State of New Jersey

PHIL MURPHY
Governor

SHEILA OLIVER
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
Water Pollution Management Element
Bureau of Surface Water & Pretreatment Permitting
P.O. Box 420 – 401 E State St
Trenton, NJ 08625-0420
Phone: (609) 292-4860 / Fax: (609) 984-7938

SHAWN M. LATOURETTE
Commissioner

Email Only
May 25, 2023

Frank Pestana, Executive Director
North Bergen Municipal Utilities Authority
6200 Tonnelle Avenue
North Bergen, NJ 07047-3312

Re: Final Surface Water Renewal Permit Action
Category: A - Sanitary Wastewater
CSM - Combined Sewer Management
NJPDES Permit No. NJ0029084
Woodcliff Sewage Treatment Plant (STP)
North Bergen Township, Hudson County

Dear Mr. Pestana:

Enclosed is a **final** NJPDES permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. This renewal permit authorizes the discharge of treated and disinfected domestic wastewater with industrial contribution into the Hudson River, classified as SE2 (C2) waters. The existing facility has a NJPDES permitted flow value of 2.91 million gallons per day (MGD) through outfall DSN 001A. This permit action retains effluent limitations based on a flow of 3.46 MGD and includes an increased wet weather flow.

North Bergen MUA and the Town of Guttenberg own separate portions of one hydraulically connected combined sewer system (CSS) which includes 2 outfalls. The collection systems flow to the Woodcliff STP. When the conveyance capacity of the collection system and/or the STP is exceeded, excess combined sewage flows pass through outfall DSN 004A in North Bergen, owned/operated by NBMUA, and outfall DSN 001A in the Town of Guttenberg, owned/operated by the Town of Guttenberg. This renewal permit serves to ensure the permittee's compliance with the Federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C.

This renewal permit also serves to **approve** the Long Term Control Plan dated September 2020 with revisions dated July 2021 and August 20, 2021. This renewal permit serves to implement the requirements of this coordinated Long Term Control Plan prepared by North Bergen MUA – Woodcliff STP and the Town of Guttenberg dated September 2020.

Comments were received on the draft permit issued on December 9, 2022. The sixty (60) day public comment period began on December 15, 2022 when the public notice was published in the *Jersey Journal*. It ended on February 13, 2023. 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.

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,

Susan Rosenwinkel
Assistant Director
Water Pollution Management Element

Enclosures

cc: Permit Distribution List
Masterfile #: 37627; PI #: 46705

Table of Contents

This permit package contains the items below:

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	Sewage Treatment Plant
TWA	Treatment Works Approval

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

RESPONSE TO COMMENTS

Comments were received on the NJPDES draft Surface Water Renewal Permit Actions No. NJ0029084 and NJ0108715 issued on December 9, 2022, issued to North Bergen Municipal Utilities Authority (NBMUA or the Authority) Woodcliff Sewage Treatment Plant (STP) and the Town of Guttenberg, respectively. The public comment period began on December 15, 2022 when the Public Notice was published in the *Jersey Journal*. It ended on February 13, 2023, encompassing a total of sixty (60) days. The New Jersey Department of Environmental Protection (the Department or NJDEP) held a virtual public hearing to solicit public comment on the draft permits on January 23, 2023 as scheduled from 10 a.m. to 12 p.m., then again from 6 p.m. to 8 p.m.

During the public comment period, the Department accepted written and oral comments from numerous parties and individuals. The Department accepted oral testimony as comments since the public hearings were recorded and transcribed. The 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 December 9, 2022.

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

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

Written Comments		
Person	**Title / Affiliation**	**Commenter Number**
Virginia Wong	Chief, Clean Water Regulatory Branch, USEPA Region 2	1
Captain Bill Sheehan Gregory Remaud	Executive Director, Hackensack Riverkeeper Chief Executive Officer, NY/NJ Baykeeper	2
Sewage Free Streets and Rivers	*Advisory Board Members:* 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) *Technical Advisors:* Rosana Pedro Nobre, The New York - New Jersey Harbor Estuary Program Chris Obropta, Rutgers Cooperative Extension Water Resources Program *Comments also signed by:* Association of New Jersey Environmental Commissions (State-wide) Bike North Bergen (North Bergen, NJ) Clean Water Action (State-wide) Embankment Preservation Coalition (Jersey City, NJ)	3

	Future City Inc. (Elizabeth, NJ) Hackensack Riverkeeper (Hudson County, NJ) Hudson County Complete Streets (Hudson County, NJ) Martha Arencibia, Community Member and Advocate (Paterson, NJ) NewarkDIG (Newark, NJ) New Jersey Future (State-wide) North Bergen Earth Talks (North Bergen, NJ) NY/NJ Baykeeper Passaic River Coalition (Northern NJ) Pershing Field Park Neighborhood Association (Jersey City, NJ) Raritan Riverkeeper (Middlesex, Monmoth and Somerset Counties, NJ) Steve Krinsky, Program Chair, Hudson County Sierra Club Skyway Park Conservancy (Jersey City, NJ) Waterspirit (State-wide)	
Jersey Water Works CSO Committee	*Comments signed by:* Jersey Water Works CSO Committee Andy Kricun, CSO Committee co-chair Andrea Sapal, Program Coordinator	4
Patricia Dunkak	Policy & Program Coordinator, New Jersey Future	5
Stephanie Martinez	Green Team Leader, North Bergen Earth Talks	6
Martha Arencibia	Resident, Paterson, NJ	7
Laurie Howard	Executive Director, The Passaic River Coalition	8
Jason Lee	Resident, Jersey City, NJ	9
Johan Andrade	Organizer, Bike North Bergen	10

Testimony at Public Hearing on January 23, 2023		
Afternoon Session		
Person	**Title / Affiliation**	**Commenter Number**
Nicole Miller	Co-Chair, Newark DIG	11
Johan Andrade	Organizer, Bike North Bergen	10
Patricia Dunkirk	Policy & Program Coordinator, New Jersey Future	5
Stephanie Martinez	Green Team Leader, North Bergen Earth Talks	6
	Green Board of North Bergen	
Hailey Benson	North Bergen Earth Talks	12
Paloma Vizcaino	Volunteer, North Bergen Earth Talks	13
Michele Langa	Hackensack Riverkeeper	14
	NY/NJ Baykeeper	
	Sewage Free Streets and Rivers	
Suzanne Aptman	Program Manager, NJ Future	15
	Advisory Board Member, Sewage Free Streets and Rivers	
Rachel Davis	Waterspirit	16
Dan Kennedy	Senior Director, Utility and Transportation Contractors Association	17
Dan Shapley	Hudson Riverkeeper	18

Testimony at Public Hearing on January 23, 2023		
Evening Session		
Person	**Title / Affiliation**	**Commenter Number**
Shamer Patel	Resident, North Bergen	19

Eleana Little	Self	20
Suzanne Aptman	Program Manager, NJ Future	15
Vivian Andrade	Self	21
Hailey Benson	North Bergen Earth Talks	12
Rachael Davis	Waterspirit	16
Lu Chavez	Self	22

Comments submitted on behalf of the permittees, as identified below, are included at the end of this document. See Page 41 of 54 for the permittees' comments and the Department's response.

Written Comments		
Person	**Title / Affiliation**	**Commenter Number**
John A. Napolitano	Partner, Cleary, Giacobbe, Alfieri & Jacobs, LLC on behalf of the North Bergen MUA Woodcliff STP	23
Mark A. Hubal, PE, BCEE	Associate, Remington & Vernick Engineers on behalf of the Town of Guttenberg, Comments on North Bergen MUA Woodcliff STP Draft Permit NJ0029084	24
Mark A. Hubal, PE, BCEE	Associate, Remington & Vernick Engineers on behalf of the Town of Guttenberg, Comments on the Town of Guttenberg Draft Permit NJ0108715	25

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

Topics	**Comment Numbers**
General	1-31
Fact Sheet Comments	32-34
Nine Minimum Control Requirements (Part IV.F)	35-67
Long Term Control Plan Requirements (Part IV.G)	68-171
Custom Requirement (Part IV.H)	172-177
Permittee Comments	178-213

GENERAL COMMENTS

1. **COMMENT:** The U.S. Environmental Protection Agency (EPA) recognizes the significant efforts of the NJDEP in implementing the CSO control program in New Jersey, and the important milestone that it has reached as it begins to require implementation of major CSO controls as identified in the permittees' CSO Long Term Control Plans (LTCPs).

   The issuance of the draft permits will ultimately result in significantly improved water quality in many of the state's waterways. The EPA applauds the incorporation of requirements in these permits for effective asset management and public outreach related to overburdened communities and environmental justice concerns, as well as providing sustainability and climate considerations. [1]

2. **COMMENT:** Hackensack Riverkeeper and NY/NJ Baykeeper would like to take this opportunity to thank the NJDEP for their efforts on the Draft Combined Sewer Overflow (CSO) Permits for North Bergen and Guttenberg. … The entire process of reducing and/or eliminating CSOs in NJ has been an effort to better the lives of NJ residents by eliminating Combined Sewer System (CSS) backups and overflows in order to improve water quality. We are encouraged to see the approach NJDEP is taking to look at hydrologically connected systems in issuing new CSO permits and the inclusion of many of the suggestions made by us and others throughout the previous CSO Supplemental Team engagement process. The problems created by CSOs in NJ are myriad and complex and cannot

be fixed easily by one person or organization. It is a true community effort, with each of us working together for the betterment and protection of the whole. [2]

3. **COMMENT:** We acknowledge that we have reached a major milestone with the release of this CSO draft permit. Thank you to all of the staff at 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 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. We appreciate the opportunity to take part in this important process and look forward to continuing to work with NJDEP to ensure that the CSO permits are compliant, effective, and equitable for all CSO communities.

   Specifically, 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 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 its members. These permits are a meaningful step toward reducing, and in some instances eliminating, CSOs and related impacts in New Jersey. [3]

4. **COMMENT:** The Jersey Water Works CSO Committee sincerely thanks and commends the NJDEP for all of its work on the CSO LTCP process from the very beginning of the initiative to its culmination with the issuance of the CSO permits. Throughout this process, the NJDEP has truly prioritized water quality, public health and safety, community benefit, public participation and environmental and social justice in an engaged and transparent way. This approach has resulted in LTCPs that will improve the quality of life for the CSO communities and the waterways of New Jersey. We thank the Department for their thoughtful approach to this complicated problem. [4]

5. **COMMENT:** New Jersey Future is largely in support of this draft permit and supports requirements to reduce CSO discharge to improve water quality in NJ. We support the Department's intent to address water quality issues by reducing flooding and CSO discharges and ensuring the proper maintenance of infrastructure in this permit. [5]

6. **COMMENT:** We are grateful to the NJDEP team for bringing us to this point and for valuing the ecosystems and public health of New Jersey's metropolitan areas. A special thank you to Susan Rosenwinkel and Joe Mannick for the years of dedication they put into writing these permits and the teamwork they demonstrated.

   We appreciate the opportunity to participate in this crucial process and look forward to collaborating with NJDEP to make sure that the CSO permits are lawful, actionable, and equitable for all CSO communities. [6]

7. **COMMENT:** Thank you for the opportunity to comment on this permit and also all the work that was done by everyone at NJDEP to finally be at this step. [7]

8. **COMMENT:** We thank NJDEP for its efforts to move forward this complicated, many-layered process, as it is a great challenge that finally will benefit so many of our citizens with compromised sewage issues in their communities. [8]

9. **COMMENT:** I was born and raised in North Bergen and have witnessed many torrential downpours including sewage in my basement. Thank you all for creating such a thorough permit. I'm grateful that we are granted the first opportunity of the 7 regional CSO permits to fix our destitute sewer systems. We are hopeful that these hearings will help to refine the document so future permits will have a guideline standard. [12]

10. **COMMENT:** Thank you for getting these permits out. It's been a long road and it's exciting to finally get to talk about actual permits for CSO. The section on adaptive management and climate guidance is fantastic to see in the permit. We're excited that it's being considered seriously as part of the permitting for CSO management. [14]

11. COMMENT: The Utility and Transportation Contractors Association (UTCA) congratulates the Department and the Bureau for all the hard work over the years. We stand to support this permit and those that will come after it. [17]

RESPONSE (1-11): The Department appreciates the commenters' support of the work involved on the development of the NJPDES CSO permits and LTCPs which has led to the issuance of the draft NJPDES Discharge to Surface Water (DSW) permits for NBMUA Woodcliff STP and the Town of Guttenberg. NBMUA Woodcliff STP and the Town of Guttenberg comprise a hydraulically connected system and these two permittees worked together to submit a single coordinated LTCP in October 2020 as required by the March 12, 2015 NJPDES CSO permits. These subject permit actions serve to renew the 2015 NJPDES CSO Permits and incorporate the findings of the LTCP.

Since the release of the 2015 NJPDES CSO permits, the Department has made a concerted effort to connect with external stakeholders and EPA in order to listen to suggestions at all stages of the LTCP process. Department staff have participated in many meetings including CSO Supplemental Team meetings as well as meetings held by stakeholders where many of those stakeholders have now commented on these two 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 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.

The Department agrees that the issues raised in these comments including climate change, environmental justice, water quality, public engagement, language accessibility, and asset management are a priority of the Department as evidenced by specific section of the NJPDES permit which target these issues. In addition, the Department agrees that communication regarding the status of construction schedules for implementation of CSO controls, progress with compliance, and water quality sampling data is essential to a transparent public process. See specific sections of the permit and this response to comments for additional detail regarding these issues.

12. COMMENT: Thank you to the Department for the public hearing on the draft NJPDES CSO permits. We appreciate the opportunity to provide comments that will allow for increased public engagement around CSOs and are a step towards improving water quality in New Jersey. [5]

13. COMMENT: Thank you for providing flexibility with two scheduled public hearings for this important issue. This is really appreciated. [10]

14. COMMENT: Thank you for the opportunity to speak virtually. [16]

15. COMMENT: Thank you for having the public hearing. [22]

16. COMMENT: I was glad to see that the public hearing was bilingual and this should be a requirement for future meetings. [20]

17. COMMENT: For future public hearings, it would be beneficial for the public to have access to the meeting link sooner than the day of the meeting. Some people may not be familiar with the software the Department uses, therefore decreasing accessibility. [6]

18. COMMENT: Registration to the public hearings should be posted at least 48 hours in advance in a prominent spot on the website. [15]

19. COMMENT: Public hearing information for meeting announcements, links and phone call information should be displayed on the website in a brighter color font such as orange. [16]

20. COMMENT: A small request is to make information on the public hearing more visible on the website. There was no announcement and I only knew about this because an organization reached out. Having the link live only the day of the meeting limits community engagement. [10]

RESPONSE (12-20): The Department issued the draft NJPDES CSO permits on December 9, 2022 and distributed the permits via email to an extensive stakeholder list. Complete copies of the draft permits were 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 December 15, 2022. The public notice specified a 60-day public comment period and scheduled 2 public hearings to be held on January 23, 2023 given the significant degree of public interest. The public hearings were held virtually where a link was distributed via email to stakeholders and was made live the morning of January 23, 2023. The opening statements for the public hearings were read in both English and Spanish given the prevalence of Spanish-speaking households within North Bergen and Guttenberg.

The Department agrees that it would be beneficial to provide an access link for public hearings sooner than the day of the hearing in order to better communicate this scheduled event. The Department has since adopted an internal policy of providing the applicable link(s) further in advance of public hearings related to NJPDES CSO permits. This practice is already in place and has been utilized for public hearings that were announced subsequent to the issuance of the NBMUA Woodcliff STP and Guttenberg NJPDES CSO permits.

21. COMMENT: 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. 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 CSOs 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 Guttenberg and North Bergen, the New York City Triathlon, the 8 Bridges Hudson River Swim, and the 20- and 40- Bridges Swims 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 NYC 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, NYSDEC and NYCDEP and also shows the wide-ranging, and previously unforeseen, uses of this waterway, 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. [3]

22. COMMENT: Generally, the combined sewer overflows in the New Jersey portion of the Hudson River amount to about 10% of the number of overflow points affecting the Hudson River estuary throughout its reach from Troy down to New Jersey and New York City. So these permits are important to us and our mission to protect and restore the Hudson River. The Hudson River is receiving the attention of many more recreational users thanks to recent recovery efforts. The New York City Triathlon and other public swim events are taking place in this reach on the Hudson in addition to kayaking and other shoreline activities. [18]

RESPONSE (21-22): The Department acknowledges that waters in and around CSO outfalls in New Jersey and New York are being used for recreational uses. The implementation of the LTCP for NBMUA Woodcliff STP and the Town of Guttenberg 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 Department also agrees that the public must be notified of the locations of CSO outfalls. In order to comply with the 2015 NJPDES permits, the permittees created a NJ CSO Group Notification System as available at https://njcso.hdrgateway.com//. This map shows the locations of CSO outfalls and indicates where CSOs may be occurring due to rainfall. The Department has also 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. Please 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 rain 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.

23. **COMMENT:** We encourage the Department 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 the Department 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. [3]

RESPONSE (23): 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 recreational uses in the area of New York State by the public. 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 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 outside the purview of the Federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C.

24. **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. We appreciate that the wastewater facility flood proofing plan is based on sea level rise and intended to protect the plant into the future and that the permittees are required to track changes in precipitation and address them. [3]

25. **COMMENT:** We are happy to see that the facility flood proofing plan is based on sea level rise data that will protect the plant from climate threats. [5]

RESPONSE (24-25): The Department agrees that climate change and floodproofing must be considered as part of CSO control measures. Climate change resilience measures, including floodproofing, were incorporated in the design of the WWTP upgrades. These elements are designed to help address the effects of climate change and sea level rise and 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.

26. COMMENT: We encourage the Department to make these permits as prescriptive as possible. Where that is beyond the scope of permitting, the Department should release concurrent, clear, detailed guidance for permittees to follow. The urgency for reducing and eliminating CSOs in NJ is only increasing and the better these permits are now the sooner communities can start seeing results. [2]

27. COMMENT: We recommend that, wherever possible, the Department strengthens requirements in certain areas. Where strengthening permitting requirements is not possible, we recommend that the Department provide separate, concurrent guidance for permittees which is specific and prescriptive 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 any provided guidance document and encourages permittees to incorporate any provided 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. [3]

28. COMMENT: We ask that the final permit have clear conditions for permittees, and that the Department create guidance documents for the highest design standards, implementation, and public engagement. In addition, we ask NJDEP to strengthen language in all areas, especially regarding public engagement. We ask NJDEP to provide permittees separate guidance documents. [5]

29. COMMENT: We request that the permits be as specific and prescriptive as possible. We request the Department provide guidance alongside the permit whenever possible. [11]

30. COMMENT: I think it's very important that we ensure that our political officials are aware that we can all make a difference. I would really appreciate any clarity on suggestions or guidance or support from the Department, the supplemental team, etc. in making sure that our plans are very clear and have community focus. [12]

RESPONSE (26-30): 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 permits to the extent practicable and has incorporated such where appropriate within the NJPDES 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 permit sections.

The Department also agrees that it is advantageous to develop guidance to enhance 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.

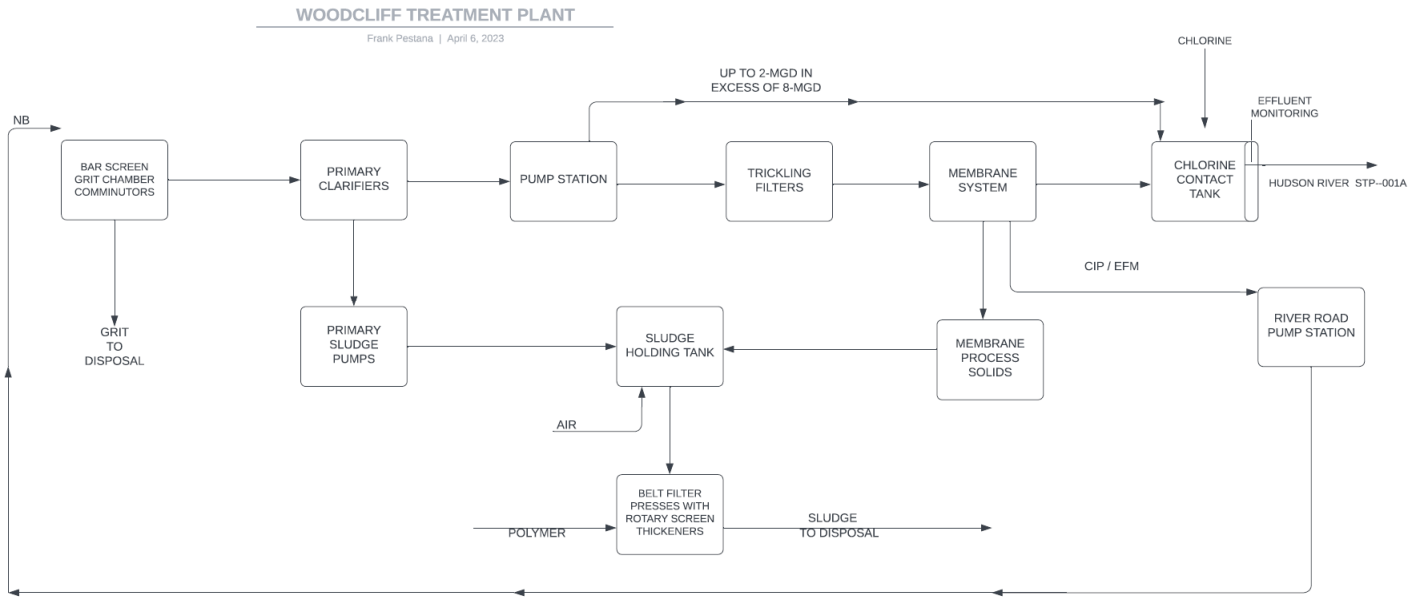
31. COMMENT: Water conservation by community members and businesses is a named tool for reducing CSO impacts in many, if not all, of the CSO LTCPs. We recommend NJDEP provide concurrent guidance to permittees outlining best practices on engaging communities on water conservation methods to ensure this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

RESPONSE (31): The Department agrees that water conservation can be an effective measure in reducing the amount of flow in a CSS and encourages all permittees to educate the community in this regard. NJDEP guidance materials are available at https://dep.nj.gov/conserve-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 Permit.

FACT SHEET COMMENTS:

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

RESPONSE (32): The Woodcliff STP effluent monitoring location, which includes bypassed flows when applicable, is at the end of the chlorine contact tank. Since a flow diagram is not included in the final permit, an updated flow diagram as provided on April 6, 2023 by Executive Director Frank Pestana, is included below to better demonstrate the effluent monitoring location and is hereby incorporated into the Administrative Record.



The Department has also clarified the Location Description in Part Table III-A-1 and III-A-2 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 chlorination and prior to discharge into the Hudson River at:
Latitude N: 40d 48m 12.2s
Longitude W. 73d 59m 26.1s

This change affects Part III of the final permit.

33. COMMENT: Please clarify in the NBMUA Woodcliff STP Fact Sheet and permit that the plant expansion/bypass was selected by the permittee in its CSO LTCP and that the NJDEP is approving the use of bypass in the permit. [1]

RESPONSE (33): The Department maintains that the selection of plant expansion/bypass as a CSO control measure is authorized in Part IV.H.2.a of the Sanitary Wastewater conditions of the permit but agrees that clarification of approval of this measure is appropriate. Modified language is as follows:

2. Bypass as a CSO Control Measure

a. This permit renewal serves to concur with the selection of CSO related bypass and approval 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.

34. COMMENT: The North Bergen MUA Woodcliff STP and Town of Guttenberg fact sheets should include the type and quantity of wastes discharged, including CSOs. [1]

RESPONSE (34): This comment from EPA appears to be requesting clarification under Section 7 of the fact sheet as entitled "Summary of Permit Conditions for WWTP" as contained in the draft NBMUA Woodcliff STP NJPDES permit. The Department agrees that it is appropriate to clarify the type and quantity of wastes discharged.

Although the fact sheet is not part of the final permit action, the following sentence in NBMUA Woodcliff STP permit is hereby modified for the purposes of the Administrative Record (additions shown with underline, deletions shown in strikethrough):

7 Summary of Permit Conditions ~~for WWTP~~

The Permit Summary Tables within this fact sheet contains ~~a summary~~ summaries of the quantity and quality of pollutants treated and discharged from the facility and the proposed effluent limitations for outfall DSN 001A. The Permit Summary Table within this fact sheet contains a summary of certain parameters for CSO outfall DSN 004A.

The following sentence has been added to the Town of Guttenberg permit for the purposes of the Administrative Record:

8 Permit Summary Table for DSN 001A

The Permit Summary Table within this fact sheet contains a summary of certain parameters for CSO outfall DSN 001A.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA **(1)**	EXISTING LIMITS	FINAL LIMITS	MONITORING	
						Freq.	Sample Type
Duration of Discharge	Days	Monthly Total	9.67	MR	MR	1/Month	Estimated
Solids/Floatables	Cu. Yd.	Monthly Total	0.071	MR	MR	1/Month	Measured
Precipitation	Inches	Monthly Total	3.64	MR	MR	1/Month	Measured

Footnotes and Abbreviations:
MR Monitor and report only
(1) Wastewater data originates from the information submitted on the monitoring report forms July 2015 to September 2022.

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

NINE MINIMUM CONTROL REQUIREMENTS (PART IV.F) COMMENTS:

35. COMMENT: EPA strongly supports the enhanced inspection and cleaning requirements contained in Part IV.F.1. This section includes requirements to inspect and clean, if needed, a minimum of 20% of the system. EPA notes that certain critical portions of the system, such as regulators and screening/netting facilities, may benefit even more from frequent inspections. [1]

36. COMMENT: 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" and section f.iii. of the Guttenberg permit requires implementation of a system cleaning program that requires the system components to be inspected and cleaned. The permittee is required to submit annual progress reports on this system cleaning with the intention that 100% of the system be inspected and cleaned by the end of the effective permit.

What will be the enforcement mechanism to ensure that the permittee implements the system cleaning program? What will the Department 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 5-year permit? Will performance factors and deficiencies be communicated to the public? If so, how will that be communicated to the public? [3]

37. COMMENT: The JWW CSO Committee sincerely thanks the Department 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 permittees do 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 for permittees to implement the System Cleaning Program. The permit should require that performance factors and deficiencies be communicated to the public. [4]

38. COMMENT: Some of today's CSO problems have accelerated from decades of neglect in sewer maintenance. Cleaning all sewers on a regular basis in order to maximize wet weather storage and conveyance must be ongoing and include an affirmative certification of the cleaning by the Department. The permit must clarify compliance criteria and elucidate endorsement accountability so that permittees are subject to serious consequences if they do not comply with annual sewer maintenance. [8]

39. COMMENT: What will the Department do if the permittee does not comply with the System Cleaning Program on an annual basis? What if the permittee does not meet the 100% inspection and cleaning of the system at the end of the five- year period. [15]

40. COMMENT: We are really hopeful that the permittee will include in the Operations and Maintenance program and corresponding manual a System Cleaning Program. What will the Department do if the permittee does not comply annually with the System Cleaning Program? What if the permittee does not meet 100% inspection and cleaning of the system by the end of the permit? Will performance factors and deficiencies be communicated to the public? And if so, how? [12]

RESPONSE (35-40): The 2015 NJPDES CSO permits contain Proper Operation and Regular Maintenance Program Requirements in Part IV.F.1. 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 developed the System Cleaning Program requirements in Part IV.F.1.f which is shown below for North Bergen Woodcliff STP. Similar language is included in Part IV.F.1.f for the Town of Guttenberg; however, the statement about the length of the system is customized for each permit. Based on these comments, 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 North Bergen MUA – Woodcliff STP the total system is 8.5 miles long which includes 2,733 feet of overflow pipe. 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 permits.

41. 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. [3]

42. COMMENT: The health hazard CSO community residents face every time sewage backups occur, where high levels of harmful bacteria invade our homes, schools, workplaces and grocery stores, is truly environmental injustice. The sewage backup flooded water we encounter is full of chemicals (gas & motor oils), and viruses (E. coli, feces, etc.) and repeatedly leaves behind a serious health crisis. Unfortunately, we have to clean the aftermath of CSO sewage flooding, directly exposing us to even more harmful elements. The urgency to forestall mold and mildew infiltrating our property and affecting our health puts us to work quickly on disinfecting and throwing out damaged belongings. This leads to disruption of our lives on every level, often leaving us with major setbacks such as homelessness or health issues. Environmental protection can do better for us but with rain frequency and intensity increasing, it is now urgent! The CSO permitting process must address this with the permittees. [7]

43. COMMENT: More frequent and intense rainfalls have led to increased occurrences of CSO flooding. For those communities who are in the throes of sudden CSO flooding, the permittees must collect data on sewage connections and specific locations. Municipalities need to be prepared to alert these neighborhoods to their vulnerability and assist them. When homes and streets flood from CSOs, often those residents are unaware of the sewage and health risks. It is imperative that the permittee make special efforts to recognize the hazards in these locations and to engage these vulnerable residents in preparedness and understanding the plans of their LTCP in their respective neighborhoods. [8]

44. COMMENT: I am a resident of North Bergen. In September of 2019 and the Summer of 2020 I began to accumulate water in my basement. In the Summer of 2021 I again had water in my basement with various levels of accumulation where I recorded the dates and amounts of rainfall each day. I utilized community forums to get feedback from my neighbors and also began to knock on doors for neighbors who were impacted by similar issues. This has been a longstanding problem. I have been able to get some positive correspondence from the town but I'm not getting feedback explaining if this is an issue that will be fixed or what is the root cause.

I have neighbors who have had to take out loans to repair their homes where some have left. Some of my neighbors have been unable to get flood insurance coverage. The flooding in my home has had no stench but I question if this water is contaminated. Cleaning companies utilize chemicals and it is unclear if that is any better. Where do I learn about what is in this water? What if I get six inches of water? Do I need to disinfect my whole home and what steps should be taken to decontaminate? I have an elderly neighbor who was once stuck in her basin on the night of a hurricane.

Flooding seems to occur when catch basins overflow. We don't need to watch our basements and can just stand on the corner and wait for the catch basins to become incapacitated. Why do the catch basins overflow after an inch of rain and why does water seep in from the cracks in the ground? [19]

RESPONSE (41-44): 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.

The elements of the LTCP as required to be completed in a 5-year implementation schedule are incorporated into these two permits and should help address flooding issues. In particular, increasing the wet weather capacity to the Woodcliff STP, the Guttenberg Galaxy Towers sewer separation, and netting chamber improvements should ameliorate local combined sewer flooding.

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 permits contain specific permit conditions that require the permittee to directly address flooding through SOPs as well as by requiring a method to track flooding locations.

45. **COMMENT:** Given today's technology, it is time the Office of Emergency Management (OEM) present in-motion plans to alert all the residents living in basement apartments and to close off roads that flood to prevent more contamination and loss of property including vehicles. We have experienced these CSO flooding events repeatedly over many years, with no response to assist those of us who suffer repeated devastating losses including financial, personal belongings, vehicles, time and quality of life in addition to compromising our health and mental well-being. [7]

46. **COMMENT:** Internal state coordination with Environmental Justice and OEM agencies would foster a more team-oriented approach to serving overburdened communities. Additionally, these sewage flooding areas should be placed on highest priority to remedy for any given LTCP. [8]

RESPONSE (45-46): OEM holds responsibility of comprehensively planning for and responding to all manner of disasters, whether man-made or natural. The responsibilities of OEM are beyond the purview of this permit.

47. **COMMENT:** We recommend that the Department require that the permittees measure the amount of raw sewage released in localized flooding and report that back to the community. In addition, we recommend that 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. [3]

48. **COMMENT:** Can the Department require that the amount of raw sewage released in localized flooding be measured and reported back to the community. This awareness is important for community members from a public health perspective? [10]

49. **COMMENT:** Raw sewage should be required to be measured and tested with the specific location recorded so that locational data can help with mapping flooded areas and also more accurately identify hazards health risks in specific neighborhoods. Monitors at these locations are desperately needed so that sudden water overflows from rain or otherwise can signal potential dangers directly to the community. Such data collection and in present time monitoring will give permittees' engineers critical information to prioritize their upcoming work but most importantly will help alert the community to evacuate and follow a set –up preparedness plan. [7]

50. **COMMENT:** Can a notification system be implemented using predictive modeling based on weather so that residents can be aware of potential flooding in their basements? [15]

51. **COMMENT:** The sewage overflow issue in this part of New Jersey is untenable and we need to do something about it. Will NJDEP require alerts and notification systems, not just for Hudson River discharges, but in advance of potential sewer backups and basement flooding? [13]

RESPONSE (47-51): As noted above, Part IV.F.1.h.x of the NJPDES Permit requires the permittees to design SOPs 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. Each Progress Report shall include a list of any complaints received by the permittee regarding CSO related flooding including location and duration. 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 permittees 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.

Note, any events related to CSO related flooding should be reported to the respective permittee and can also be reported to the NJDEP Hotline at 1-888-WARN-DEP. Information such as the address, date and time is needed to address these occurrences.

52. **COMMENT:** By listening to each other's stories of affected residents and property owners, students, parents, community leaders, it is difficult to look away from the repetitive trauma caused by floods and flooding. There are cumulative effects and impacts to residents by antiquated combined sewer overflow systems and the environmental racism they continue to represent through purposefully slipshod infrastructure. In 2023 we must bring New Jersey policy up to speed by meeting the urgency of flooding with equitable or urgent policy reforms. [16]

RESPONSE (52): The Department is aware that CSO-related flooding is a consistent topic raised by stakeholders as well as by those that provided oral testimony in the public hearings and written comments on these NJPDES CSO permits. The reduction of CSO-related flooding is a priority of the Department and is being addressed through a variety of ways in these NJPDES CSO renewal permits. This includes revised and updated O&M requirements including Standard Operating Procedures, Emergency Plan, Vulnerability Analysis and an Asset Management Plan. The new System Cleaning requirements may also reduce CSO-related flooding. See Part IV Section F.1. for specific details. Most importantly, implementation of the CSO control measures will serve to reduce CSO volumes which may also alleviate CSO-related flooding.

53. **COMMENT:** I am a resident of Jersey City, New Jersey. Every time it rains, the drains in the street get backed up and pushes everything back into the house. There has been multiple times where feces has come up the drain inside the home and onto the basement floor and we have lost many valuable possessions due to this recurring issue. [9]

54. **COMMENT:** Combined sewer overflows affects many communities throughout Hudson County and I have experienced flooding in Jersey City. [20]

RESPONSE (53-54): Jersey City is a separate municipality within the PVSC hydraulically connected system. The combined sewer system for Jersey City is not the subject of these permit actions which have been issued to the Town of Guttenberg and NBMUA Woodcliff STP which serves North Bergen. The NJPDES permit for Jersey City will be issued under a separate permit action which will have an associated public comment period and public hearings.

55. **COMMENT:** We request that the role of Department staff be clarified with respect to inspecting and enforcing all projects, including gray and green infrastructure and maintenance. How is the Department going to ensure the permittee is complying with their maintenance plan for all projects? [3]

56. **COMMENT:** Regarding Construction, Operations and Maintenance, we recommend the Department define more clearly the Department's role in inspecting and enforcing all projects, including gray and green infrastructure. [4]

57. **COMMENT:** Well-designed and constructed green infrastructure projects, like all stormwater management solutions, require regular maintenance to retain effectiveness. The permit should require CSO Permittees to provide 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.? [3]

58. **COMMENT:** The Department should ensure that the permit requires the permittees 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 N.J.A.C. 7:8 and N.J.A.C. 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. [4]

59. **COMMENT:** What metrics will be utilized for the performance of GI projects? How will they be maintained? How will they be funded? [11]

60. **COMMENT:** The permit must require the permittees to provide documentation that all green infrastructure practices are being inspected and maintained in accordance with the operations and maintenance manual. What will be the enforcement mechanism to ensure that these green infrastructure practices are being properly maintained? [5]

61. **COMMENT:** We request that the Department 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. [3]

62. **COMMENT:** We would like to see more information about the GI projects and how they will be maintained going forward. [11]

63. **COMMENT:** How will the Department inspect and enforce all projects including green infrastructure? How will the Department ensure that the permittee is complying with the maintenance plan for all projects? [12]

64. **COMMENT:** How will the Department inspect and enforce all projects including green infrastructure? How will the Department ensure that the permittee is complying with the maintenance plan for all projects? [15]

65. **COMMENT:** Maintenance of green infrastructure and related planning is the key to ensuring its durability. So how is NJDEP working on enforcement? [16]

RESPONSE (55-65): 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 North Bergen MUA Woodcliff STP and Town of Guttenberg are still in the process of being implemented. The majority of these 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.

66. **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. Permittees without an approved pretreatment program should continue to implement selected CSO controls to minimize CSO impacts resulting from nondomestic discharges. [1]

RESPONSE (66): NBMUA Woodcliff STP does not currently have an approved pretreatment program. 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.G.3 of the final permit.

67. COMMENT: One suggestion for immediate and ongoing public outreach is for water utilities to target updates to each community through their billing mailings and emails. While this does not reach all within any given community, it is an important component to getting the word out on a regular basis. This information should explain what a CSO is, what is in the works, how one can engage directly and how to learn about the impact upon their specific neighborhood. By having such information posted in every billing invoice, people will take note as this generates "word of mouth" among a sector of each community. Much more is needed but this is a simple task that permittees can do easily through their billing process. [8]

RESPONSE (67): The Department agrees that Public Notification should be a required component of the NJPDES permits. This element is part of the Federal CSO Control Policy 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 permittees, including NBMUA Woodcliff STP and the Town of Guttenberg, created a NJ CSO Group Notification System as available at

https://njcso.hdrgateway.com//. This map shows the locations of CSO outfalls in the northeastern part of the state and indicates where CSOs may be occurring due to rainfall.

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

68. COMMENT: We support the shift in focus from public participation to public engagement in order to inform, educate, and engage specific to the implementation of the CSO control projects. More specifically, we support the requirement for a public engagement process that is 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 support the requirement that the Supplemental Team be reconstituted and the inclusion of project based meetings. We further support the requirement to document the recruitment and public sharing of members of this team. We believe this is a positive step toward transparency.

These first permits have 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 will better engage and serve the surrounding communities on the path toward reducing or eliminating CSOs. [3]

69. COMMENT: We hope that this permit will include transparency in community involvement with direct public engagement. We further hope this CSO permit will prioritize the climate crisis, environmental justice, and language justice concerns by including at least another language other than English, preferably Spanish. The Department 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. Maintaining transparency and outreach around water quality and sampling is a critical step to further protect the public from the effects of CSO events. [6]

70. COMMENT: We are pleased to see the focus placed on Public Engagement and the expansion of engagement prescribed in the permits. [2]

71. COMMENT: We commend NJDEP for shifting the focus from public participation to public engagement in order to inform, educate and engage specific implementation of the CSO control projects. Public engagement should be continuous and effective to ensure that the public knows what is in the plan and its consequences. [4]

72. COMMENT: We support the requirement for the reconstitution of the CSO Supplemental Team. [11]

RESPONSE (68-72): The 2015 NJPDES CSO permit required that public participation occur throughout all 3 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. Given the significant amount of varied work involved through these stages, Clean Waterways Healthy Neighborhoods initiative was established for the CSO Supplemental Team which included the North Bergen MUA Woodcliff STP and Town of Guttenberg hydraulically connected system. The Clean Waterways Healthy Neighborhoods team generally held quarterly 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. The Department is preparing guidance on this topic to educate permittees on various methods for successful Public Engagement.

73. **COMMENT:** The permit language regarding the CSO Supplemental Team is vague in regard to ensuring 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 particular community's makeup, and requires that a majority of community members are aware of the opportunity to participate on the team. How will the permittees 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? [3]

74. **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 overburdened communities, are included in public engagement. The Supplemental Team should have a transparent process of recruiting members and this process should be shared publicly. We commend the Department for developing 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. [4]

75. **COMMENT:** Will the Supplemental Team be accessible to all community members? Who will make up this Supplemental Team? How will that team be assembled? [10]

76. **COMMENT:** How will NJDEP ensure various languages and methods of communication are employed throughout this process and how will it be inclusive of the majority of New Jersey state residents. [16]

77. **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? [3]

78. **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. [3]

79. **COMMENT:** How will NJDEP ensure that members of overburdened communities are represented in the process? [10]

80. **COMMENT:** 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. [4]

81. **COMMENT:** Public participation is important. Yet the permit is vague as to ensuring that the members of the community, 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 of community members are aware of the opportunity? [12]

RESPONSE (73-81): 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 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, know that 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. The Department is preparing guidance on this topic to educate permittees on various methods for successful Public Engagement.

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.

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

82. **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. 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? [3]

83. **COMMENT:** 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 or if their input is incorporated into final decisions made by permittees. These recommendations can be achieved by either enhancing these 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? [3]

84. **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. [3]

85. **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 on-line, in person or a combination of both for meeting accessibility. [4]

86. **COMMENT:** Meeting accessibility is described as something to be kept in mind with a few suggestions. Meeting accessibility should be a requirement with specific and prescriptive guidance on what that should look like. There might be members of the community without computers or members who can't get to in person meetings due to physical limitations. So how can language translation, including sign language, be part of every meeting. Can in-person meetings be located within 5 minutes from public transportation and be handicapped accessible? [15]

87. **COMMENT:** Meeting accessibility is described in the permit as something to be kept in mind with few specific suggestions. [12]

88. **COMMENT:** Minimum requirements should be developed around the number of supplemental team meetings to be held annually and mechanisms should be required to capture input and feedback. [12]

89. **COMMENT:** A minimum requirement should be developed regarding the number of supplemental meetings held annually. This will serve the purpose of better informing the public. [21]

RESPONSE (82-89): The Department supports the efforts regarding implementation of the Public Participation requirements for the 2015 NJPDES permit where the meeting frequency was discussed with the CSO Supplemental Team in the first meeting. 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 in a similar format namely at the first meeting. 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 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 ensure 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.

90. **COMMENT:** The residents of CSO urban communities continue to endure environmental injustice along with financial hardship paying for repeated sewage back–up damages. Unfortunately, a lack of language, educational programs and public outreach to help the community understand what a CSO is and what the LTCP will achieve is lacking. For example, in Paterson, accessibility to communication in specific languages is most needed given its diverse community. The key to having better community engagement starts by understanding who makes up most of the population in these CSO communities. The majority of the population in Paterson are renters and seniors living in buildings where the smallest group are homeowners.

I recommend engaging through the school system/Board of Education outlets, being that most of their buildings have consistent CSO flooding and because they have the capacity for outreach through parents and students. Another important partnership for engagement is through all houses of worship which would reach the rest of the community. We also need elected officials to promote a dedicated resource, such as a website and meetings, to listen to what is occurring in specific neighborhoods. For too long residents have protested but with little response. This is all the more reason that it is time for NJDEP to encourage the importance of getting public feedback to bring CSO systems to new standards. NJDEP needs to put in place permitting regulations that demand listening and acting upon the needs of the community, as quickly as possible. Our quality of life and health are at stake. [7]

91. **COMMENT:** We would like to emphasize the critical importance of public engagement to the health and welfare of and suggest some ways that the permittees, guided by NJDEP, need to connect to their constituents continually during the process at hand.

A proposed LTCP Coordinator who oversees a dedicated website and social media for each permittee must be in place as an on-point resource for specific towns and their respective neighborhoods that will be impacted by CSO work in upcoming years. Overburdened communities are especially in need of assistance and outreach. In order to inform and secure engagement outreach should include schools, businesses and house of worships that serve diverse populations. Audio, visual and written materials in specific languages are demanded here. [8]

92. **COMMENT:** While I was glad to see that the public hearing was bilingual with real time Spanish language interpretation, bilingual meetings should be a requirement for future meetings under the public engagement requirements. I noticed that meeting materials were required to be in multiple languages but this should be required for real time meetings too. [20]

93. **COMMENT:** I support a requirement for the public engagement process but some of the information is unclear. Print material should be sent out in advance to the community because people experience flooding. Homeowners often pay the most attention to flyers and sending this information through the mail would be useful. [22]

RESPONSE (90-93): The Department agrees that education on CSOs is important. Education was a requirement of the 2015 NJPDES permits as part of the Public Participation requirements and is being continued and expanded in these permits as Public Engagement requirements in order to satisfy the Federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. As part of the work conducted under the 2015 NJPDES permits, a variety of educational materials have been distributed and continue to be available at the Clean Waterways, Healthy Neighborhoods website at www.njcleanwaterways.com. These materials are available in English, Spanish, and Portuguese. Information about CSOs is also available on the North Bergen website at www.nbmua.com. The Department agrees that educational materials should be distributed through a variety of outlets such as schools, houses of worship, and other meeting centers throughout the affected communities. The Public Engagement requirements as contained in this NJPDES permit are intended to require certain elements yet permittees can build upon and customize public engagement efforts to the specific needs of their affected community.

In addition, 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. Please refer to the Department's website at https://www.nj.gov/dep/dwq/cso.htm.

94. **COMMENT:** The principles of the environmental justice promise guidance document must be considered before implementing these projects in overburdened communities. [21]

95. **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? [3]

RESPONSE (94-95): Pursuant to New Jersey's Environmental Justice Law, N.J.S.A. 13:1D-157, et seq., it is the policy of the State that all residents, regardless of income, race, ethnicity, color, or national origin, have a right to live, work, learn, and recreate in a clean and healthy environment, and that no community should bear a disproportionate share of the adverse environmental and public health consequences that accompany the State's economic growth. To further the promise of environmental justice, it is the policy of the State that all New Jersey communities, and especially those disproportionately affected by environmental and public health stressors, must have a meaningful opportunity to participate in decision-making that affects their environment, communities, homes, and health.

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 NJPDES Regulations, the NJPDES permit has been subjected to an extensive public participation process throughout the three steps of the LTCP 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 60-day comment period and two public hearings to allow a means for the affected community to participate on these permit actions. Public hearings are also a required component of the Environmental Justice Law.

96. **COMMENT:** We support the inclusion of the LTCP Coordinator position from within each individual community to encourage community engagement. We would like to see the roles and responsibilities of that position outlined more clearly. In addition, will the Department provide a training manual or guidance for this position since the position will be in each CSO community. [11]

97. **COMMENT:** We support the requirement for an LTCP Coordinator to be hired as a single point of contact between permittees and the community. However, the criteria for selecting the LTCP Coordinator is not defined. We request that the final permit includes a baseline requirement for what the LTCP Coordinator role is and their responsibilities, 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 permittees 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, certifications are required. Important skills and experience should include an understanding of community engagement best practices and past success with that work. As with the previous note, clear guidance and requirements here 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? [3]

98. **COMMENT:** We believe the newly formed LTCP Coordinator position and requirements for reinstituting the CSO Supplemental Team can be improved with more specific directions regarding how and why engagement is pursued. We strongly encourage that NDJEP require LTCP Coordinators be hired from within the community they serve or have strong ties to that community. Permittees knowing the community they serve is essential to meaningful engagement and strengthens the process by incorporating their needs, opinions, and concerns in implementing the LTCPs over the coming years. [2]

99. **COMMENT:** We recommend the Department draft a baseline requirement for what the LTCP Coordinator role is and their responsibilities 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 also provide clear guidance on how the permittee shall select an LTCP Coordinator and what training the LTCP Coordinator should receive to perform the role effectively. [4]

100. **COMMENT:** There should be a baseline requirement for what a long term control plan coordinator role entails and spelling out the responsibilities is vital. Does NJDEP have a standard for this coordinator role so that it is measurable and available to the public and will something similar be drafted for the permit holder? [16]

RESPONSE (96-100): The 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. The Department is preparing guidance on this topic to provide suggestions to permittees on the role of the LTCP Coordinator.

101. **COMMENT:** There is no process established for developing a feedback loop where Supplemental Team input is captured, incorporated, and made public nor is there is a defined process 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? [3]

102. **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.

The Supplemental Team and the CSO public engagement website should post regular updates on the progress of implementing the LTCP including notice of any significant changes that are considered for the LTCP. The Supplemental Team and website viewers should also be notified and given an opportunity to comment. The website should 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 make both questions and answers readily available on the website to ensure full responsiveness and transparency. [4]

103. **COMMENT:** How can the Department ensure that the public, including those from overburdened communities, be made aware of the public engagement meetings? How can the public be part of the supplemental team and where can they find information? How will a clear feedback loop and public input, including designs, be integrated into the plans? How will the information be shared back to the community in a detailed way so that everybody is engaged, informed and participating as these projects roll out?[15]

RESPONSE (101-103): The Department maintains that the NJPDES 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 Department is preparing guidance and will include additional relevant information on this topic.

The NJPDES permits require a 5-year implementation schedule for the LTCP. Any changes to the LTCP require approval from the Department and will likely trigger a major modification to the NJPDES permit pursuant to N.J.A.C. 7:14A-16.4.

104. **COMMENT:** We support the requirement that permittees are required to hold regular public meetings (live streamed, in person, or a combination of both) and for public meetings to be made available to the affected community for viewing afterwards. Public meetings and materials should be in the language(s) appropriate to the majority of community demographics. We also support the requirement for outreach materials, including physical handouts and websites, to be produced in all major languages spoken in a given community. [3]

RESPONSE (104): The Department acknowledges the commenter's support. As noted within the permit at Part IV.G.2.h, CSO Supplemental Team meetings that are open to the public are 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.

105. 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 Permittees ensure the community is aware of the Supplemental Team members and how to contact them? [3]

106. COMMENT: We recommend that once team members are identified, they are listed on the website with clear methods to get in contact with them. [4]

107. 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. [12]

RESPONSE (105-107): 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.

108. COMMENT: We request that the Department apply requirements and a framework regarding public meetings and follow-up to project-based meetings. This should include how public input is incorporated into projects, especially as it relates to the performance of projects and project deficiencies. [3]

RESPONSE (108): 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.

109. 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. [3]

RESPONSE (109): The Department acknowledges the commenter's 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.

110. 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, Infrastructure Bank low-interest loan programs, utilizing more green infrastructure, grants, and more. [4]

111. COMMENT: Will NJDEP include guidance on innovative funding strategies to be given concurrently with the release of the final permit? 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? [3]

112. COMMENT: We're in a great position in the State of New Jersey with infrastructure funding. We've got a tremendous asset in the State of New Jersey and the Infrastructure Bank where the Water Bank has more capacity and more funding now than it has in the history of the program. The Department can accelerate the benefits of green and gray projects by making sure the projects go through the infrastructure bank and are done quickly. The Department, through other divisions and bureaus, should be as supportive of the permittee and local government through implementation as it has been of the permit development process by making sure the projects are engineered, designed and permitted. [17]

RESPONSE (110-112): There are funding opportunities within the Department to address CSO controls including green infrastructure. The Department and the New Jersey Infrastructure Bank (NJIB) partner together as New Jersey Water Bank (NJWB) 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 priorities and policies of the NJWB are established through the Intended Use Plan (IUP. 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.

Technical assistance is also available through the New Jersey Technical Assistance Program (NJ-TAP) which serves to prioritize aid to communities identified as disadvantaged or overburdened. This program can help identify sources of state and federal funding to assist with important water-quality improvement projects and is free of charge to participating water systems that could include municipalities. One component of NJ-TAP includes Community Engagement and Outreach Assistance which helps develop a toolbox of resources that systems and local governments can utilize for community outreach.

Stormwater utility fees are similar to a water or sewer utility fee except customers pay a fee for stormwater from their properties. 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.

113. 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? If so, is it missing from this permit because it doesn't apply in this instance?

We are encouraged that the permit has a 5-year implementation schedule, shorter even than the LTCP schedule. However, the permit mentions that the construction of the Treatment Plant expansion is being financed by North Bergen MUA and passed on to Guttenberg via rate increases. It is not clear what these rate increases and impact on lower income households will be. We request that this project not be funded in a way so that lower income households bear the burden of higher bills. Can NJDEP work with the permittees to maintain this 5-year timeline, and ensure these apparent rate increases do not unduly burden lower income ratepayers? [3]

114. COMMENT: This permit does 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?

This permit should not extend the timeline for requirements to reduce rate increase, as this will extend the time that the community faces environmental and public health issues. Can the Department be more specific in its guidance to permit holders around other cost-effective, innovative financing opportunities to help finance this work equitably, such as Infrastructure Bank low-interest loan programs, utilizing more green infrastructure, grants, and more? [5]

115. COMMENT: Is there a consideration of the fair distribution of cost between municipal and utility holders applied across all permittees? How will the permittee demonstrate a commitment to affordability? Can the Department be more specific in its guidance to permit holders around other cost effective innovative financing opportunities to help

finance this work equitably, such as storm water utilities, I-Bank, low interest loan programs, utilizing more green infrastructure grants and more. [12]

116. COMMENT: We recommend the Department provide guidance on ways the permittees can demonstrate their commitment to affordability. [4]

117. COMMENT: How will the Department ensure affordability of this plan? [11]

118. COMMENT: Is there a fair distribution of costs between municipal and utility permit holders applied across all permittees? [16]

RESPONSE (113-118): The Department agrees that CSO control measures should be implemented as soon as practicable as evidenced by the five-year implementation schedule included in both permits as applicable to NBMUA Woodcliff STP and the Town of Guttenberg. Costs between municipal and utility permit holders are outside the purview of the NJPDES Regulations and are therefore not the subject of this permit action.

119. COMMENT: Page 10 of the NJDEP's May 10, 2021 technical response letter to both the Town of Guttenberg and North Bergen MUA, NJDEP states, "A review of the financial capability analysis cannot be conducted until a review of this information is provided" where it referred to interest and inflation rates and related calculations. We do not see reference to the requested documents on the NJDEP website, nor in the draft CSO permit. We request that this updated information and analysis be clarified and included in the permit, including how affordability for lower income households is reflected. Also, how did any response to the Department's technical comment letter dated May 10, 2021 change the financial impact on ratepayers with lower household incomes and those who may be most overburdened? [3]

120. COMMENT: Was there a response to the NJDEP's May 10, 2021 technical response letter to both the Town of Guttenberg and North Bergen MUA? [11]

RESPONSE (119-120): The permittees submitted an LTCP dated September 2020 where the Department provided comments on May 10, 2021. Both the LTCP and the Department's response on May 10, 2021 are provided on the Department's website. The permittees provided responses on July 9, 2021 and August 20, 2021. This is stated within the Contents of the Administrative Record within the draft permit fact sheet under item 8 of LTCP Report Submissions:

8. "Selection and Implementation of Alternatives for Long Term Control Planning for Combined Sewer Systems – Regional Report" dated September 2020, revised July 2021, and with a revised Implementation Schedule on August 20, 2021.

This submission served to provide additional detail and therefore answered the Department's questions. These documents are available through the Office of Record Access at https://www.nj.gov/dep/opra/ora.html.

Since the costs between municipality and utility permit holders are outside the purview of the NJPDES Regulations, the Department's technical comment letter dated May 10, 2021 did not change the financial impact on ratepayers with lower household incomes for North Bergen and Guttenberg.

121. COMMENT: Will NJDEP apply the new US EPA guidelines (https://www.epa.gov/waterfinancecenter/clean-water-act-financial-capability-assessment-guidance, February 2023) to insist on permittees doing a Financial Alternatives Assessment and shorten compliance schedules to more equitably and affordably fund CSO controls? [4]

122. COMMENT: We urge the Department to work with all permittees in order to reduce implementation times as much as possible. This would increase access to clean water and ensure affordability, especially for ratepayers with lower incomes. We believe the EPA's recently released 2023 CWA Financial Capability Analysis (FCA) Guidance provides an opportunity to find this balance. [6]

123. COMMENT: We urge NJDEP to follow the approach of EPA's just released final 2023 Clean Water Act Financial Capability Assessment 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 to document 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 acquiring 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. [3]

124. COMMENT: We encourage the NJDEP to work with all permittees to shorten implementation timelines as much as possible, thereby accelerating access to clean water, while ensuring affordability, especially to lower income ratepayers. We believe the EPA's recently released 2023 CWA Financial Capability Assessment Guidance provides an opportunity to find this balance. It states:

> "Where CWA compliance costs impact residents, particularly low income households, 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 residents or take other steps to reduce the costs of needed CWA controls. If the intended goal is to help impacts to residents, an extended CWA schedule may, in fact, have the opposite effect if it delays addressing pollution in the neighborhoods where they live."

This guidance provides a range of options for permittees to consider in order to mitigate financial impacts of potential rate increases on low- income households. [3]

RESPONSE (121-124): The Department acknowledges that US EPA announced its updated Clean Water Act Financial Capability Assessment (FCA) Guidance on February 1, 2023 subsequent to the issuance of the draft NJPDES CSO permits on December 9, 2022. 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, this guidance document is not legally binding and is intended only to provide clarity to the public regarding existing requirements under the law or agency policies. At this time, the Department maintains that the analysis contained within the LTCPs is sufficient as written.

The NJPDES CSO permits as issued to NBMUA Woodcliff STP and the Town of Guttenberg serve to incorporate the findings of the September 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. The permittees have agreed to a five-year implementation schedule to implement the selected alternatives as set forth in the permits at Part IV.G.8. This five-year schedule will ensure that the benefits of reductions in CSO volume are realized in the short term. Note that the original LTCP submission was for projects to be completed over a ten-year period. Subsequent to submission of the LTCP the permittees have agreed to complete these projects over a five-year period which is the schedule that was included in the NJPDES CSO permits.

The Department agrees that CSO control measures should be implemented as soon as practicable as evidenced by the five-year implementation schedule included in both permits. 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.

125. **COMMENT:** As NJDEP drafts the permits for the subsequent NJ CSO regions, we encourage NJDEP to 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. Will NJDEP and permit holders, for this permit and subsequent regional CSO permits, follow the EPA's 2023 CWA FCA Guidance to limit resident's impacts of longer implementation schedules while minimizing financial impacts on lower income households? [3]

RESPONSE (125): The Department has either drafted or is in the process of drafting NJPDES permits for 7 other hydraulically connected combined sewer systems. The length of implementation schedules will be carefully considered while developing these permits. The 7 remaining LTCPs were submitted in October 2020. As noted above, the LTCPs reflect many years of data gathering, evaluation and modeling and included an assessment of Cost/Performance analysis. The rationale for implementation schedules in the 7 remaining LTCPs will be included in each of those NJPDES permits which will be open to the public comment process as well as public hearings. At this time, the Department maintains that the analysis contained within the NBMUA Woodcliff STP and Town of Guttenberg LTCP is sufficient as written.

126. **COMMENT:** It is encouraging that an Asset Management Plan is included in this permit. However, is affordability considered in the Asset Management Plan and where is it described? How will the NJDEP ensure the CSO Supplemental team can provide meaningful input on the Asset Management Plan and how it is establishing rates? [3]

127. **COMMENT:** We appreciate affordability being incorporated into the Asset Management Plan. [5]

128. **COMMENT:** How will the Department ensure that the CSO supplemental team can provide input on the Asset Management Plan and how rates are established? [12]

129. **COMMENT:** We recommend the Department ensure that the CSO Supplemental Team provides input on the Asset Management Plan and how the wastewater or utility establishes rates. [4]

RESPONSE (126-129): 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 here: 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.l, 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.

130. <u>COMMENT</u>: Part IV.G.8 includes requirements to implement the permittee-selected CSO Controls identified in the LTCP**.** This section could be improved by:

- Including a paragraph that identifies the required numeric performance standard (minimum percentage capture – i.e., 92%) for the selected CSO controls, and

- Including interim project deliverables for larger projects to help stay on schedule, as in the following example:

> 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:
>
> | Activity | Completion Date |
> |---|---|
> | **[Insert name of activity]** | **[insert date]** |
> | Site-Specific Language: | |
> | 1. Retention basin | |
> | • Complete design of [named] retention basin. | [insert date] |
> | • Submit construction drawings for [named] retention basin. | [insert date] |
> | • Initiate Construction of [named] retention basin. | [insert date] |
> | • Complete construction of [named] retention basin. | [insert date] |
> | 2. [Named street] sewer separation | |
> | • Complete design | [insert date] |
> | • Solicit bids | [insert date] |
> | • Award contracts | [insert date] |
>
> **NOTE: A compliance schedule exceeding the term of the permit may only be included in the permit if explicitly authorized in the applicable State WQS.**

[1]

<u>RESPONSE (130)</u>: The major project required in the NBMUA Woodcliff STP NJPDES permit is the expansion of the treatment plant. The Department agrees that interim deliverables are appropriate to help stay on schedule. While construction of the expansion to the NBMUA Woodcliff STP is largely complete, activation of the bypass has not yet occurred pending operational enhancements to ensure compliance with the ACO conditions. In addition, a TWA application is needed to activate the bypass. Since the effective date of the permit (EDP) is now set with the finalization of this NJPDES permit, the Department has corrected typographical errors and also improved Part IV.G.8 of the NBMUA Woodcliff STP permit to include interim deliverables in Part IV.G.8 for both the STP expansion and GI Part 2 as follows:

i. Year One (EDP to EDP + 1 year); ~~Green Infrastructure for NBMUA (GI Part 1);~~ <u>Submit application for TWA so that CSO-related bypass can proceed.</u>
ii. Year Two (EDP + 1 year to EDP + 2 years); Expansion of the NBMUA Woodcliff Treatment Plant (owned/operated by NBMUA).
iii. Year Three (EDP + 2 years to EDP + 3 years): ~~No required projects for NBMUA Woodcliff STP.~~ <u>Select location for Green Infrastructure for NBMUA (GI Part 1).</u>
iv. Year Four (EDP + 3 years to EDP + 4 years): ~~No required projects for NBMUA Woodcliff STP.~~ <u>Green infrastructure for NBMUA (GI Part 1); Select location for Green Infrastructure for NBMUA (GI Part 2).</u>
v. Year Five (EDP + 4 years to EDP + 5 years): Green Infrastructure for NBMUA (GI Part 2)

The Department has corrected typographical errors and also improved Part IV.G.8 of the Town of Guttenberg permit to include interim deliverables in Part IV.G.8 as follows:

i. Year One (EDP to EDP + 1 year): I/I Reduction for Guttenberg (Project #1); Upgrades at Netting Chamber; <u>Green Infrastructure: 30 Planter Boxes (GI Part 1); Separation of Galaxy Storm Water Flow (Design/Permitting)</u>.

ii. Year Two (EDP + 1 year to EDP + 2 years): Expansion of the NBMUA Woodcliff Treatment Plant (owned/operated by NBMUA with rate impacts to Guttenberg); Separation of Galaxy Towers Storm Water Flow (Construction Complete); I/I Reduction for Guttenberg (Project #2).
iii. Year Three (EDP + 2 years to EDP + 3 years): I/I Reduction (Project #3); Separation of Galaxy Sanitary Sewer Flow (Design/Permitting).
iv. Year Four (EDP + 3 years to EDP + 4 years): I/I Reduction (Project #4) for Guttenberg; Separation of Galaxy Towers Sanitary Sewer Flow (Construction Complete).
v. Year Five (EDP + 4 years to EDP + 5 years): I/I Reduction for Guttenberg (Project #5); Green Infrastructure: 30 Planter Boxes (GI Part 2).

This change affects Part IV.G.8 of the final permits.

131. COMMENT: It is appreciated that, as stated in the LTCP, "The LTCP elements are scheduled so that the higher-impact projects come earlier in the process, maximizing the total CSO volume captured over the ten-year implementation schedule." It is also very encouraging that the water volume capture percentage exceeds the 85% minimum. All controls should be prioritized to have the greatest impact on CSOs in the shortest time frame, while maintaining affordability for lower income households. [3]

RESPONSE (131): The Department agrees that CSO control measures should be implemented as soon as practicable as evidenced by the five-year implementation schedule included in both permits. The Department also agrees that wet weather percent capture should be maximized where both the baseline percent capture of 89% and the projected percent capture of 92% exceed the minimum of 85%. The most significant element of the LTCP for both permittees is the upgrade to the NBMUA Woodcliff STP to increase the facility's wet weather capacity from 8 MGD to 10 MGD along with increasing the average monthly capacity from 2.91 MGD to 3.46 MGD. As noted in this comment, this project is earlier in the Implementation Schedule. In addition, the permittee revised the implementation schedule to five years in part due to the Department's request.

132. 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 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. Therefore, we recommend that these well- designed green infrastructure projects be installed as a control measure as quickly as the implementation schedule permits.

One way to achieve this goal is to leverage gray infrastructure project installations as an opportunity to simultaneously install green infrastructure solutions. At the same time, we caution that green infrastructure should not be installed solely with the intention of appeasing the public. Green infrastructure is a valid stormwater control solution and these projects should have substantial, measurable outcomes. [3]

133. COMMENT: We recommend that 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. We recommend the Department ensure that green infrastructure is implemented as much as possible, where possible, as quickly as possible, and accelerate timelines for green infrastructure projects to maximize benefits. Green infrastructure projects should achieve significant results; they should not just create the appearance of action. [4]

134. COMMENT: We support the Department's prioritization of green infrastructure projects in the first five years of the permit to improve water quality, reduce localized flooding, and increase wet weather CSO capture. CSO control alternatives, including green infrastructure, are important components in achieving 92% capture of combined sewage collected during wet weather. [5]

135. COMMENT: Are the most impactful projects with the greatest potential for flood reduction prioritized in the five-year schedule whether they be green or gray? Is there another method for prioritization of projects? [20]

136. **COMMENT:** CSO controls should be prioritized based on the impact of combined sewage over full volume reduction and water quality improvements including well designed green infrastructure. [21]

137. **COMMENT:** We're encouraged to see a detailed schedule on page 27 of the fact sheet. You know we can see a very clear set of projects both green and gray that the permittee will have to proceed with in order to meet the required minimum wet weather percentage capture of 92%. A lot of the benefit is going to come through the gray infrastructure side as complimented by the green infrastructure. [17]

RESPONSE (132-137): 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 indicated in the implementation schedule, both permittees have selected green infrastructure projects as part of the LTCP to be implemented within a five-year schedule.

138. **COMMENT:** As it relates to this permit, we request that the mentioned GI projects be installed in the first five years along with the gray infrastructure projects. [3]

139. **COMMENT:** Can NJDEP adjust the implementation schedule of the 100 planter boxes to be installed within the next five years rather than 10 years? [4]

140. **COMMENT:** Can NJDEP adjust the implementation plan for the 100 planter boxes so that they are installed in the first five years of the plan, rather than in 5– 10 years, as proposed in the LTCP draft? [3]

141. **COMMENT:** The time frame for the 100 planter boxes should be adjusted from 10 years to 5 years because we just don't have the time. [16]

142. **COMMENT:** NJDEP must ensure that the benefit from the few green infrastructure projects required as part of this permit be maximized by accelerating timelines. [5]

143. **COMMENT:** We recommend NJDEP should prioritize controls and projects based on the impact of CSO volume reduction and water quality improvements, including well-designed green infrastructure. Green infrastructure has a greater impact than a gray infrastructure project depending on where you are and what you are doing. How can NJDEP ensure that green infrastructure is explored as part of gray infrastructure projects? [5]

144. **COMMENT:** The 2020 LTCP contained a 10-year implementation schedule, where GI was included in the last 5 years of the schedule. We would like to see GI included earlier in the implementation schedule. [11]

145. **COMMENT:** The benefits of green infrastructure can be maximized by having them start sooner than projected. There is a lack of green infrastructure in North Bergen's permit. Can green infrastructure projects one and two be explained in full detail so that requirements are followed strictly? [12]

RESPONSE (138-145): As noted within the draft NJPDES CSO permits, the September 2020 LTCP included a ten-year implementation schedule with GI prominently featured within the last five years. The permittee revised the implementation schedule to five years at the Department's request. All GI projects are required to be implemented within the five-year NJPDES permit cycle.

Due in part to significant public interest in the use of GI as part of the LTCP, the NJPDES CSO permits require the permittees to seek public input on the siting of GI projects through CSO Supplemental Team meetings that are required to be open to the public. This is an objective of those required meetings and is stated in Part IV.G.2.c.iii and iv 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.

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.

In sum, the Department maintains that the schedule for GI as included in the NJPDES permit is appropriate particularly given that time is needed to incorporate public input in the siting of GI, while also encouraging the public to participate in GI solutions.

146. COMMENT: Since green infrastructure is so vital to a sustainable plan, especially as precipitation volumes increase due to climate change, we recommend leveraging these early gray infrastructure project installations as an opportunity to simultaneously install green infrastructure solutions. For example, we recommend that while separating the sewer system during the Galaxy Towers project and disturbing the right of way, consider the below grade improvement as an opportunity to implement a surface level improvement such as a bioswale or other water storage infrastructure. 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 rate payers? Can surface-level green infrastructure improvements be implemented in this current draft permit along with gray infrastructure installations? [3]

RESPONSE (146): The objective of the Development and Evaluation of Alternatives Report dated July 1, 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 January 24, 2020. The permittees selected several GI projects in the LTCP that are now being required to be implemented in this permit. In addition, the Department has included a 5-year implementation schedule for gray and green infrastructure which is expedited from the original projected schedule of 10 years without reduction of total expenditures.

147. COMMENT: The public should clearly understand the types of green infrastructure projects being considered. In the case of this permit, the public expressed keen interest in obtaining more information on NBMUA projects #1 and #2. Moving forward, the public should be involved in decisions around the siting of green infrastructure to ensure the projects also meet other aesthetic and environmental goals of the community, including reducing street and basement flooding. How can the NJDEP ensure that the public is involved in the siting of the planter boxes and other green infrastructure projects and in helping to identify other possible GI projects? Can the NJDEP provide additional information on the two green infrastructure projects cited in the NBMUA permit to allow for community input? They are currently described as "Green Infrastructure Projects #1 and #2." [3]

148. COMMENT: How can the NJDEP ensure that green infrastructure is explored as part of gray infrastructure? [12]

149. COMMENT: How can NJDEP ensure that green infrastructure is explored as part of gray infrastructure projects? There are already 300 people who are certified green infrastructure champions throughout the state who can help with the all hands on deck that is necessary to assess green infrastructure throughout the entire state. [16]

RESPONSE (147-149): As noted above, the DEAR evaluated multiple types of green infrastructure. For example, NBMUA considered green roofs, zoning to incentivize green roofs, pervious concrete, rain gardens, right-of-way bioswales, porous asphalt, permeable interlocking concrete pavers, planter boxes, and rain barrels. The Town of Guttenberg considered green roofs, including zoning changes to encourage green roofs on an estimated total of 5-10% of the newly zoned area; permeable pavement; planter boxes; and rain barrels. As noted within the implementation schedule, both NBMUA and the Town of Guttenberg are required to implement GI where siting of those projects require public input as part of the CSO Supplemental Team meetings. The public is also encouraged to participate in implementing GI solutions as well.

150. COMMENT: Is it possible for NJDEP to require the implementation of the green roof ordinance ASAP instead of waiting until 2026? [4]

151. **COMMENT:** To maximize benefits from the green roof ordinance, can NJDEP include a requirement that this ordinance be implemented as soon as possible rather than waiting until 2026? [3]

152. **COMMENT:** To maximize benefits from the green roof ordinance can you include a requirement that this ordinance be implemented ASAP, rather than wait until 2026? [5]

153. **COMMENT:** Can you include a requirement that the green roof ordinance be implemented as soon as possible in Guttenberg rather than waiting until 2026? Can you also adjust the implementation plan in Guttenberg for the 100 planter boxes so they are installed in the next 5 years rather than 10 years? [12]

154. **COMMENT:** NJDEP should require the green roof ordinance to be implemented ASAP, rather than waiting until 2026. [16]

RESPONSE (150-154): As shown in the Implementation Schedule included in Part IV.G.8, the Town of Guttenberg has proposed a Green Roof Ordinance for High-Rises. A green roof consists of vegetation planted in growing media on top of a drainage layer that intercepts stormwater runoff and reduces the total volume of runoff through evapotranspiration. Additional information is available in the New Jersey Stormwater Best Management Practices Manual as available at: https://www.nj.gov/dep/stormwater/bmp_manual2.htm.

Given that the permittee has proactively agreed to a five-year implementation schedule and because a local ordinance involves multiple parties, the Department cannot alter the implementation of this project to be earlier within the schedule.

155. **COMMENT:** We request that the Department require that the siting of gray infrastructure will not have negative cumulative impacts on overburdened communities. [3]

156. **COMMENT:** The permit should require a mechanism for assurance that gray infrastructure will not have cumulative negative impacts on overburdened communities. [12]

157. **COMMENT:** In terms of a gray infrastructure, will the Department require for the siting of gray infrastructure to not have negative cumulative impacts on overburdened communities? [15]

158. **COMMENT:** A mechanism should be required to ensure that the cumulative impacts of gray infrastructure will not negatively impact overburdened communities. [21]

RESPONSE (155-158): The Department acknowledges that North Bergen and Guttenberg have a significant population that meet the Department's definition of an overburdened community in accordance with N.J.A.C. 7:1C. The primary element of the LTCP for both permittees is upgrading the Woodcliff STP to increase the facility's wet weather capacity from 8 MGD to 10 MGD along with increasing the average monthly capacity from 2.91 MGD to 3.46 MGD. Therefore, the most significant change to gray infrastructure as required in this permit is limited to the Woodcliff STP property. Other gray infrastructure methods utilized for this LTCP includes reduction of I/I and sewer separation which improves the function of infrastructure that is already sited within the communities.

159. **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 and 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. [4]

RESPONSE (159): 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."

The Department acknowledges that there has been significant public interest in the prioritization of GI. In the 2020 LTCP submission, 20% of the Town of Guttenberg GI projects were to be completed within each of the Years 5-9. In part due to the Department's request, the revised LTCP as included in this permit requires 30% of the GI projects to be completed in Year 1 and the remaining projects to be done in Year 5. This translates to an acceleration of the original timeline for GI implementation for the Town of Guttenberg. Likewise, NBMUA's second GI project "Green Infrastructure for NBMUA (GI Part 2)" was moved from Year 9 to Year 5 as part of this permit action.

As described previously, upgrades to the North Bergen Woodcliff STP will have the greatest impact on CSO reduction and water quality improvement and is the first required project in the LTCP as well as in Part IV.G.8 of these permits. The acceptance of additional combined sewage by the Woodcliff STP will result in a reduction in CSOs for the CSO outfalls that service North Bergen and the Town of Guttenberg thereby resulting in water quality improvements to the Hudson River and less chance of flooding during storm events.

160. **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. [3]

RESPONSE (160): As stated in this comment, the Department did release guidance in 2018 regarding GI available at https://www.state.nj.us/dep/dwq/pdf/CSO_Guidance_Evaluating_Green_Infrastructure_A_CSO_Control_Alternative_for_LTCPs.pdf. 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.

Both permittees have selected GI as LTCP alternatives as indicated in the Implementation Schedule in Part IV.G.8. 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.

161. **COMMENT:** The Guttenberg plan calls for sewer separation, but there is no discussion of treating the new stormwater discharges that will be created as part of this sewer separation. According to existing Municipal Separate Storm Sewer System (MS4) water quality rules, these discharges should be required to reduce 80% total suspended solids from motor vehicle surfaces, but there is no mention of these standards within this permit. How will NJDEP ensure the creation of a new MS4 connection properly manages the treatment of these stormwater discharges? If Guttenberg will be required to meet this minimum, can that be clearly stated? [3]

162. **COMMENT:** The plan calls for sewer separation but there is no discussion of treating the new stormwater discharges that will be created as part of this sewer separation. Will NJDEP require a reduction in total suspended solids from motor vehicles surfaces? [4]

163. **COMMENT:** I'm encouraged to see sewer separation of the Galaxy Towers and that some partial separation has already been completed. Are there additional projects for sewer separation beyond what is covered in this permit in a future iteration of a permit? What is the plan for treatment of the stormwater flow after sewer separation for total suspended solids? [20]

RESPONSE (161-163): Discharges of stormwater from separate storm sewers are required to obtain a NJPDES permit as that system is considered an Municipal Separate Storm Sewer Systems (MS4). A full copy of the Master MS4 General Permit is available at www.nj.gov/dep/dwq/tier_a.htm. MS4 permittees are required to develop, update, implement and enforce its stormwater management program to address post construction stormwater runoff in new development and redevelopment and to ensure compliance with the Stormwater Management rules at N.J.A.C. 7:8. This includes the Stormwater runoff quality standards at N.J.A.C. 7:8-5.5 which includes reduction of the post construction load of total suspended solids.

164. **COMMENT:** We recommend the Department require the permittees conduct water quality sampling near CSO outfalls during implementation of LTCP projects and during wet weather events that generate overflows. 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. [4]

165. **COMMENT:** Will the permittees 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?

    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. [3]

166. **COMMENT:** I think it's important that we have water quality monitoring near CSO outfalls, particularly during wet weather events. Will the permittee be required to conduct water quality sampling near CSO outfalls during the implementation of LTCP projects and during wet weather events when the CSO is active? How will the Department utilize information from these permits, including water quality and precipitation data, to look at opportunities to improve protections on water bodies, such as use attainability analysis? [12]

    RESPONSE (164-166): 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. 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. 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.

    NBMUA and the Town of Guttenberg are required to utilize 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.

167. **COMMENT:** Regarding the H&H model, 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. We appreciate that models will be required to be updated at the end of the effective NJPDES permit. We also appreciate that updated Hydrologic and Hydraulic (H&H) models will be required to include all completed CSO control measures and any modifications to the Combined Sewer System since the previous H&H model was calibrated for the LTCP. [3]

168. COMMENT: Upon the end of the effective NJPDES permit, will the Department require permittees to recalibrate the H&H model with the updated water quality data, precipitation rates, and other climate related data? [12]

RESPONSE (167-168): Modeling of a sewer system is recognized as a valuable tool for predicting sewer system response to various wet weather events. The NJPDES CSO permits for NBMUA Woodcliff STP and the Town of Guttenberg contain a 5-year implementation schedule. As such, 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.

169. 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 (169): The Department agrees that the NJPDES CSO permit must be consistent with the Federal CSO Policy and N.J.A.C. 7:14A-11, Appendix C. Part IV.G.9.e 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.

170. COMMENT: Phase II CSO permits should contain a requirement to implement, with an established schedule, the approved post-construction water quality assessment program. This should include requirements to monitor and collect sufficient information to demonstrate compliance with Water Quality Standards and protection of designated uses as well as to determine the effectiveness of CSO controls.

In these permits, the requirement Compliance Monitoring Requirement is included in Part IV.G.9. It is recommended that the date for submission of the final Post Construction Compliance Monitoring Plan (PCCMP) be independent from implementation of all LTCP projects (due 30 months after the last approved LTCP project has been constructed and implemented), since some of these projects (e.g., small green infrastructure projects) are minor, are not expected to significantly improve percent capture (and therefore have a minimum impact upon water quality) and may be subject to implementation delays. Instead, implementation of the PCCMP should be required after implementation of all significant CSO Controls that are projected to improve percent capture and/or water quality (e.g., plant expansion) and should include a fixed date.

The permittees should submit their respective water quality compliance monitoring plan to the NJDEP for review and approval prior to implementation. [1]

RESPONSE (170): The Department agrees that an approved post construction water quality assessment program must be a component of the permit consistent with EPA Phase II CSO permit requirements. As such, the NJPDES permits includes the Compliance Monitoring Program and required submission of a Final PCCMP Report. The Final PCCMP Report requires multiple measures including flow monitoring, update of the H&H model (which may include calibration and/or validation), and continuous simulation to ensure the final required percent capture is being attained.

The hydraulically connected system currently attains 89% wet weather capture. Inclusion of the CSO projects will only increase wet weather capture thereby further exceeding the minimum requirement of 85% capture as required by the Federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C. The primary element of the LTCP for both permittees is the upgrade to the Woodcliff STP to increase the facility's wet weather capacity from 8 MGD to 10 MGD. The Department agrees that submission of the PCCMP can be conditional on the completion of this project which is required to be completed by April 2024. As such, the PCCMP shall be completed by November 1, 2026. Part IV.G.9 is hereby modified as follows:

g. A Final PCCMP Report shall be submitted to the Department by November 1, 2026 which is ~~within~~ 30 months after the STP upgrades have ~~last Approved LTCP project has~~ been constructed and ~~is~~ are in operation. The single Final PCCMP Report shall evaluate and document the system-wide performance of the Approved 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:.

This change affects Part IV.G.9.g of the final permit.

171. COMMENT: Will future hydrologic and hydraulic modeling be updated, based on precipitation data and modeling from the Northeast Regional Climate Center released in November 2021? [5]

RESPONSE (171): 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 hydrologic and hydraulic (H&H) model.

CUSTOM REQUIREMENT (PART IV.H) COMMENTS:

172. COMMENT: It is recommended to add specific reporting requirements to the Adaptive Management Plan to: (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 or at least make up for lost time, as

well as identify alternate CSO projects to be implemented with an accompanying schedule; and (3) submit to the NJDEP for approval. [1]

RESPONSE (172): 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 requirements.

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.

173. COMMENT: How will the Department incorporate New Jersey Protecting Against Climate Threat (NJ PACT) rules, anticipated in 2023, into this permit and future permits? [5]

174. 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. [4]

175. COMMENT: There is a lingering vagueness to the language in these permits around climate change and adaptive management that can be addressed to provide consistent and clear guidance. The permit should be clear as to how or if the plans will be subject to pending or new NJ PACT rules. How/will the Department incorporate NJ PACT rules, especially the inland flood protections rules anticipated in mid-2023, into this permit and future permits? [3]

176. COMMENT: The permittee is required to track changes in precipitation and address them, but it's not clear how or if the plans will be subject to the new NJ PACT rules. How will the Department incorporate the NJ PACT rules into this permit and future permits? [12]

177. COMMENT: Will the issuance of the permits before NJ PACT preclude the permittees from having to apply those rules to projects? Will projects that are not yet permitted be required to follow the new rules? It would be really great to see guidance around climate threats and NJ PACT rules to come out with the permit. [14]

RESPONSE (173-177): 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 is in the process of developing rules as entitled NJ PACT. These regulations are the result of Executive Order No. 100 as signed by Governor Phil Murphy. Consequently, Administrative Order No. 1 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.

RESPONSE TO PERMITTEE COMMENTS

Comments on behalf of the permittees were submitted via three separate letters, as identified below:

Written Comments Submitted on Behalf of the Permittees		
Person	**Title / Affiliation**	**Commenter Number**
John A. Napolitano	Partner, Cleary, Giacobbe, Alfieri & Jacobs, LLC on behalf of the North Bergen MUA Woodcliff STP or "the Authority"	23
Mark A. Hubal, PE, BCEE	Associate, Remington & Vernick Engineers on behalf of the Town of Guttenberg, Comments on North Bergen MUA Woodcliff STP Draft Permit NJ0029084	24
Mark A. Hubal, PE, BCEE	Associate, Remington & Vernick Engineers on behalf of the Town of Guttenberg, Comments on the Town of Guttenberg Draft Permit NJ0108715	25

178. COMMENT: The second sentence of the NBMUA Woodcliff STP Cover Letter states that the Authority's "existing facility discharges treated, disinfected, domestic wastewater with industrial contribution into the Hudson River[.]" For clarification, the only industrial contribution is Hackensack Meridian Health Palisades Medical Center. The Authority requests that the second sentence be revised to state the Authority's "existing facility discharges treated, disinfected, domestic wastewater with a single industrial contribution (hospital) into the Hudson River[.]" [23]

179. COMMENT: The Authority requests that the first sentence in the fifth paragraph of the Public Notice be revised as follows: "The NBMUA – Woodcliff STP discharges treated, disinfected, domestic wastewater with a single industrial contribution (hospital) into the Hudson River, classified as SE2 (C2) waters." [23]

RESPONSE (178-179): The Department acknowledges that at this time there is only one industrial contributor to the NBMUA Woodcliff STP service area. However, the Department maintains that the description is sufficient as included in the draft permit cover letter and public notice. Industrial users may change over time; therefore, the Department does not typically specify individual industrial users in the cover letter or public notice for NJPDES permits issued to POTWs such as NBMUA Woodcliff STP. In addition, the public notice was already published in the *Jersey Journal* on December 15, 2022 as shown here: www.njpublicnotices.com.

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

180. COMMENT: The second paragraph of the Executive Summary discusses achieving 92% capture and includes a chart suggesting same will be achieved. However, compliance is currently 85% capture measured using the H&H model during the NJDEP approved Typical Year of 2004. The Authority requests that the Chart in the Executive Summary be removed or, alternatively, revised to indicate that compliance is 85% capture measured using the H&H model during the Typical Year. [23]

RESPONSE (180): The purpose of the chart is to simply show the existing and projected system-wide annual average capture as measured using the H&H model and the approved system-wide annual average as included in the Service Area System Characterization Report NBMUA Woodcliff and Guttenberg (see Appendix C of the LTCP). The Department maintains that the chart is appropriate and that the above statement is clear.

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

181. COMMENT: The Authority requests that the second paragraph of the Executive Summary be revised as follows:

> "Through the LTCP, Guttenberg and NBMUA - Woodcliff STP will comply with the regulations through the Presumption Approach of elimination or capture of a minimum 85% of the annual average combined sewage

collected in the system measured using the hydrologic and hydraulic ("H&H") model during wet weather in the Typical Year. Collection system modeling, as required by the 2015 CSO permit and summarized in the LTCP, demonstrate that this system currently exceeds 85% capture using the H&H model during the Typical Year ~~{is currently at 89% capture}~~. The projects listed in the LTCP, and proposed in this permit, are projected to further exceed the minimum 85% capture requirement. These projects~~{, which}~~ include both gray and green infrastructure~~{, are projected to achieve 92% capture. These projects}~~ and are projected to be completed within the next five years." [23]

RESPONSE (181): The purpose of the Executive Summary is to provide a concise overview of the draft NJPDES CSO permits. The draft NBMUA NJPDES permit is 130 pages long and the draft Guttenberg NJPDES permit is 74 pages long where these permits are highly technical documents. The Executive Summary serves to highlight the main elements of the draft permits and was developed with the average reader in mind. The concept of an Executive Summary was originally suggested by Jersey Water Works as part of the LTCP process and the Department agreed that it was an excellent idea.

The Department disagrees that it is appropriate to include specific, technical details identified in this comment as this contradicts the intended purpose of the Executive Summary.

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

182. **COMMENT:** The fourth paragraph of the Executive Summary states that "[t]his permit includes specific requirements pertaining to climate change." What are the climate change requirements? Is the requirement the Vulnerability Analysis? Please advise. [23]

RESPONSE (182): There are multiple references within the NJPDES permits regarding climate change and completion of a Vulnerability Analysis which is a required component of the Proper Operation and Regular Maintenance Program Requirements at Part IV.F.1.j. A "Vulnerability Analysis" is a component of the Emergency Plan that serves to estimate the degree to which the treatment works would be adversely affected by each type of emergency situation including the effects on the power supply; communication equipment; supplies; personnel; security and must include emergency procedures to be followed. Similarly, preparation of the larger Emergency Plan shall provide for 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. Again, the Executive Summary is not intended to summarize the NJPDES permit but rather to highlight key elements of the permits.

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

183. **COMMENT:** The first paragraph of the Public Notice lists both the Woodcliff STP Permit (NJ0029084) and the Guttenberg Permit (NJ0108715). Is this correct? Please advise. [23]

184. **COMMENT:** The Authority requests that the third sentence in the fourth paragraph of the Public Notice is revised as follows: "When the conveyance capacity of the collection system and/or the STP is exceeded, excess combined sewage flows pass through Outfall 004A in North Bergen and Outfall 001A in Guttenberg. [23]

RESPONSE (183-184): A single, combined Public Notice was published for North Bergen MUA Woodcliff STP and the Town of Guttenberg in the *Jersey Journal* on December 15, 2022. Therefore, the first paragraph of the Public Notice is correct in that both permits were appropriately listed.

The public notice was already published on December 15, 2022; therefore, the Department cannot make corrections to the third sentence of the fourth paragraph as suggested in this comment. However, the Department did include this suggested sentence in the cover letter of the final permits for NBMUA Woodcliff STP and the Town of Guttenberg to clarify that excess combined sewage flows through outfall 004A in North Bergen and Outfall 001A in Guttenberg.

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

185. COMMENT: The eighth paragraph of the Public Notice references the Guttenberg Permit (NJ0108715) and not the Woodcliff STP Permit (NJ0029084). Should the Public Notice only reference Woodcliff STP Permit or both? Please advise. [23]

RESPONSE (185): The eighth paragraph of the Public Notice references the public hearing procedure and does not reference a NJPDES permit number. It appears that the commenter is referring to the seventh paragraph in the Public Notice which is stated as follows:

> Comments may be submitted in writing to Susan Rosenwinkel, Chief, or Attention: Comments on Public Notice NJ0029084 and/or NJ0108715, at Mail Code 401-02B, Division of Water Quality, Bureau of Surface Water & Pretreatment Permitting, P.O. Box 420, Trenton, NJ 08625-0420 by the close of the public comment period.

This paragraph is correct as it references both permit numbers.

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

186. COMMENT: On Page 1 of 57, Section #3 of the NBMUA Woodcliff STP Fact Sheet states that "NBMUA and the Town of Guttenberg are served by a combined sewer collection system (CSS) which is hydraulically connected to the Woodcliff STP as owned by NBMUA." However, the Authority only owns the regulators, interceptor, CSO 004A and the Woodcliff STP. The Township of North Bergen owns the collection system. Please revise to reflect same. [23]

187. COMMENT: On Page 3 of 57, Section #5(A) of the NBMUA Woodcliff STP Fact Sheet states "NBMUA and the Town of Guttenberg own separate portions of one hydraulically connected combined sewer system." However, the Authority only owns the regulators, interceptor, CSO 004A and the Woodcliff STP. The Township of North Bergen owns the collection system. Please revise to reflect the same. [23]

188. COMMENT: On Page 4 of 57, Section #5(C) of the NBMUA Woodcliff STP Fact Sheet states that the Authority "has sole ownership of the North Bergen Township CSS and the Woodcliff STP." However, the Authority only owns the regulators, interceptor, CSO 004A, and the Woodcliff STP. The Township of North Bergen owns the collection system. Please revise to reflect the same. [23]

189. COMMENT: The Township of North Bergen (the "Township") owns the collection system. The Authority requests that revisions are made throughout the Draft Permit for consistency and clarification that the Authority, Guttenberg and the Township own separate portions of the hydraulically connected combined sewer collection system. Specifically, that the Township owns the collection system and that the Authority only owns the regulators, interceptor, CSO Outfall 004A and the Woodcliff STP. [23]

190. COMMENT: As stated above, the Township owns the collection system. As such, the cleaning of collection system is not within the Authority's jurisdiction and is the responsibility of the Township. The Authority will coordinate with the Township but should not be held liable for noncompliance with this condition. [23]

RESPONSE (186-190): The Department acknowledges that NBMUA owns the regulators, interceptor, CSO 004A and the Woodcliff STP whereas the Township of North Bergen owns the collection system. Part IV.F.1.f.i has been clarified in the final permit as follows:

> 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. The Township of North Bergen owns the collection system.

In order to clarify issues related to ownership, the Department had also included the following in the fact sheet on page 53 for NBMUA and on page 30 for Guttenberg:

"The LTCP as submitted by the Town of Guttenberg and NBMUA – Woodcliff STP outlines the owner/operators of the CSSs and control facilities from the CSO Permittees as follows:

Town of Guttenberg
Owner of CSS: Town of Guttenberg
Operator of CSS: NBMUA
Owner of Regulators: Town of Guttenberg
Operator of Regulators: NBMUA

Township of North Bergen
Owner of CSS: North Bergen Township
Operator of CSS: NBMUA
Owner/Operator of Regulators: NBMUA
Owner/Operator of Woodcliff STP: NBMUA"

This information matches the clarifications provided within these comments. In addition, other sections of the permit (i.e., cover letter, permit authorization page) have the correct information as cited in this comment. In order to ensure that this fact sheet information is carried forward in the final permit, the Department has added this owner/operator information to Part IV.G.10.b in both final permits.

This change affects Part IV.G.10.b of the final permits.

191. COMMENT: On Page 4 of 57, Section #5(D) of the NBMUA Woodcliff STP Fact Sheet references the installation of a flow control valve on the Guttenberg influent line. However, the flow control device installed on the Guttenberg influent line had to be removed because it was causing blockages. Therefore, conditions remain the same as prior to upgrade. Please revise to reflect same. [23]

RESPONSE (191): This comment refers to Section 5.D (WWTP Improvements and Climate Change Resilience) of the fact sheet as issued to NBMUA Woodcliff STP which states the following:

"Currently, WWTP operators throttle or close the valve when the plant flow approaches approximately 8.0 MGD as an hourly peak flow in order to avoid overflowing at the treatment plant. The plant upgrade will allow additional combined sewer flows to enter the treatment plant at a controlled rate and reduce the number and/or frequency of untreated overflows through the CSO DSN 004A. Based on WWTP records, NBMUA estimates that peak hourly flows to the Woodcliff WWTP may exceed 8.0 MGD about 40 times per year. Typically, the duration in which the flow exceeds approximately 8.0 MGD during a 24 hour period ranges from 30 minutes to a few hours."

This section does not make mention of a flow control valve on the Guttenberg influent line as part of the plant upgrade. Similarly, Figure A-3 on Page 38 of 57 of the fact sheet also does not include a reference to a flow control valve on the Guttenberg influent line. Because Section 5.D concerns wastewater treatment plant improvements, there is no corresponding Section 5.D in the fact sheet as issued to Guttenberg.

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

192. COMMENT: Pursuant to an ongoing Administrative Consent Order ("ACO"), the Authority is permitted to bypass the current membrane system to the chlorine contact tank until the membrane system is fully operational provided the effluent discharge complies with the interim ACO limits. NJDEP should qualify the prohibition against bypass to acknowledge the precedence of the ACO. [23]

RESPONSE (192): The commenter is correct in that an ACO was issued, in part, to address ongoing construction activities at the STP to upgrade and expand the Woodcliff STP. The ACO is a separate document from the NJPDES permit. As described within the ACO, the lamella-type final clarifiers are being replaced with a new membrane filter

system. The permittee should continue to abide by the ACO requirements until such time as the ACO is no longer the controlling regulatory mechanism.

This permit renewal serves to concur with the selection of CSO-related bypass as a CSO control measure. However, the activation of the CSO-related bypass is conditional on a Treatment Works Approval being issued for the construction and operation of the bypass line. This is a different circumstance from that which is described within the ACO concerning the membrane filter system. Since the ACO is a separate document from the NJPDES permit, the Department maintains that this does not need to be clarified in the NJPDES permit and that the ACO remains the controlling document until such time as the ACO is terminated.

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

193. COMMENT: The Authority objects to NJDEP's calculation and specification of effluent limitations for ammonia. NJDEP concludes that limitations are necessary to protect against the potential for ammonia toxicity in the receiving water. Please consider the following:

A. The Woodcliff STP was not designed to remove ammonia and will not be able to comply with the proposed summer ammonia effluent limitations during dry summer months. In addition, there is no available space to construct ammonia removal improvements at the Woodcliff STP site.

B. The winter ammonia effluent limitations are quite large, and the Authority contends that there is no reasonable potential that it will exceed these limitations. NJDEP relied on assumptions that have not been validated, nor are appropriate, to calculate the suggested ammonia limits. If there is no reasonable potential that the receiving water quality criteria will be exceeded, then the Authority requests that NJDEP remove the winter ammonia effluent limitations from the Draft Permit.

C. The Authority contends that NJDEP's calculation of the ammonia effluent limitations is deficient for the following reasons:

   i. The calculation is based on a dilution factor abstracted from a 1992 study performed by Metcalf & Eddy. That study is more than thirty years old. The gravity of this situation mandates the use of an updated effluent dilution factor. Furthermore, the Authority requests that this same approach apply for any water quality based effluent limitations proposed in the Draft Permit (e.g., CPO effluent limitations).

   ii. An updated dilution factor may reveal that some improvement to the current outfall will provide substantial water quality benefits and may obviate the need for ammonia effluent limitations or other water quality based effluent limitations. The Authority requests to see the basis for the use of the proposed dilution factor.

   iii. The Authority requests that NJDEP substantiate the need for a 20% reserve capacity in the ammonia effluent limitation calculations. The Authority objects to the use of a reserve capacity in this instance.

   iv. NJDEP's calculation relies on ambient water quality data from 2006 through 2011. These data are quite dated. Indeed, it is not likely that NJDEP would rely on calculations performed by the permittee if the permittee relied on such dated information.

   v. NJDEP assumed effluent and ambient alkalinity values (100 mg/1 and 200 mg/1, respectively). Again, the gravity of this matter warrants the use of site-specific data, not assumed values.

   vi. NJDEP has relied on a coefficient of variation of 0.48 for ammonia in the Authority's effluent for both summer and winter. The Authority requests to see the basis for that reliance and requests the opportunity to determine the appropriate value for the coefficient of variation.

For the reasons set forth above, the Authority contends that the ammonia limits should remain at monitor only until the time that NJDEP can update its model and substantiate any basis for any ammonia limit in this permit. [23]

194. COMMENT: The Town of Guttenberg supports the NBMUA's objection to the proposed ammonia limitations in the draft permit. While the Town will not comment on the technical aspects of the proposed limits, they will note that the Town is responsible for a portion of any capital or operational costs at the Woodcliff plant, through the rates they pay to the NBMUA.

Per the MUA, the Woodcliff plant was not designed to remove ammonia. In addition, there is no available space to construct ammonia removal improvements at the Woodcliff STP site. If the NBMUA is required to construct ammonia removal facilities, the Town of Guttenberg will be subject to significant rate increases (in addition to those already scheduled as a result of the recent plant expansion as part of the approved LTCP), which will cause a financial hardship to Town residents.

As a result, the Town believes that the ammonia limits should remain as "Report Only" until the time that NJDEP can update its model and substantiate any basis for any ammonia limit in the permit. [24]

RESPONSE (193-194): As described in this comment, the NJPDES permit as issued to NBMUA Woodcliff STP does contain ammonia limitations. The Department acknowledges that Woodcliff STP has space limitations given its location in an urban environment. However, because the permittee discharges ammonia in quantifiable amounts, the Department has an obligation under N.J.A.C. 7:14A-13.5 to determine "whether a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above any Surface Water Quality Standard." Consequently, the Department must perform a toxicity-based ammonia analysis to assess whether or not the aquatic life designated use (based on acute and chronic toxicity) will be impinged upon because of ammonia being discharged into the Hudson River at both current and expanded permitted flows. This analysis was conducted and is described on page 11 of the fact sheet for the NBMUA Woodcliff STP.

As pointed out in Comment 193.C.i and iii through vi in NBMUA's comment above and, as outlined in the ammonia section of the fact sheet in the draft permit, select inputs into the ammonia toxicity analysis (i.e., the dilution factors, reserve capacity, ambient water quality data, alkalinity values, and coefficient of variation) were based on previously accepted water quality studies, standard NJPDES practice, conservative assumptions, and/or the submission of site-specific data by the permittee. For example, "conservative effluent and ambient alkalinity values were also used in the analysis in lieu of requiring the permittee to conduct an effluent and ambient monitoring program." In addition, it is standard NJPDES practice to include a reserve capacity for ammonia toxicity analyses.

Based on these input values, effluent data demonstrated cause to exceed the applicable toxicity-based total ammonia (as N) criteria for the summer season. However, the commenter is correct in Comment 193.B in that the ammonia toxicity analysis for the winter season demonstrated *no* cause or reasonable potential to cause an exceedance of the applicable criteria. Therefore, winter season ammonia limitations do not apply for the winter season namely November through April. While the calculation equations on page 11 of the fact sheet are correct and show that the effluent data shows cause to violate water quality standards in the summer season (May to October), the Department erroneously applied the effluent limitations on a year-round basis. This has been rectified in the final permit in Part III for all phases.

Regarding the ammonia limits for the summer season, the permittee may accept the inputs described within the fact sheet and the resultant effluent limitations or the permittee can alternatively provide updated site-specific data in support of an updated toxicity-based ammonia analysis. This could include effluent alkalinity monitoring and/or updated ambient water quality data. For example, if the permittee is aware of more spatially- and temporally-representative ambient water quality data than the 2006 to 2011 Harbor Dischargers Group dataset, the Department can consider this data as part of an updated analysis. Furthermore, the permittee can perform or provide an updated dilution study and/or make outfall improvements. A copy of the 1992 dilution study referenced within the fact sheet can be made available by contact the Office of Record Access at https://www.nj.gov/dep/opra/ora.html.

In addition to the above, the Department did not intend to impose new summer season effluent limitations without a compliance schedule. N.J.A.C. 7:14A-6.4, as referenced in Part I of the draft NJPDES permit, allows for a three-year compliance schedule. It is the Department's policy to include a compliance schedule in NJPDES permits upon the inclusion of new effluent limitations, consistent with this regulation, and this error is being rectified in the final permit action. As a result, the Department has incorporated a monitor and report requirement for the summer season for the time period of EDP to EDP + 3 years in the final permit. A new Interim Phase has been created in this final permit to allow time to comply with the new limitations. This three-year time period also will allow additional time for the permittee to provide updated information that could serve to alter the inputs to the ammonia-toxicity analysis. If alternate limitations are appropriate, the Department could incorporate such consistent with N.J.A.C. 7:14A-16.4.

This change affects Part III and Part IV (Category A) of the NBMUA Woodcliff STP final permit.

195. COMMENT: The NBMUA Woodcliff STP Draft Permit states at "PART III Table III-A-1: Surface Water DMR Limits and Monitoring Requirements" that the "Mercury loading limit established through NJHDG [New Jersey Harbor Dischargers Group] remains at 8.8 g/d". The Authority requests that this is revised to state "Mercury loading limit established through NJDEP remains at 8.8 g/d." [23]

RESPONSE (195): Table III-A-1 does include a Mercury limit of 8.8 g/day where page 17 of the fact sheet included the basis and background for this effluent limitation which is stated as follows:

> ... The final effluent loading limitation for this parameter is based on the TMDL for the New York/ New Jersey Harbor and the antibacksliding provision of N.J.A.C. 7:14A-13.19. Monitoring requirements for the daily maximum loading and the monthly average and daily maximum concentration have been carried forward in this permit action."

The Department cannot locate any reference to the NJHDG within the fact sheet or Table III-A-1 regarding Mercury requirements.

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

196. COMMENT: In the letter dated December 7, 2022, the Town of Guttenberg noted that on Page 6 of 34, Section #6 (B1), the [Guttenberg] draft calls for "…an annual certification to be sent to NJDEP that a minimum of 20% of the system (by linear feet/miles) shall have been inspected and, if necessary, cleaned, within the last year". Given the small size of the Town, it has been their practice to have a single contract to inspect 100% of the system every five years. The last inspection was in 2020; the next one will be in 2025. Initial discussions with the Department indicated that this would fulfill the requirement; however, the Town would like this confirmed in the final permit language. [25]

RESPONSE (196): The requirement at Part IV.F.1.f requires that 100% of the system be inspected and, if necessary, cleaned, by the expiration date of the permit. Therefore, cleaning of the collection system every five years would fulfill Part IV.F.1.f.

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

197. COMMENT: On Page 36 of 57, Section #11(B)(9) of the NBMUA Woodcliff STP Fact Sheet requires monthly reporting of discharge parameters, precipitation, and quantity of solids/floatables removed from the CSO. The Authority currently performs monitoring using the modeling database. The modeling database will need to be updated as CSO controls are constructed and placed online. The design criteria for the CSO control elements will be based on the Typical Year; therefore, so should compliance. As such, the Authority requests that the Fact Sheet and NJPDES Permit state the following; "Monthly DMRs will not be used to determine compliance. Compliance shall be determined based on the Typical Year modeling conditions and not current precipitation events." [23]

RESPONSE (197): The Department maintains that the permit conditions found at Part IV.F.9 require monitoring for Duration of Discharge, Precipitation and Solids/Floatables. A description is as follows:

- **Duration of Discharge** represents the number of days (in whole numbers) that at least one discharge occurred from that outfall (i.e., not the number of discharge events). Sample type is "Estimated".

- **Precipitation** represents the total amount of precipitation (i.e. rainfall and snowmelt) measured during the monitoring period from a single rain gauge representative of the area.

- **Solids/Floatables (S/F)** represents the total volume (reported in cubic yards) of all S/F removed and disposed of from all outfalls during the month. Reporting a S/F value is only necessary when the S/F material is measured for disposal (e.g. filled dumpsters).

The purpose of these requirements, which have been carried forward from the 2015 NJPDES permit, is to track overall trends for these parameters as CSO control measures are implemented. These requirements are distinct and separate from compliance with the Presumption Approach as set forth in the Post Construction Monitoring Program requirements at Part IV.G.9. Note that DMR data will not be used to determine compliance with the Implementation Schedule nor with the minimum percent capture requirements.

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

198. COMMENT: The requirement in Section F.9.a to record the quantity of solids/floatable solid waste removed for each CSO after each discharge event conflicts with the more reasonable requirement found at Section C.1.b, which states this information shall be reported on the MRF only when the solids/floatable solid waste is measured for disposal. It should be noted that the Authority inspects each CSO after every discharge event to determine if the quantity of solids/floatable solid waste in the nets is sufficient to warrant removal and measurement. NJDEP should change the requirement in Section F.9.a to be consistent with the requirement in Section C.l. b. [23]

RESPONSE (198): The Department agrees that Part IV.F.9.a conflicts with Part IV.C.1.b where the Department intended for solids/floatables solid waste removal to be measured at the time of disposal. This intent is also stated at Part III. Part IV.F.9.a. has been included in the final permit as follows:

a. The permittee shall monitor the CSO discharge events and record the date, precipitation and duration of discharge~~, precipitation 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. The total quantity of Solids/Floatables removed from this outfall shall be reported when the solid waste is measured for disposal. 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 change affects Part IV.F.9.a of the final permit.

199. COMMENT: The Authority's compliance is currently 85% capture measured using the H&H model during the Typical Year. The monthly discharge monitoring reports ("DMR") are not used to determine compliance. The Authority requests that revisions are made throughout the Draft Permit to clarify that monthly DMRs shall not be used to determine compliance. Further, the Authority requests that revisions are made throughout the Draft Permit to clarify that compliance shall be determined based on the H&H modeling conditions during the Typical Year and not current or annual precipitation events over the life of the permit. [23]

RESPONSE (199): The Department agrees that the monthly DMR requirements as included in Part IV.F.9.a are separate conditions and are not utilized for a compliance assessment with the Presumption Approach. The inclusion of the parameters at Part IV.F.9.a are for informational purposes to track trends over time where these requirements have been carried over from the 2015 NJPDES permits. The purpose of these requirements is clearly stated in the fact sheet for Part IV.F.9.a as described in the previous response.

Wet weather percent capture for the hydraulically connected system, as shown on page 46 of the fact sheet, is currently at 89% and is projected to attain 92% based on the selected LTCP projects and is stated in the implementation schedule in Part IV.G.8. Compliance with percent capture and the Presumption Approach is based on the H&H model and selected design conditions. Compliance for minimum wet weather percent capture is clearly defined in Part IV.G.9 under Post Construction Compliance Monitoring Program (PCCMP) requirements. In Part IV.G.9.c it is stated that 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. This will be used to determine whether the CSO control measures have achieved the final required percent capture. The Department maintains that wet weather percent capture compliance is clearly stated in Part IV.G.9.c and it is not necessary to clarify this in Part IV.F.9.a.

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

200. COMMENT: The Authority has supported extensive public participation in the development of the LTCP as documented in the Fact Sheet, Pages 39 and 40 of 58, Section #l l(C)(2). This effort was successful in part because of the multiple jurisdictions working together under the Clean Waterways, Health Neighborhoods initiative. The Authority requests that the new Public Engagement requirement be updated to include an option for public engagement to be performed under the same regional cooperation initiative across multiple CSO communities/permittees. This allows multiple permittees that are working together to improve water quality to have more effective and consistent messaging while also managing the cost of this requirement (i.e. CSO Supplemental Team, LTCP outreach coordinator, program website, etc.).

The Draft Permit states that meetings be held when projects are implemented in Years 1, 2 and 5 of the permit. The Authority requests that no meetings be required to engage the public when work is not being performed, Years 3 and 4 of the permit.

These references occur throughout the Draft Permit including but not limited to the following: Executive Summary, third paragraph; Fact Sheet, Pages 40, 41 and 42 of 58, Section #ll(C)(2); and Part IV, Page 29 of 32, Part IV.G.8. [23]

201. COMMENT: The Town of Guttenberg has supported extensive public participation in the development of the LTCP as documented in the Fact Sheet, Pages 16 and 17 of 35, Section #7(C)(2). This effort was successful in part because of the multiple jurisdictions working together under the Clean Waterways, Health Neighborhoods initiative. The Town of Guttenberg requests that the new Public Engagement requirement be updated to include an option for this public engagement to be performed under the same regional cooperation initiative across multiple CSO communities/permittees. This allows multiple permittees that are working together to improve water quality to have more effective and consistent messaging, while also managing the cost of this requirement (i.e. CSO Supplemental Team, LTCP outreach coordinator, program website, etc.).

These references occur throughout the [Guttenberg] permit including, but not limited to, the following: Executive Summary, third paragraph and Fact Sheet, Pages 17, 18 and 19 of 35, Section #7(C)(2). [25]

RESPONSE (200-201): As noted in these comments, the permittee utilized the Clean Waterways, Healthy Neighborhoods regional team in order to comply with the 2015 NJPDES CSO permit requirements for Public Participation and continues to be compliant for the purposes of this permit. This is noted in the approval of the Public Participation Plan per the Department's approval letter dated March 29, 2019 and in the findings summarized within the December 9, 2022 draft NJPDES permits**.**

The frequency of meetings should be determined by the milestones in the Implementation Schedule and by input from the affected community and interested public as stated in Part IV.G.2.d. Therefore, it is acceptable to have meetings based on the LTCP schedule as set forth in Part IV.G.8. However, the Department encourages facilitation of additional public meetings during years without scheduled projects if there is a significant degree of public interest.

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

202. COMMENT: On Page 46 of 57, Section #11(C)(4) of the NBMUA Woodcliff STP Fact Sheet states that "In order to evaluate the performance of the CSO control measures, the permittees are required to demonstrate a value of 92% reduction of wet weather capture through the use of the hydrologic and hydraulic model." The design criteria for the CSO control elements will be based on the Typical Year; therefore, so should compliance. As such, the Authority requests that the language is revised to state the following: "In order to evaluate the performance of the CSO control measures, the permittees are required to demonstrate improvement of the percent capture above the 85% minimum, modeled using the Typical Year. The permittee will endeavor to achieve a value of 92% ~~{reduction of wet weather}~~ capture through the use of the hydrologic and hydraulic model during the Typical Year. [23]

203. COMMENT: Throughout the NBMUA Woodcliff STP Draft Permit there are multiple references to CSO LTCP compliance. These references are inconsistent in wording and associated requirements. The Authority's compliance is currently 85% capture by volume measured using the hydrologic and hydraulic ("H&H") model during the NJDEP approved Typical Year (2004). The Authority requests that revisions are made throughout the Draft Permit to clarify that CSO LTCP compliance limit is 85% capture of the system-wide wet weather volume measured using the H&H model during the Typical Year and that compliance is not 92% capture. The 92% capture by volume, as currently included in the Draft Permit, is only a targeted goal but is not related to CSO LTCP compliance. As such, the Authority further requests that revisions are made throughout the Draft Permit to eliminate reference to achieving 92% capture and/or a projected achievement of 92% capture.

These references occur throughout the Draft Permit including but not limited to the following: Executive Summary, second paragraph; Fact Sheet, Pages 44, 45 and 46 of 58, Section #11(C)(4); Fact Sheet, Page 48 of 58, Section #11(C)(7); Fact Sheet, Page 50 of 58, Section #1l(C)(8); Fact Sheet, Pages 51 and 52 of 58, Section #1l(C)(9); Part IV, Page 28 of 32, Part IV.G.4.c; and Part IV, Page 29 of 32, Part IV.G.9.b.i. [23]

204. COMMENT: Throughout the Guttenberg draft permit there are multiple references to CSO LTCP compliance. These references are inconsistent in wording and associated requirements. The Town of Guttenberg requests that all of these references be consistent in setting 85% capture by volume of the system-wide wet weather volume during the Typical Year (2004) as the compliance limit. The hydrologic and hydraulic model will be utilized to demonstrate compliance for this 85% capture by volume limit. The 92% capture by volume as currently included in the draft permit is a targeted goal, but the compliance limit is 85% capture by volume during the Typical Year as demonstrated utilizing the hydrologic and hydraulic model.

These references occur throughout the permit including, but not limited to, the following: Executive Summary, second paragraph; Fact Sheet, Pages 21, 22, and 23 of 35, Section #7(C)(4); Fact Sheet, Page 25 of 35, Section #7(C)(7); Fact Sheet, Page 27 of 35, Section #7(C)(8); Fact Sheet, Pages 28 and 29 of 35, Section #7(C)(9); Part IV, Page 17 of 21, Part IV.G.4.c; and Part IV, Page 18 of 21, Part IV.G.9.b.i. [25]

RESPONSE (203-204): Wet weather percent capture for the hydraulically connected system, as shown on page 46 of the Fact Sheet, is currently at 89%. According to Table ES-1 of the permittee's LTCP, when all selected LTCP projects are completed, the system is projected to attain 92%. The Federal CSO Control Policy requires the following under the Presumption Approach as stated in Part IV.G.4.a:

> 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.

Since the Presumption Approach requires a minimum percent capture of 85%, both the baseline and projected results do exceed the minimum requirement. However, one goal of the NJPDES permit is to ensure iterative improvements to water quality through CSO reduction. This is accomplished in this hydraulically connected system by requiring implementation of the CSO control measures that are projected to attain 92% wet weather capture. As a result, the Department maintains that inclusion of the 92% value is appropriate as it was identified within the LTCP and it allows measurement of the effectiveness of these measures over time. Inclusion of this value is also consistent with Part IV.G.7 of this renewal permit, as well as the Federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C, which calls for the LTCP to maximize flow and treatment at the STP.

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 upon completion of the CSO control alternatives. This is stated in Part IV.G.4 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 upon completion of the CSO control alternatives. In order to evaluate the performance of the CSO control measures, the permittees are required to demonstrate a value of 92% wet weather capture through the use of the hydrologic and hydraulic model.

This is also stated in Part IV.G.9.b as follows:

i. A process to determine whether the CSO control measures are meeting the final required percent capture of no less than 92% 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 and N.J.A.C.7:14A-11, Appendix C. The PCCMP shall provide data to evaluate the effectiveness of the CSO control measures constructed during and after the implementation of the LTCP.

Compliance with percent capture and the Presumption Approach is based on the H&H model and selected design conditions. The H&H model and design conditions are outlined in the 2018 System Characterization Report which is included as Appendix C of the LTCP and was approved by the Department. Note that the reference to the term interim was included in the December 9, 2022 draft permit in Part IV.G.9.c in error since the permittees are only required to comply with final percent capture. Reference to the term interim has been removed in the final permit at Part IV.G.9.c.

This change affects Part IV.G.9 of the NBMUA Woodcliff STP final permit.

205. COMMENT: The Authority's compliance is not calculated using annual precipitation over the life of the permit or the system wide annual average. Rather, compliance is 85% capture measured using the H&H model during the Typical Year. The Authority requests that revisions are made throughout the Draft Permit to clarify that compliance is 85% capture measured using the H&H model during the Typical Year and that compliance is not annual precipitation over the life of the permit nor the system wide annual average. The Authority further requests that revisions are made throughout the Draft Permit to clarify that any annual precipitation analysis shall not be used for determining compliance. [23]

206. COMMENT: The Town of Guttenberg notes that the comments regarding Long Term Control Plan Compliance (LTCP) Compliance determination (as noted in our letter dated 2/23/2023 re: Permit No. NJ0108715) also apply for the NBMUA permit. [24]

RESPONSE (205-206): The Department maintains that identification of the system-wide annual average is a component of the System Characterization Report as included as Appendix C of the September 2020 LTCP. This design condition is utilized to run the H&H model for baseline conditions as well as to assess compliance with the Presumption Approach upon completion of the required LTCP projects. Compliance with the Presumption Approach and percent capture is determined through the PCCMP requirements at Part IV.G.9.

Part IV.H.1 is a separate permit condition which requires the permittee to analyze the annual precipitation depth obtained by the National Oceanic and Atmospheric Administration (NOAA) at the Newark Liberty International Airport to determine the annual precipitation depth during the effective period of the permit. These are separate permit conditions in separate subsections of the permit and the Department maintains that further clarification is not necessary.

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

207. COMMENT: The NBMUA Woodcliff STP Draft Permit includes specific requirements pertaining to climate change, including construction to address resilience and the required preparation of a Vulnerability Analysis as part of an Emergency Plan, a required analysis for annual precipitation over the life of the permit and an Adaptive Management Plan. The Authority is already implementing projects to address operational resiliency as a result of climate change and plans to continue to do so, as documented in the Fact Sheet, Page 4 of 58, Section #5(D). However, the Authority takes issue with the required analysis for annual precipitation and potential for an Adaptive Management Plan. The entire multijurisdictional CSO LTCP required decades of planning and investment and that process required a baseline assumption of rainfall data that was developed in coordination with NJDEP. That resulting Typical Year rainfall data was then used to develop and vet hundreds of infrastructure alternatives, as previously approved by NJDEP, and ultimately resulted in the approved LTCP. Furthermore, the Authority and other CSO LTCP

communities have already begun to implement a portion of these LTCP projects and are committed to spending hundreds of millions of dollars with the understanding that regulatory compliance at the completion of the LTCP will be predicated upon system performance during the Typical Year utilizing the H&H model to demonstrate the compliance at 85% capture by volume. Performing a future annual precipitation analysis and potentially forcing a community into an Adaptive Management Plan as a result of short-term trends (five years of rainfall data) undermines decades of planning and collaboration to significantly reduce CSOs. The Authority requests that this annual precipitation analysis and associated provision of the Adaptive Management Plan be removed from the Draft Permit.

These references occur throughout the Draft Permit including, but not limited to, the Executive Summary, fourth paragraph; Fact Sheet, Page 2 of 58, Section #4(A); Fact Sheet, Page 30 of 58, Section #ll(B)(l); and Fact Sheet, Pages 54 of 58, Section #1l(D)(l) and Section #l l(D)(2). [23]

208. **COMMENT:** The Guttenberg draft permit includes specific requirements pertaining to climate change, including construction to address resilience and the required preparation of a Vulnerability Analysis as part of an Emergency Plan, a required analysis for annual precipitation over the life of the permit and an Adaptive Management Plan. The Town of Guttenberg is already implementing projects to address operational resiliency as a result of climate change and plans to continue to do so as documented in the Fact Sheet, Page 4 of 35, Section #5(C).

However, the Town of Guttenberg does take issue with the required analysis for annual precipitation and potential for an Adaptive Management Plan. The entire multijurisdictional CSO LTCP required decades of planning and investment and that process required a baseline assumption of rainfall data that was developed in coordination with NJDEP. That resulting Typical Year rainfall data was then used to develop and vet hundreds of infrastructure alternatives, as previously approved by the NJDEP, and ultimately resulted in the approved LTCP. Furthermore, the Town of Guttenberg and other CSO LTCP communities have already begun to implement a portion of these LTCP projects and are committed to spending hundreds of millions of dollars with the understanding that regulatory compliance at the completion of the LTCP will be predicated upon system performance during the Typical Year utilizing the hydrologic and hydraulic model to demonstrate the compliance at 85% capture by volume. Performing a future annual precipitation analysis and potentially forcing a community into an Adaptive Management Plan as a result of short-term trends (five years of rainfall data) undermines decades of planning and collaboration to significantly reduce CSOs. The Town of Guttenberg requests that this annual precipitation analysis and associated provision of the Adaptive Management Plan be removed from the permit.

These references occur throughout the permit including, but not limited to, the following: Executive Summary, fourth paragraph; Fact Sheet, Page 2 of 35, Section #4(A); Fact Sheet, Page 7 of 35, Section #7(B)(1); and Fact Sheet, Page 31 of 35, Section #7(D)(1) and Section #7(D)(2). [25]

209. **COMMENT:** The Town of Guttenberg notes that the comments regarding climate change permitting (as noted above) also apply for the NBMUA permit. [24]

RESPONSE (207-209): The Precipitation Trends analysis at Part IV.H.1 is a separate condition than the PCCMP requirements as described in the previous response.

The Department maintains that an Adaptive Management Plan is necessary. The NJPDES permit simply requires an analysis of Precipitation Trends concluding the 5-year NJPDES permit cycle and does not undermine the selected LTCP control alternatives. Note that the permittees acknowledged that conditions could change over time and the concept of an Adaptive Management Plan was proposed in the permittee's LTCP in Section K.

No change to the final permit has been made as a result of this comment.

210. **COMMENT:** The Authority currently does not have any SIUs and is not a delegated industrial pre-treatment program. The Authority requests clarification as to whether it will have to submit a pretreatment program annual report by October 1 of each year. [23]

RESPONSE (210): The requirement to submit an annual pretreatment program report at N.J.A.C. 7:14A-19.3(b)ii applies to all non-delegated local agencies. If the local agency does not accept wastewater from any significant indirect users at the time of submittal, the "Non-DLA Annual Pretreatment Program Report" form is still required to be submitted by the due date, including a note in the cover letter that there are no indirect users at this time.

No change has been made to the final permit as a result of this comment.

211. COMMENT: Starting on Page 6 of 31 of Part IV - Sanitary Wastewater Requirements, Section #7 titled "RWBR Requirements for Public Access" is included. Does Reclaimed Water for Beneficial Reuse ("RWBR") apply to the Authority or Woodcliff STP? Please advise. [23]

RESPONSE (211): The RWBR conditions in the Sanitary Wastewater Narrative Requirements apply to the North Bergen MUA - Woodcliff STP Outfall 001A.

No change to the final permit has been made as a result of this comment.

212. COMMENT: On Page 1 of 3 of Appendix A: RWBR, the STP Washdown is listed as an approved RWBR Category RA-IS (Restricted Access – Industrial System) at the NBMUA. Is this correct? Is this for Woodcliff STP only? Please advise. [23]

RESPONSE (212): The STP Washdown Approval location listed in Appendix A: RWBR is "North Bergen MUA - Woodcliff STP". Therefore, the approved location is only at the Woodcliff STP.

213. COMMENT: On Page 2 of 3 of Appendix A: RWBR, an "Annual Reuse Report" is included. Is this a new requirement? Does the Authority have to submit same for Woodcliff STP? Please advise. [23]

RESPONSE (213): The requirement is not new, as it was included in the facility's previous Final Revoke & Reissue Permit issued on March 12, 2015 and effective July 1, 2015. As per Page 2 of 3 of Appendix A, "Any facility that has received an RWBR authorization is required to submit an Annual Reuse Report."

No change to the final permit has been made as a result of this comment.

ADDITIONAL CHANGES TO THE FINAL PERMIT

The draft renewal permits contained an evaluation of the LTCP to ensure compliance with the applicable regulations. The Department has concluded that the LTCP dated September 2020 with revisions dated July 2021 and August 20, 2021 is acceptable and hereby approved. As such, Part II.C has been amended to include this statement:

2. Approval of the LTCP

   a. The Department hereby approves the LTCP dated September 2020 with revisions dated July 2021 and August 20, 2021.

Part II.B.7.a of the draft permits contained an erroneous reference. This section of the final permits is hereby corrected as follows:

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 overflow discharges~~(see Part II.B.3.c)~~.

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: NJ0029084

Final: Surface Water Renewal Permit Action

Permittee:
North Bergen MUA
6200 Tonnelle Avenue
North Bergen, NJ 07047-3312

Co-Permittee:

Property Owner:
North Bergen MUA
6200 Tonnelle Avenue
North Bergen, NJ 07047-3312

Location Of Activity:
Woodcliff STP
7117 River Road
North Bergen Township, Hudson County

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
A - Sanitary Wastewater - Renewal CSM - Combined Sewer Management - Renewal	05/25/2023	07/01/2023	06/30/2028

By Authority of:
Commissioner's Office

Susan Rosenwinkel

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	N.J.A.C. 7:14A-6.10 & 6.8(h)
Hotline/Two Hour & Twenty-four Hour Reporting	N.J.A.C. 7:14A-6.10(c) & (d)
Written Reporting	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 overflow discharges.

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
Division of Water Supply and Geoscience
Bureau of Water Systems Engineering
Mail Code 401-04Q
Box 420
Trenton, New Jersey 08625 - 0420

(609) 292-2957
or via e-mail 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 condtion 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. Approval of the LTCP

a. The Department hereby approves the LTCP dated September 2020 with revisions dated July 2021 and August 20, 2021.

PART III
LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
001A Sanitary Outfall	Hudson River	SE2(C2)	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 chlorination and prior to discharge into the Hudson River at:
Latitude N: 40d 48m 12.2s
Longitude W: 73d 59m 26.1s

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 Final Phase (flow of 3.46 MGD and 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:** 07/01/2023 **PHASE End Date:** 06/30/2026

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	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Effluent Gross Value	330 Monthly Average	500 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Week	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 Final Phase (flow of 3.46 MGD and 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:** 07/01/2023 **PHASE End Date:** 06/30/2026

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
pH	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	*****	REPORT Report Per Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Report Per Minimum	*****	9.0 Report Per Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	330 Monthly Average	500 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	1/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/Week	24 Hour Composite
May thru October	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 Final Phase (flow of 3.46 MGD and 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:** 07/01/2023 **PHASE End Date:** 06/30/2026

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
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/Week	24 Hour Composite
November thru April	QL	***	***		***	***	***			
Coliform, Fecal General	Effluent Gross Value	*****	*****	*****	*****	200 Monthly Geo Avg	400 Weekly Geometric	#/100ML	4/Month	Grab
January thru December	QL	***	***		***	***	***			
LC50 Statre 96hr Acu Mysid Bahia	Effluent Gross Value	*****	*****	*****	34 Report Per Minimum	*****	*****	%EFFL	1/Quarter	Composite
January thru December	AL	***	***		50	***	***			
Chlorine Produced Oxidants	Effluent Gross Value	0.65 Monthly Average	1.7 Daily Maximum	KG/DAY	*****	0.054 Monthly Average	0.13 Daily Maximum	MG/L	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	REPORT Instant Minimum	4.0 Weekly Av Minimum	*****	MG/L	1/Week	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 Final Phase (flow of 3.46 MGD and 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:** 07/01/2023 **PHASE End Date:** 06/30/2026

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Mercury Total Recoverable	Effluent Gross Value	8.8 Monthly Average	REPORT Daily Maximum	GR/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Table III - A - 2: Surface Water DMR Limits and Monitoring Requirements

PHASE: 2-Interim **PHASE Start Date:** 07/01/2026 **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	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Effluent Gross Value	330 Monthly Average	500 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Week	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 Final Phase (flow of 3.46 MGD and 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-Interim **PHASE Start Date:** 07/01/2026 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
pH	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	*****	REPORT Report Per Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Report Per Minimum	*****	9.0 Report Per Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	330 Monthly Average	500 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	286 Monthly Average	441 Daily Maximum	KG/DAY	*****	26 Monthly Average	40 Daily Maximum	MG/L	1/Week	24 Hour Composite
May thru October	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 Final Phase (flow of 3.46 MGD and 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-Interim **PHASE Start Date:** 07/01/2026 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
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/Week	24 Hour Composite
November thru April	QL	***	***		***	***	***			
Coliform, Fecal General	Effluent Gross Value	*****	*****	*****	*****	200 Monthly Geo Avg	400 Weekly Geometric	#/100ML	4/Month	Grab
January thru December	QL	***	***		***	***	***			
LC50 Statre 96hr Acu Mysid Bahia	Effluent Gross Value	*****	*****	*****	34 Report Per Minimum	*****	*****	%EFFL	1/Quarter	Composite
January thru December	AL	***	***		50	***	***			
Chlorine Produced Oxidants	Effluent Gross Value	0.65 Monthly Average	1.7 Daily Maximum	KG/DAY	*****	0.054 Monthly Average	0.13 Daily Maximum	MG/L	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	REPORT Instant Minimum	4.0 Weekly Av Minimum	*****	MG/L	1/Week	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 Final Phase (flow of 3.46 MGD and 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-Interim **PHASE Start Date:** 07/01/2026 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Mercury Total Recoverable	Effluent Gross Value	8.8 Monthly Average	REPORT Daily Maximum	GR/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

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

PHASE: 3-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/Week	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 Final Phase (flow of 3.46 MGD and 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 - 3: Surface Water DMR Limits and Monitoring Requirements

PHASE: 3-Final **PHASE Start Date:** INACTIVE **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
BOD, 5-Day (20 oC)	Effluent Gross Value	330 Monthly Average	500 Weekly Average	KG/DAY	*****	27 Monthly Average	42 Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
pH	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	*****	REPORT Report Per Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Report Per Minimum	*****	9.0 Report Per Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	330 Monthly Average	500 Weekly Average	KG/DAY	*****	27 Monthly Average	42 Weekly Average	MG/L	1/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Week	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 Final Phase (flow of 3.46 MGD and 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 - 3: Surface Water DMR Limits and Monitoring Requirements

PHASE: 3-Final **PHASE Start Date:** INACTIVE **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	286 Monthly Average	441 Daily Maximum	KG/DAY	*****	22 Monthly Average	34 Daily Maximum	MG/L	1/Week	24 Hour Composite
May thru October	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/Week	24 Hour Composite
November thru April	QL	***	***		***	***	***			
Coliform, Fecal General	Effluent Gross Value	*****	*****	*****	*****	200 Monthly Geo Avg	400 Weekly Geometric	#/100ML	4/Month	Grab
January thru December	QL	***	***		***	***	***			
LC50 Statre 96hr Acu Mysid Bahia	Effluent Gross Value	*****	*****	*****	34 Report Per Minimum	*****	*****	%EFFL	1/Quarter	Composite
January thru December	AL	***	***		50	***	***			
Chlorine Produced Oxidants	Effluent Gross Value	0.65 Monthly Average	1.70 Daily Maximum	KG/DAY	*****	0.05 Monthly Average	0.13 Daily Maximum	MG/L	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	2/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 Final Phase (flow of 3.46 MGD and 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 - 3: Surface Water DMR Limits and Monitoring Requirements

PHASE: 3-Final **PHASE Start Date:** INACTIVE **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Temperature, oC	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	REPORT Instant Minimum	4.0 Weekly Av Minimum	*****	MG/L	1/Week	Grab
January thru December	QL	***	***		***	***	***			
Mercury Total Recoverable	Effluent Gross Value	8.8 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 - Annual Reporting Requirements:

Submit an Annual WCR: Within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP)..

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

PHASE: Final **PHASE Start Date:** 07/01/2023 **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
Selenium, Total Recoverable	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
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
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
Antimony, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Mercury Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	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
Benzo(b)fluoranthene (3,4-benzo)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: Within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP)..

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

PHASE: Final **PHASE Start Date:** 07/01/2023 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
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
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: Within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP)..

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

PHASE: Final **PHASE Start Date:** 07/01/2023 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
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	24 Hour Composite	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	24 Hour Composite	January thru December
2-Chloronaphthalene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Di-n-octyl Phthalate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: Within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP)..

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

PHASE: Final **PHASE Start Date:** 07/01/2023 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
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
Di-n-butyl phthalate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Benzidine	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
1,3-Dichloropropene	Effluent Gross Value	REPORT	UG/L	Grab	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
Toluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: Within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP)..

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

PHASE: Final **PHASE Start Date:** 07/01/2023 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
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
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

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: Within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP)..

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

PHASE: Final **PHASE Start Date:** 07/01/2023 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
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
Chloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Phenols	Effluent Gross Value	REPORT	UG/L	Grab	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

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: Within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP)..

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

PHASE: Final **PHASE Start Date:** 07/01/2023 **PHASE End Date:**

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

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: Within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP)..

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

PHASE: Final **PHASE Start Date:** 07/01/2023 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
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
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
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

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: Within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP)..

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

PHASE: Final **PHASE Start Date:** 07/01/2023 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
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	24 Hour Composite	January thru December
Pentachlorophenol	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 - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2023 **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
Cyanide, Total (as CN)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Zinc, 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 - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2023 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Copper, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
1,4-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chloroform	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
004A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management (IP)

Location Description

The permittee is authorized to discharge combined sewage from Outfall 004A located approximately 200-feet to the east of the NBMUA Woodcliff STP into the Hudson River at:
Latitude N: 40d 47m 29s
Longitude W: 73d 59m 48s

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:** 07/01/2023 **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	***	***		***	***	***			

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 National CSO Policy along with EPA's guidance document can be found at N.J.A.C. 7:14A-11.12-Appendix C and http://www.epa.gov/npdes/pubs/owm0030.pdf

d. The Nine elements of a Long Term Control Plan from the National CSO Policy along with EPA's guidance document can be found at N.J.A.C. 7:14A-11.12-Appendix C and http://water.epa.gov/polwaste/npdes/cso/upload/owm0272.pdf

e. EPA's Post Construction Compliance Monitoring Guidance document can be found at http://www.epa.gov/npdes/pubs/final_cso_pccm_guidance.pdf

f. EPA's Guidance: Coordinating Combined Sewer Overflow (CSO) Long-Term Planning with Water Quality Standards Reviews (PDF)

g. EPA's Capacity, management, operation and maintenance (CMOM) guidance document can be found at http://www.epa.gov/npdes/pubs/cmom_5.pdf

h. Dry-Weather Deposition and Flushing for Combined Sewer Overflow Pollution Control: http://nepis.epa.gov/Adobe/PDF/30000821.PDF

i. Combined sewer overflow control (manual): http://nepis.epa.gov/Adobe/PDF/30004MAO.pdf

j. EPA's Storm Water and Combined Sewer Overflows Publications can be found at http://water.epa.gov/polwaste/wastewater/StormwaterPubs.cfm

B. Definitions

1. These definitions are specific only to this permit

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

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

b. "Green Infrastructure" means methods of stormwater management that reduce wet weather/stormwater volume, flow, or changes the characteristics of the flow into combined or separate sanitary or storm sewers, or surface waters, by allowing the stormwater to infiltrate, to be treated by vegetation or by soils; or to be stored for reuse. Green infrastructure includes, but is not limited to, pervious paving, bioretention basins, vegetated swales, and cisterns.

c. "Hydraulically connected system" means the entire collection system that conveys flows to one Sewage Treatment Plant (STP). On a case-by-case basis, the permittee, in consultation with the Department, may segment a larger hydraulically connected system into a series of smaller inter-connected systems, based upon the specific nature of the sewer system layout, pump stations, gradients, locations of CSOs and other physical features which support such a sub area. A hydraulically connected system could include multiple municipalities, comprised of both combined and separate sewers.

C. NINE MINIMUM CONTROL REQUIREMENTS

1. **Proper operation and regular maintenance programs for the sewer system and the CSOs**
2. **Maximum use of the collection system for storage**
3. **Review and modification of pretreatment requirements to assure CSO impacts are minimized**
4. **Maximization of flow to the POTW for treatment**
5. **Prohibition of CSOs during dry weather**
6. **Control of solid and floatable materials in CSOs**
7. **Pollution prevention**
8. **Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts**
9. **Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls**

D. NINE ELEMENTS OF THE LONG TERM CONTROL PLAN

1. **Characterization, Monitoring, and Modeling of the Combined Sewer Systems**
2. **Public Participation**
3. **Consideration of Sensitive Areas**

4. **Evaluation of Alternatives**
5. **Cost/Performance Considerations**
6. **Operational Plan**
7. **Maximizing Treatment at the Existing POTW Treatment Plant**
8. **Implementation Schedule**
9. **Compliance Monitoring Program**

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 flow 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, 3) all data used to complete the application for a NJPDES permit, and 4) 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.

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. REPORTING

1. See Part II for Reporting Requirements.

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, 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.

   iv. The permittee shall submit an annual report in accordance with the Annual Report Guidance Document every 12 months from the implementation of the PMP.

c. PCB PMP Annual Report Requirement

   i. Any revisions to the PMP as a result of the ongoing work shall be reported in the annual report.

   ii. 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.

3. Compliance Schedule Progress Reports

a. In accordance with N.J.A.C. 7:14A-6.4(a), a schedule of compliance has been included for ammonia nitrogen (summer), including interim deadlines for annual progress reports that outline the progress towards compliance with the conditions of the permit.

   i. Submit a Compliance Schedule Progress Report: within 12 months from the effective date of the permit (EDP).

   ii. Submit a Compliance Schedule Progress Report: within 24 months from the effective date of the permit (EDP).

b. The compliance schedule progress report(s) shall be submitted to the following Departmental entities:

   i. NJDEP: Division of Water Quality
   Bureau of Surface Water and Pretreatment Permitting
   P.O. Box 420, Mail Code 02B
   Trenton, New Jersey 08625.

D. SUBMITTALS

1. Standard Submittal Requirements

a. The permittee shall update the Operation and Maintenance (O&M) Manual including an emergency plan in accordance with requirements of N.J.A.C. 7:14A-6.12(c).

b. 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.

E. FACILITY MANAGEMENT

1. Discharge Requirements

a. The permittee shall discharge at the location(s) specified in PART III of this permit.

b. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.

c. The discharge shall not exhibit a visible sheen.

d. When quantification levels (QL) and effluent limits are both specified for a given parameter in Part III, and the QL is less stringent than the effluent limit, effluent compliance will be determined by comparing the reported value against the QL.

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. In the Initial Phase, the effluent limitations and monitoring requirements are based on the current monthly average flow of 2.91 MGD. Pursuant to the June 27, 2017 ACO, the Final Phase effluent limitations and monitoring requirements will commence once NBMUA has: completed the plant upgrades; and provided six consecutive months of analysis that demonstrates compliance with the acute toxicity limit.

b. Wastewater Characterization Report (WCR) Form Requirements

i. The final effluent monitoring conditions contained in PART III for DSN001A 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. 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.

6. Inactive RWBR Requirements

a. The following RWBR sections are included in this permit for various reuse applications. These sections are inactive and not effective unless the status column in Appendix A states the reuse activity is approved. Any specific RWBR type 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.

7. 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. Chlorine Produced Oxidants (CPO): If the permittee disinfects utilizing chlorine, an instantaneous minimum of 1.0 mg/L after fifteen minutes contact time at peak hourly flow must be met.

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 chlorine disinfection, monitoring for CPO shall be continuous and shall be monitored after the appropriate contact time is achieved.

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 (NO3 + NH3) shall be a composite sample, taken in accordance with Part III, at least once per week taken prior to RWBR diversion. Total Nitrogen (NO3 + NH3) 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 chlorine is used for disinfection, the lowest sampling result obtained during the reporting month shall be reported for CPO.

8. 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 (NO3 + NH3): Daily maximum of 10 mg/L. Frequency of sampling for Total Nitrogen shall be in accordance with Part III of this permit. The sample shall be collected as a composite sample taken prior to diversion for RWBR. Nitrogen, Total (NO3 + NH3) 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 in accordance with Part III of this permit. The sample shall be collected as a grab sample taken immediately after disinfection.

f. Chlorine Produced Oxidants (CPO): For chlorine disinfection, instantaneous minimum of 1.0 mg/L after fifteen minutes contact time at peak hourly flow. Frequency of sampling for CPO shall be in accordance with Part III of this permit. The sample shall be collected as a grab sample taken immediately after disinfection. The value reported for CPO shall be the minimum sampling result obtained during the reporting month for diverted RWBR. Chlorine Produced Oxidants (CPO) shall be monitored after the appropriate contact time is achieved.

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.

9. 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 in accordance with Part III of this permit. Fecal coliform shall be monitored immediately after disinfection. This requirement does not apply to sanitary sewer jetting.

10. 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.

11. RWBR Submittal Requirements

a. 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 any type 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.

b. 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.

c. 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.

d. Submit a Beneficial Reuse Annual Report: by February 1 of each year beginning from the effective date of the permit (EDP). The permittee shall compile the total volume of RWBR distributed to each type of authorized RWBR activity for the previous calendar year. Specific requirements for the Annual Reuse Report are identified in the Reuse Technical Manual.

e. 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 any type 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.

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

12. 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 and Standard Operations Procedure, 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.

13. 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 exceedances of this Action Level. See Toxicity Reduction and Implementation Requirements 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). The permittee shall submit toxicity test results on appropriate forms.

h. Test reports shall be submitted to:

i. biomonitoring@dep.nj.gov.

14. 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 exceedance 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 exceedance 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.

F. INDUSTRIAL PRETREATMENT PROGRAM REQUIREMENTS

1. Requirements to Identify and Locate Industrial Users

a. The Permittee shall identify all indirect users which meet the significant indirect user (SIU) 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 Pretreatment and Residuals, of the name, address, telephone number and facility contact of:.

   i. all 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.

3. Requirement to Develop Local Limits

a. The Permittee has developed local limits as required by N.J.A.C. 7:14A-19.7.

b. The Permittee shall reevaluate local limits when necessary to 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 Regulations within 30 days of modification.

b. The permittee shall prepare a Pretreatment Program Annual 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.

c. Submit the Annual Pretreatment Program Report: by October 1 of each year beginning from the effective date of the permit (EDP).

d. The report shall be submitted to: NJDEP, Bureau of Pretreatment and Residuals, 401 East State Street, P.O. Box 420, Mail Code 401-02B, Trenton, N.J. 08625-0420.

G. 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 the specified QL.

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.

H. Custom Requirement

1. Dry Weather Expansion

a. In accordance with the June 27, 2017 Administrative Consent Order between the Department and NBMUA, the Department will consider a request from NBMUA to rerate the flow capacity from 2.91 MGD to 3.46 MGD only if NBMUA provides 6 consecutive months of analyses that demonstrates compliance with the acute toxicity limit set forth in the permit and complies with all other statutory and regulatory requirements applicable to a flow capacity re-rating. Any required TWA determination for the expanded flow will be made separately.

2. Bypass as a CSO Control Measure

a. This permit renewal serves to concur with the selection of CSO related bypass and approval 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 membrane filters is prohibited except during wet weather events when influent flows exceed approximately 8.0 MGD as a peak hourly average. 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.

3. 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 publically 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 Februrary 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. The Township of North Bergen owns the collection system.

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 NBMUA – Woodcliff STP the total system is 8.5 miles long which includes 2,733 feet of overflow pipe.

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 NBMUA:

- 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, 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. 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 NJ0029084.
- 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, precipitation and duration of discharge 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. The total quantity of Solids/Floatables removed from this outfall shall be reported when the solid waste is measured for disposal. 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.

G. LONG TERM CONTROL PLAN REQUIREMENTS

1. Characterization Monitoring and Modeling of the Combined Sewer System

a. As required by the 2015 NJPDES CSO permit, the permittee cooperatively with the Town of Guttenberg submitted the System Characterization and Landside Modeling Program Quality Assurance Project Plan (QAPP) dated December 18, 2015, revised March 22, 2016 and October 12, 2016 and the Service Area System Characterization Report dated June 2018, revised January 24, 2019 and April 8, 2019. The QAPP and the System Characterization Report were approved by the Department on April 11, 2016, and April 18, 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.

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 greater than 85% wet weather capture.

d. 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 continued in this renewal permit and will 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 for both NBMUA and the Town of Guttenberg.

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 requires that the permittee complete all projects within the five year NJPDES permit cycle.

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. Cliamate 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): Submit application for TWA so that CSO-related bypass can proceed.

ii. Year Two (EDP + 1 year to EDP + 2 years): Expansion of the NBMUA Woodcliff Treatment Plant (owned/operated by NBMUA).

iii. Year Three (EDP + 2 years to EDP + 3 years): Select location for Green Infrastructure for NBMUA (GI Part 1).

iv. Year Four (EDP + 3 years to EDP + 4 years): Green Infrastructure for NBMUA (GI Part 1); Select location for Green Infrastructure for NBMUA (GI Part 2).

v. Year Five (EDP + 4 years to EDP + 5 years): Green Infrastructure for NBMUA (GI Part 2).

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 Baseline Compliance Monitoring Program (BCMP) Report dated June 30, 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 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 final required percent capture.

d. After the implementation of the LTCP, 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 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.

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.

f. 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.

g. A Final PCCMP Report shall be submitted to the Department by November 1, 2026 which is 30 months after the lSTP upgrades have been constructed and are 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 final required percent capture; and.

   v. An assessment of whether the control measures are complying with water quality standards

10. Permittee's LTCP Responsibilities

a. The permittee is responsible for implementing CSO control measures to ensure compliance with the Federal CSO Control Policy and N.J.A.C. 7:14-11, Appendix C as outlined in the Implementation Schedule located in Section G.8. Since multiple permittees own/operate different portions of a hydraulically connected CSS, the permittee is required to work cooperatively and provide the necessary information with all other CSO permittees to ensure overall compliance. In addition, each permittee is required to institute necessary measures in accordance with the Implementation Schedule for only the portion of the hydraulically connected system that the permittee owns/operates and provide this information to the other permittees for compliance with the Federal CSO Control Policy and N.J.A.C. 7:14A-11, Appendix C.

b. The LTCP as submitted by the Town of Guttenberg and NBMUA - Woodcliff STP outlines the owner/operators of the CSSs and control facilities from the CSO Permittees as follows:

Town of Guttenberg
Owner of CSS: Town of Guttenberg
Operator of CSS: NBMUA
Owner of Regulators: Town of Guttenberg
Operator of Regulators: NBMUA

Township of North Bergen
Owner of CSS: North Bergen Township
Operator of CSS: NBMUA
Owner/Operator of Regulators: NBMUA
Owner/Operator of Woodcliff STP: NBMUA.

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 with the NJPDES permit renewal application if any of the following occurs:.

i. A Final PCCMP Report determines that the implemented CSO control measures do not meet 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 the Final PCCMP Report determines that the implemented CSO control measures do not meet the final required percent capture, the Adaptive Management Plan shall include:.

i. Modified or additional CSO control measures that will be to achieve 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 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 final required percent capture will be achieved; and.

ii. A modified implementation plan and schedule of the CSO control measures.

Masterfile #: 37627 **PI #:** 46705

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	Combined or Separate Sanitary Sewer Jetting	North Bergen 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 Bergen MUA - Woodcliff STP	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:
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:
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)
	For Example:		
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:
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:
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.