterization Report for the Adams Street WWTP" dated June 1, 2018, revised April 1, 2019 and July 9, 2019. The work plan and the System Characterization Report were approved by the Department on August 4, 2016, and July 23, 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 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 percent reduction through the use of the H&H model to attain no less than 85% wet weather capture.
- d. To supplement these measures, as a condition of the NJPDES permit as issued to NHSA, 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.

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): Integration of 1 MG Resiliency Park Storage Tank into NHSA Conveyance System - Phase 2: Electrical & Mechanical Work on Pump Station.
 - ii. Year Two (EDP + 1 year to EDP + 2 years): Boulevard East Combined Sewer Improvements.
 - iii. Year Three (EDP + 2 years to EDP + 3 years): Integration of 1 MG Resiliency Park Storage Tank into NHSA Conveyance System - Phase 3.
 - iv. Year Four (EDP + 3 years to EDP + 4 years): Construct New Adams Street WWTP Outfall.

- v. Year Five (EDP + 4 years to EDP + 5 years): Basis of Design Engineering to Increase Capacity at Adams Street WWTP by 20 MGD through Side Stream Treatment.

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.

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 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.
- 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, 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.

Masterfile #: 7579

PI #: 46440

RWBR Approval Status List

The permittee is only authorized to utilize RWBR for the specific category, type and location that has been approved in the table below.

RWBR Category	Specific RWBR Type	Location	Status
PA	Spray Irrigation (Golf Course)	None	Not Approved
PA	Spray Irrigation (Athletic Fields, Playgrounds)	None	Not Approved
PA	Spray Irrigation (Residential Lawns)	None	Not Approved
PA	Vehicle Washing	None	Not Approved
PA	Hydroseeding/Fertilizing	None	Not Approved
PA	Decorative Fountains	None	Not Approved
PA	Toilet Flushing	None	Not Approved
RA-LA	Sod Irrigation	None	Not Approved
RA-LA	Spray Irrigation within a fenced perimeter or otherwise restricted area	None	Not Approved
RA-LA	Spray Irrigation within a fenced perimeter or otherwise restricted area (Without NH3 + NO3)	None	Not Approved
RA-LA	Spray Irrigation (not fenced or restricted area)	None	Not Approved
RA-CM	Street Sweeping	None	Not Approved
RA-CM	Dust Control	None	Not Approved
RA-CM	Fire Protection	None	Not Approved
RA-CM	Vehicle Washing (at STP or DPW)	None	Not Approved
RA-CM	Composting	None	Not Approved
RA-IS	Sanitary Sewer Jetting	MUA Sewer Service Area	Approved
RA-IS	Non-Contact Cooling Water	None	Not Approved
RA-IS	Boiler Makeup Water	None	Not Approved
RA-IS	Road Milling	None	Not Approved
RA-IS	Hydrostatic Testing	None	Not Approved
RA-IS	Parts Washing	None	Not Approved
RA-IS	STP Washdown	North Hudson Sewerage Authority – Adams St. WWTP	Approved

Categories:

PA Public Access
RA-LA Restricted Access-Land Application and Non-Edible Crops
RA-CM Restricted Access--Construction and Maintenance Operations
RA-IS Restricted Access--Industrial Systems

Abbreviations:

NH3 - Ammonia
NO3 - Nitrate
STP - Sewage Treatment Plant
DPW - Dept. of Public Works

Annual Reuse Report

Any facility that has received an RWBR authorization is required to submit an Annual Reuse Report. The following information, at a minimum, shall be included in the report, due on February 1st of each year.

- (1) The total wastewater reused (R) by the facility in the previous calendar year. If no wastewater was reused in the previous calendar year, report R as zero and skip to (6) below;
R = _____ gallons
- (2) The total wastewater discharged (D) by the facility in the previous calendar year;
D = _____ gallons
- (3) The percent of wastewater reused (%R) by the facility in the previous calendar year, calculated as follows:
 $\%R = R/(R+D)$, expressed as a percent;
%R = _____ percent
- (4) The total wastewater that was reused for **each reuse type** in the previous calendar year. This information should be provided in the chart format utilized in the RWBR Usage Table below;

RWBR Usage Table

RWBR Category	Specific RWBR Type	Location	Flow (gallons)

Attach additional pages as necessary.

- (5) An update to the correlation between Total Suspended Solids and Turbidity, if necessary;
Correlation = _____
- (6) Submit a completed copy of this form to:

For paper copies:
ATTN: Ramanathan Asokan
Mail Code 401 – 02B
Division of Water Quality
Bureau of Surface Water & Pretreatment
Permitting
P.O. Box 420
Trenton, NJ 08625-0420

For electronic copies:
ATTN: Ramanathan Asokan
DWQRWBR@dep.nj.gov

Annual Reuse Report - SAMPLE

Any facility that has received an RWBR authorization is required to submit an Annual Reuse Report. The following information, at a minimum, shall be included in the report, due on February 1st of each year.

- (1) The total wastewater reused (R) by the facility in the previous calendar year. If no wastewater was reused in the previous calendar year, report R as zero and skip to (6) below;
R = _____ gallons
- (2) The total wastewater discharged (D) by the facility in the previous calendar year;
D = _____ gallons
- (3) The percent of wastewater reused (%R) by the facility in the previous calendar year, calculated as follows:
 $\%R = R/(R+D)$, expressed as a percent;
%R = _____ percent
- (4) The total wastewater that was reused for **each reuse type** in the previous calendar year. This information should be provided in the chart format utilized in the RWBR Usage Table below;

RWBR Usage Table			
RWBR Category	Specific RWBR Type	Location	Flow (gallons)
	<i>For Example:</i>		
RA-CM	Street Sweeping	Local Township	42,000
RA-IS	Sanitary Sewer Jetting	Facility Sewer Service Area	15,000
RA-IS	STP Washdown	Sewage Treatment Plant	43,000
		Grand Total (R)	100,000

Attach additional pages as necessary.

- (5) An update to the correlation between Total Suspended Solids and Turbidity, if necessary;
Correlation = _____
- (6) Submit a completed copy of this form to:

For paper copies:
ATTN: Ramanathan Asokan
Mail Code 401 – 02B
Division of Water Quality
Bureau of Surface Water & Pretreatment
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P.O. Box 420
Trenton, NJ 08625-0420

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DWQRWBR@dep.nj.gov

APPENDIX B

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.